# NEW YORK CITY DRINKING WATER SUPPLY AND QUALITY REPORT 2024



## **NEW YORK CITY'S WATER SUPPLY SYSTEM**







Dear Friends:

Every day the New York City Department of Environmental Protection (DEP) delivers one billion gallons of some of the highest quality tap water in the world to more than 9 million New Yorkers. This could only be achieved by the dedication of thousands of DEP employees, engineers, and scientists who, through careful planning, ensure that New Yorkers will continue to receive this precious resource for generations to come.

DEP is committed to maintaining and upgrading our water supply infrastructure through significant strategic investments, with multi-billion-dollar projects underway in both the Catskill/Delaware and Croton watersheds. Since the early 1990s DEP has invested more than \$2.7 billion in source water protection programs and continues spending at a rate of about \$100 million each year on such programs to ensure the highest quality of water possible.

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. This report illustrates that New York City's drinking water continued to be of excellent quality, meeting all drinking water standards in 2024.

DEP scientists collected 46,800 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 651,600 times at our four water quality laboratories. Robotic monitoring stations on our reservoirs and in our streams provided another 2.9 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 one billion gallons of safe, high-quality drinking water every day to more than 8.2 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 2024, DEP delivered a total of 364.9 billion gallons of drinking water to New York City, withdrawing a total of 374.3 billion gallons from the system. DEP also delivered 38.2 billion gallons to 75 communities and institutions outside NYC. In all, this system serves half the population of New York State. The Catskill/Delaware provided 92.7 percent of the water and the Croton 7.3 percent. DEP estimates that 14.1 percent of water delivered was non-revenue producing in 2024.

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 treated 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 concentration of 0.7 mg/L as directed by the NYC Health Department, because it is effective in preventing cavities. During 2024, 99.7 percent of the water produced by the Catskill/Delaware supply was fluoridated.

NYC is currently conducting a study of corrosion control to determine if any changes to treatment methods are needed to minimize the corrosivity of the water.

#### **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 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 of the treatment unit 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 2024, 100 percent of the Croton water produced by the plant was fluoridated.

DEP scientists performed over 396,850 analyses on over 33,750 samples from the distribution system in 2024.

## **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 2024, DEP performed more than 396,850 analyses on over 33,750 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 254,750 analyses on about 13,050 samples and 2.9 million robotic monitoring measurements from the upstate reservoir watersheds 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**

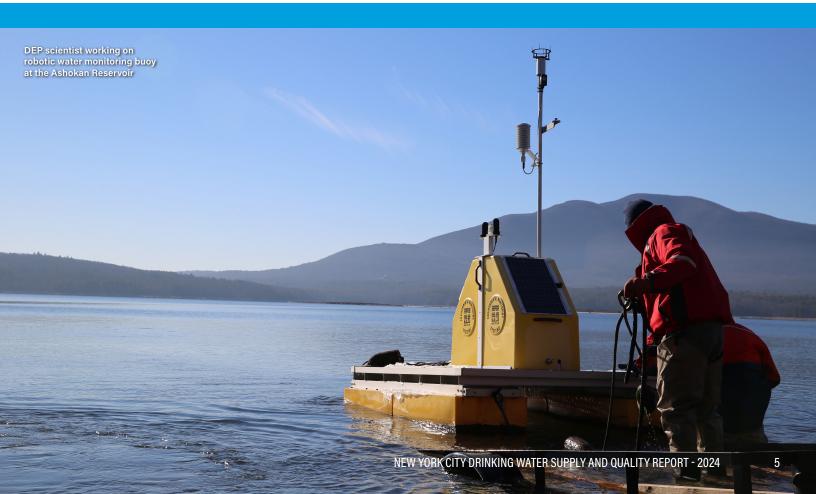
#### FILTRATION AVOIDANCE DETERMINATION (FAD)

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. To comply with the FAD, DEP spends nearly \$100 million annually on watershed protection 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.





## **CAPITAL UPGRADES**

In 2024 DEP broke ground on more than \$3.2 billion in new water supply system capital projects just north of New York City, ensuring the nation's largest municipal water supply system's state-of-good-repair for generations to come. This included two new large infrastructure projects in Westchester County, mandated by the Hillview Consent Decree and Judgment.

The \$1.2 billion Hillview Reservoir Improvements Project in Yonkers is a modernization of the water treatment facilities at the reservoir and includes upgrades to 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.

Separately, DEP began site preparation work for a new \$2 billion two-mile long water tunnel connecting the Kensico Reservoir with the Catskill Delaware Ultraviolet Treatment Facility near Valhalla. This project will improve flexibility between vital water supply facilities that serve more than 9 million people in New York City and Westchester County.

Due to New York experiencing an unprecedented drought in October, DEP paused the final phase of the Delaware Aqueduct repair project, the largest and most complex capital repair project in the history of New York City's water supply. DEP plans to complete the repair of the Delaware Aqueduct by early 2026 by connecting the new bypass tunnel under the Hudson River near the city of Newburgh.

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 and 125 miles from the five boroughs, 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

On November 2, 2024, New York City Mayor Eric Adams issued a drought watch during the driest spell in the city's recorded history. The City elevated the drought watch to a drought warning on November 18, 2024, as the historic lack of precipitation led to unprecedented challenges. In response, DEP implemented extraordinary measures to safeguard the city's water supply, including temporarily pausing the \$2 billion Delaware Aqueduct repair project. This critical step, along with significant upstate rainfall and enhanced water supply flexibility, enabled the City to meet its water needs. By December 16, 2024, improved conditions allowed the warning to be downgraded back to a drought watch. Strategic decision-making by DEP, conservation efforts by New Yorkers, and favorable weather conditions together contributed to the replenishment of the city's reservoir system and a lifting of the drought watch on January 3, 2025.

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. DEP released its Water Demand Management Plan Annual Update in June 2024, which highlights DEP's commitment to implement innovative water conservation strategies and projects to meet the city's sustainability goals. Advances in technology have also 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.

The average single-family household in New York City uses approximately 70,000 gallons of water each year at a cost of \$4.87 per 100 cubic feet of water (748 gallons), or about \$455 a year. Since nearly all customers also receive wastewater collection and treatment services, which cost about \$724 per year, the combined annual water and sewer charge for the typical New York City household using 70,000 gallons per year is \$1,179, calculated at fiscal year 2025 rates, effective July 1, 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.
- X Don't use the toilet as a wastebasket, and don't flush it unnecessarily.

#### **OUTDOORS**

- ✓ Do use a self-closing nozzle on your hose.
- X 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.
- X Don't open fire hydrants.

TO LEARN MORE, CALL 311.



monitor source waters, key streams and water leaving Hillview Reservoir 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. 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 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 2024 commitments due under the Decree.



## **IS THERE LEAD IN MY DRINKING WATER?**

New York City's high-quality 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. Property owners own and are responsible for maintaining their water service lines. Although New York City takes extensive steps to protect water in homes that may have lead in their private plumbing, lead could still be released into a home's drinking water.

#### DOES NYC REPLACE LEAD SERVICE LINES?

To assist homeowners living in environmental justice neighborhoods that have high concentrations of lead service lines, New York City expanded a free Lead Service Line Replacement Program in 2024 to eligible properties in the Bronx and Queens, made possible through \$48 million in grants and interest-free loans funded in part by the federal Bipartisan Infrastructure Law, and in part by the New York state loan forgiveness program. This free program will save individual property owners more than \$10,000 in replacement costs. Eligible homeowners will be contacted by DEP with more information.

## DID YOU RECEIVE A NOTICE ABOUT YOUR SERVICE LINE MATERIAL?

New federal regulations require the city to notify property owners annually if records indicate that their water service line is made of lead, galvanized steel, or an unknown material. If you know your service line is not made of lead, please help us update our records by submitting a Service Line Identification form online by visiting **nyc.gov/dep/PARIS**. For more information on lead and to view this notice in other languages, visit **nyc.gov/dep/lead**.

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

Visit **nyc.gov/dep/lead** 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.

#### WHAT ARE THE HEALTH EFFECTS OF LEAD?

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. DEP is responsible for providing high quality drinking water and there is no lead in the City's distribution system. However, DEP cannot control the variety of materials used in the private plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, call 311. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead or by calling the Safe Drinking Water Hotline at 1-800-426-4791.

#### 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.



**USE A WATER FILTER** certified by NSF or UL for lead removal, either a pitcher or installed on a faucet or under a sink. **DEP scientists** continuously sample and conduct analyses for hundreds of water quality parameters

## HOW TO READ THE NEW YORK CITY 2024 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 and met all drinking water standards in 2024.

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 2024. The table on page 15 represents those parameters monitored for but not detected in any sample.

## THE NEW YORK CITY 2024 DRINKING WATER QUALITY TESTING RESULTS

### **Detected Conventional Physical and Chemical Parameters**

This table summarizes the monitoring results for all detected parameters in 2024

PARAMETER	NYSDOH MCL (Highest Level Allowed)	EPA MCLG	# SAMPLES	RANGE	AVERAGE	MCL VIOLATION	LIKELY SOURCES IN DRINKING WATER
Alkalinity (mg/L CaCO <sub>3</sub> )	-	-	310	15 - 67	22	No	Erosion of natural deposits
Aluminum (µg/L)	50 - 200 <sup>(1)</sup>	-	310	8 - 51	18	No	Erosion of natural deposits
Barium (mg/L)	2	2	310	0.01 - 0.03	0.01	No	Erosion of natural deposits
Calcium (mg/L)	-	-	310	5 - 23	7	No	Erosion of natural deposits
Chloride (mg/L)	250	-	310	9 - 54	15	No	Naturally occurring; road salt
Chlorine Residual, Free (mg/L)	4 <sup>(2)</sup>	-	15,059	ND - 1.6	0.5	No	Water additive for disinfection
Chromium (µg/L)	100	100	310	ND - 2	ND	No	Erosion of natural deposits
Color - distribution system (color units - apparent)	-	-	13,529	3 - 45	7	No	Presence of iron, manganese, and organics in water
Color - entry points (color units - apparent)	15	-	1,530	3 - 33 (3)	7	No	Presence of iron, manganese, and organics in water
Copper (mg/L)	1.3 (4)	1.3	310	0.002 - 0.034	0.007	No	Corrosion of household plumbing; erosion of natural deposits
Corrosivity (Langelier index)	_ (5)	-	310	-2.76 to -1.16	-2.21	No	
Fluoride (mg/L)	2.2	4	2,288	ND - 0.8	0.7	No	Water additive which promotes strong teeth; erosion of natural deposits
Hardness (mg/L CaCO <sub>3</sub> )	-	-	310	16 - 90	25	No	Erosion of natural deposits
Hardness (grains/gallon[US] CaCO <sub>3</sub> ) <sup>(6)</sup>	-	-	310	1 - 5	1	No	Erosion of natural deposits
Iron (μg/L)	300 (7)	-	310	ND - 123	30	No	Naturally occurring
Magnesium (mg/L)	-	-	310	0.9 - 7.9	1.8	No	Erosion of natural deposits

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## Detected Conventional Physical and Chemical Parameters (continued)

PARAMETER	NYSDOH MCL (Highest Level Allowed)	EPA MCLG	# SAMPLES	RANGE	AVERAGE	MCL VIOLATION	LIKELY SOURCES IN DRINKING WATER
Manganese (µg/L)	300 <sup>(7)</sup>	-	310	8.6 - 66	19	No	Naturally occurring
Nitrate (mg/L nitrogen)	10	10	310	0.03 - 0.31	0.10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (mg/L nitrogen)	1	1	310	ND - 0.002 <sup>(8)</sup>	ND	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
pH (pH units)	6.8 - 8.2 <sup>(9)</sup>	-	15,060	6.6 - 8.6 <sup>(9)</sup>	7.3	No	
Phosphate, Ortho- (mg/L)	1 - 4 <sup>(9)</sup>	-	13,455	1.5 - 4.3 <sup>(9)</sup>	2.2	No	Water additive for corrosion control
Potassium (mg/L)	-	-	310	ND - 2.2	0.7	No	Erosion of natural deposits
Sodium (mg/L)	NDL (10)	-	310	9 - 42	13	No	Naturally occurring; road salt; water softeners; animal waste
Specific Conductance (µS/cm)	-	-	15,058	77 - 408	112	No	
Strontium (µg/L)	-	-	285	16 - 71	23	No	Erosion of natural deposits
Sulfate (mg/L)	250	-	310	3 - 33	6	No	Naturally occurring
Temperature (°F)	-	-	15,060	38 - 84	57	No	
Total Dissolved Solids (mg/L)	500 <sup>(1)</sup>	-	310	29 - 207	66	No	Metals and salts naturally occurring in the soil; organic matter
Total Organic Carbon (mg/L)	-	-	310	1.2 - 2.0	1.6	No	Organic matter naturally present in the environment
Turbidity <sup>(11)</sup> - distribution system (NTU)	5 <sup>(12)</sup>	-	15,059	ND - 4.8	1.0 (12)	No	Soil runoff
Turbidity <sup>(11)</sup> - source water (NTU)	5 (13)	-	-	-	2.1 <sup>(13)</sup>	No	Soil runoff
Turbidity (11) - filtered water (NTU)	0.3 (14)	-	-	-	0.66 (14)	No	Soil runoff
UV 254 (absorbance/cm)	-	-	351	0.019 - 0.042	0.032	No	Organic matter naturally present in the environment
Zinc (mg/L)	5	-	310	ND - 0.1	ND	No	Naturally occurring

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## **Detected Organic Parameters**

PARAMETER	NYSDOH MCL (Highest Level Allowed)	EPA MCLG	# SAMPLES	RANGE	AVERAGE	MCL VIOLATION	LIKELY SOURCES IN DRINKING WATER
Bromochloroacetic Acid (µg/L)	50	-	305	ND - 2.8	1.4	No	By-product of drinking water chlorination
Di(2-Ethylhexyl) phthalate (µg/L)	50	-	23	ND - 0.92 <sup>(15)</sup>	ND	No	Used in plastic products such as polyvinyl chloride, toys, vinyl upholstery, adhesives, and coatings
Fluridone (µg/L)	50	-	11	ND - 0.38	ND	No	Herbicide used to control invasive plants like hydrilla
Haloacetic Acid 5 (HAA5) (µg/L)	<b>60</b> <sup>(16)</sup>	-	305	6 - 71	48 <sup>(16)</sup>	No	By-product of drinking water chlorination
Hexachlorocyclopentadiene (µg/L)	5	-	12	ND - 0.07	ND	No	Used in production of rubber adherents, flame retardants and pesticides
Perfluorooctanoic acid (PFOA) (ng/L)	10	-	15	ND - 2.1 <sup>(17)</sup>	ND	No	Released into the environ- ment from widespread use in commercial and industrial applications.
Total Organic Halogen (μg/L)	-	-	260	80 - 233	174	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM) (µg/L)	80 (16)	-	305	5 - 64	48 <sup>(16)</sup>	No	By-product of drinking water chlorination

## **Detected Microbial Parameters**

PARAMETER	<b>TT</b> (Highest Level Allowed <b>)</b>	EPA MCLG	# SAMPLES	RANGE	# SAMPLES Positive	AVERAGE	HIGHEST MONTH % POSITIVE	ASSESSMENT TRIGGERED	LIKELY SOURCES IN DRINKING WATER
Total Coliform Bacteria (% of samples positive/ month)	5% <sup>(18)</sup>	0	9,244	-	42	-	1.9%	No	Naturally present in the environment
Heterotrophic Plate Count (CFU/mL)	-	-	11,831	ND - 493	189	ND	-	-	Naturally present in the environment

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### Lead and Copper Rule Residential Tap Sampling

PARAMETER	NYSDOH AL	EPA MCLG	90% OF YOUR LEVELS WERE LESS THAN	RANGE	# SAMPLES EXCEEDING AL	EXCEEDANCE	LIKELY SOURCES IN DRINKING WATER
Copper (mg/L)	1.3	1.3	0.195	0.01 - 0.90	0 out of 335	No	Corrosion of household plumbing
Lead (µg/L)	15	0	10	ND - 107	16 out of 335	No	Corrosion of household plumbing

### Cryptosporidium and Giardia Source Water Sampling (19)

PARAMETER	EPA MCLG	RESERVOIR	# SAMPLES	# SAMPLES POSITIVE	RANGE	LIKELY SOURCES IN DRINKING WATER		
<i>Cryptosporidium</i> (oocysts/50L)	0	Kensico	54	13	0 - 4			
		Hillview	54	5	0 - 3	Animal fecal waste		
		Croton	4	0	0			
<i>Giardia</i> (cysts/50L)	0	Kensico	54	32	0 - 14			
		Hillview	54	19	0 - 6	Animal fecal waste		
		Croton	4	2	0 - 3			

#### **UNITS AND ABBREVIATIONS**

**CaCO**<sub>3</sub> = calcium carbonate

**CFU/mL** = colony forming units per milliliter

**/cm** = per centimeter

°F = degrees Fahrenheit

 $\mu$ g/L = micrograms per liter (10<sup>-6</sup> grams per liter)

**µS/cm** = microsiemens per centimeter

mg/L = milligrams per liter (10<sup>-3</sup> 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. There is convincing evidence that 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.

#### 90<sup>th</sup> Percentile Value:

The values reported for lead and copper represent the 90<sup>th</sup> 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 90<sup>th</sup> 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 2024

### **Conventional Physical, Chemical and Microbial Parameters:**

Antimony, Arsenic, Asbestos, Beryllium, Cadmium, Cyanide, E. coli, Gross alpha, Lead, Lithium, Mercury, Nickel, Radium 228, Selenium, Silver, Thallium, Uranium

### **Principal Organic Contaminants:**

Benzene, Bromobenzene, Bromochloromethane, Bromomethane, tert-Butylbenzene, n-Butylbenzene, sec-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chlorobenzene, 2-Chlorotoluene, 4-Chlorotoluene, Dibromomethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,2-Dichloroethane, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Dichloropropane, 1,3-Dichloropropane, 1,2-Dichloropropane, 1,3-Dichloropropane, 1,3-Dichloropropane, 1,3-Dichloropropane, 1,2-Dichloropropane, 1,3-Dichloropropane, 1,3-Dichloropropane, 1,3-Dichloropropane, 1,1-Dichloropropene, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, p-Isopropyltoluene, Methylene chloride, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 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, methyl tert-Butyl ether, Carbaryl, Carbofuran (Furadan), Chlordane, 2,4-D, Dalapon, 1,2-Dibromo-3-chloropropane, 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, 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, Acetone, Acifluorfen, Allyl chloride, Ametryn, tert-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, Bromacil, Bromoethane, 1,3-Butadiene, 2-Butanone, tert-Butyl alcohol, tert-Butyl ethyl ether, Butylate, Butylated hydroxytoluene (BHT), Caffeine, Carbon Disulfide, alpha-Chlordane, gamma-Chlordane, Chlorofenvinphos, Chlorobenzilate, 2-Chlorobiphenyl, 4-Chlorobiphenyl, 1-Chlorobutane, Chlorodifluoromethane, Chloroneb, Chlorothalonil (Draconil, Bravo), Chlorpopham, 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, Dibenzo[a,h]anthracene, 3,5-Dichlorobenzoic acid, 2,4'-Dichlorobiphenyl, Dichlorvos (DDVP), Diethyl ether, Diethyl phthalate, 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, Etridiazole, Fenarimol, Fluoranthene, Fluorene, 2,2',3,4,4',5,5'-Hetachlorobiphenyl, 2,2',3,4,5',5'-Hexachlorobiphenyl, 2,2',3,4,5',5'-Hexachlorobiphenyl, 2,2',3,4,4',5-Hexachlorobiphenyl, 2,2',3,4,4',5-Hexachlorobiphenyl, 2,2',3,4,4',5-Hexachlorobiphenyl, 2,2',3,4,4',5-Hexachlorobiphenyl, 2,2',3,4,4',5-Pentachlorobiphenyl, 2,3',4,4',5-Pentachlorobiphenyl, 2,3',4,4',5-Pentachlorobiphenyl, Pentachloroethane, cis-Permethrin, trans-Permethrin, Mexinphos, MGK-264 isomer a & b, Molinate, Napropamide, Di-n-Butylphthalate, Nitrofen, Di-N-octylphthalate, trans-Nonachlor, Norflurzon, Oxyfluorfen, Paraquat, Parathion, Pebulate, Pendimethalin, 2,3,3',4',6-Pentachlorobiphenyl, 2,2',5,5'-Tetrachlorobiphenyl, Pentachloroethane, cis-Permethrin, trans-Permethrin, mixed isomers), Phenanthrene, Phorate, Phosphamidon, Profeofos, Promet

### Fifth Unregulated Contaminant Monitoring Rule (UCMR5) <sup>(20)</sup> Parameters:

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF30UdS), 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-PF30NS), Hexafluoropropylene Oxide Dimer Acid (HFP0-DA), Nonafluoro-3,6-dioxaheptanoic acid (NFDHA), Perfluoro (2-ethoxyethane) sulfonic acid (PFESA), Perfluoro-3-methoxypropanoic acid (PFMPA), Perfluoro-4-methoxybutanoic acid (PFMBA), Perfluorobutanesulfonic acid (PFBS), Perfluorobutanoic acid (PFBA), Perfluorodecanoicacid (PFDA), Perfluoroheptanesulfonicacid (PFHpS), Perfluoroheptanoicacid (PFDA), Perfluorohexanesulfonicacid (PFHxS), Perfluorohexanoicacid (PFDA), Perfluorononanoicacid (PFNA), Perfluorooctanesulfonicacid (PFDA), Perfluoropentanesulfonicacid (PFHxS), Perfluorohexanesulfonicacid (PFDA), Perfluoropentanesulfonicacid (PFDA), Perfluoroctanesulfonamidoaceticacid (NEtFOSAA), N-methylperfluoroctanesulfonamidoaceticacid (NMeFOSAA), Perfluorotetradecanoicacid (PFTA), Perfluorotidecanoicacid (PFTDA)

## **2024 MONITORING DATA FOOTNOTES**

- (1) EPA Secondary MCL: NYSDOH has not set an MCL for this parameter.
- (2) 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.
- (3) On 11/25/24 a non-representative sample with elevated color was collected at site 1S02B (Woodlawn, 10470). Maintenance activities on a generator at the time of sample collection caused a disturbance to the water flowing to the sampling station.
- (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  $\mu$ g/L.
- (8) Nitrite was only detected in one sample on 5/7/24 at site 45250 (Arverne, 11692) and the sample was noted as discolored due to a water main shutdown in the area and FDNY activity.
- (9) NYSDOH established Optimal Water Quality Parameters (OWQP) under the Lead and Copper Rule which includes a range for pH and orthophosphate which are presented here. The reported average value for pH is the median value. One low pH value of 6.6 was collected from site 77150 (Cambria Heights, 11411) on 2/15/24 and the pH was 8.6 in one sample collected from site 77550 (Queens Village, 11428) on 10/17/24. From site 11750 (City Island, 10464), the pH was 8.5 on 12/15/24 and orthophosphate was slightly above 4.0 mg/L in four samples on 4/1/24, 5/26/24, 6/7/24, and 9/3/24 due to an Optimization of Corrosion Control Study being conducted in this area of the system.
- (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 January 2024.
- (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 4/3/24.
- (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 10/15/24. In 2024, 100% of turbidity results were <0.3 NTU.</p>
- (15) Di(2-Ethylhexyl) phthalate was only detected in one sample on 10/21/24 from site 31850 (Tribeca, 10007).
- (16) 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.
- (17) Perfluorooctanoic acid (PFOA) was only detected in one sample on 9/11/24 from site 1SCL1 (Van Cortlandt Village, 10468) collected as part of our annual sampling. PFOA was not detected in the quarterly UCMR5 sampling.
- (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) Monitoring for the Fifth Unregulated Contaminant Monitoring Rule (UCMR5) commenced in the 4th quarter of 2023 and was completed in the 1st quarter of 2025 for the Croton supply.

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## **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

NYC Health Department 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/lead

#### HEALTH QUESTIONS (WATER SUPPLY-RELATED)

NYC Health Department // 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/watergualityreport

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## **TEXT 311**

311-692



Art by: Amara M., /th Grade 2024 Water Resources Art & Poetry Contes

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 보고셔는 귀하의 식수에 관한 매우 중요한 정보를 포함하고 있습니다. 이 정 보에 대해 이해하는 사람에게 그 정보를 번역하거나 통역해 받으십시오.

এই প্রতিবেদনে আপনার পানীয় জল সম্পর্কে গুরুত্বপূর্ণ তথ্য রয়েছে

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