

KINGSTON WATER DEPARTMENT



ANNUAL DRINKING WATER QUALITY REPORT FOR 2024 ***(Public Water Supply ID# 5503374)***

INTRODUCTION:

The Kingston Water Department is pleased to present a summary of the quality of the water provided to you during 2024. The purpose of this report is to raise your understanding of drinking water and your awareness of the need to protect our drinking water sources. Last year, we conducted tests for over 80 contaminants and we are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

We want you to be informed about your drinking water. If you want to learn more, Water Board meetings are held on the second Wednesday of each month in the offices of the Kingston Water Department, 111 Jansen Avenue, Kingston, NY 12401. The meetings begin at 5:00 PM and the public is welcome. The current Board includes: Dennis Croswell, President; Joanne Seche, Secretary; James Noble; Patrick Hickey, Nate Horowitz and Mayor Steven Noble. If you have any questions about this report or your drinking water, please contact Matthew Dysard, Superintendent at 845-331-0175, fax 845-340-9209, or e-mail at water@kingston-ny.gov. You may also mail inquiries to the Kingston Water Department at PO Box 1537, Kingston, NY 12402.



111 Jansen Ave Building

WHERE DOES OUR WATER COME FROM?

In general, 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 can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in surface water include: microbial contaminants; inorganic contaminants, including phosphorus; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Kingston gets its water from a Catskill stream. From there, it is piped into our Cooper Lake Reservoir. From the Reservoir, water flows by gravity through a transmission main to our Edmund T. Cloonan Water Treatment Plant. The NYS DOH conducted source water assessments for Cooper Lake and our emergency sources (Reservoirs 1, 2, and 4). These assessments evaluate the possible and actual threats to our sources and, although it includes a susceptibility rating which estimates the risk posed by each potential source of contamination, it does not mean that the water delivered to consumers is, or will become contaminated. The NYS DOH has found that Cooper Lake contains no discrete potential contaminant sources, and the land cover contaminant prevalence ratings are low. The NYS DOH has not conducted a source water assessment for the Mink Hollow stream which is our principal source of supply. Those assessments that have been completed are available for inspection by calling the Water Department at 845-331-0175.



Cooper Lake Reservoir



Edmund T. Cloonan Water Treatment Plant

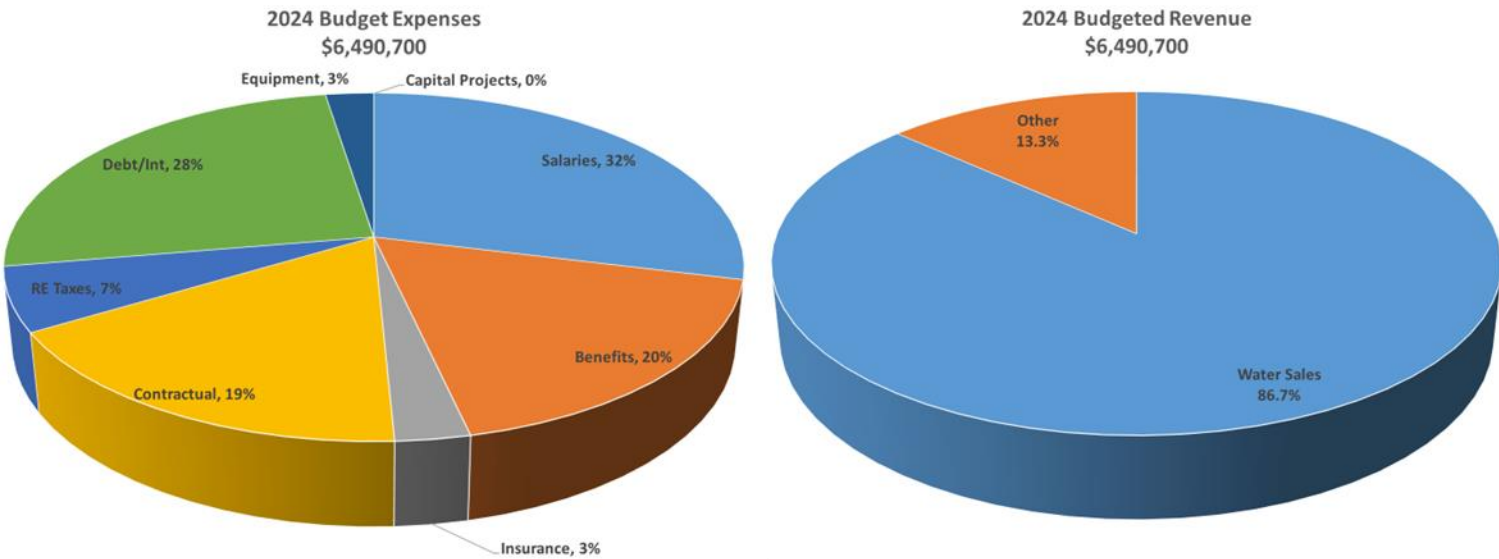
The treatment technologies that are employed by the Kingston Water Department include chlorine disinfection, direct filtration with alum coagulation, corrosion control via the addition of lime and ultraviolet disinfection. The treatment facilities have nominal capacities of 8 MGD.

FACTS AND FIGURES

Our water system serves approximately 24,100 people through 8,000 service connections. The total water produced in 2024 was 1,401,868,000 gallons. The total amount of water delivered to the distribution system was 1,280,348,000 gallons and the average flow into the system was 3.5 million gallons per day. The single highest flow was 3.85 million gallons and occurred on February 5, 2024. The amount of water registering through our customer meters was approximately 814 million gallons. The difference between the water entering the distribution system and the amount registering through our customer meters is 466 million gallons. Of that total, some was estimated to be used to flush mains, fight fires, and maintain sewers and streets. In addition, some of that water was lost through known meter inaccuracies and water main breaks. The balance is assumed to be lost to leakage. During 2024, water customers were charged according to the following rate schedule:

0 to 4 Units	\$57.48
Next 16 Units	\$4.06 per
> 20 Units	\$3.70 per

Meters record usage in cubic feet and a unit of water is equal to 100 cubic feet (748 gallons). All revenues from water rents remain within the Department to fund our operation. In 2024, we operated on an annual budget of \$6.49 million and water sales accounted for \$5.6 million or 86 percent of the total budget and the balance is derived from water-related fees and miscellaneous reimbursements. The average rate per unit of water delivered was \$5.17. While a sewer usage fee of \$7.13 per unit of water consumed was collected with the water bills, the Water Department does not set or determine the sewer rate or administer the funds. The Department merely acts as collection agent for the sewer fund and turns over all moneys to the City’s Comptroller weekly.



ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As New York State regulations require, we routinely test your drinking water for more than 80 contaminants. These contaminants include total coliform bacteria, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once each year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, might be reasonably 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 (800-426-4791) or the Ulster County Health Department at 845-340-3010.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Result	Unit	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Barium ⁴	No	5/24/2024	0.0041	mg/L	2	MCL = 2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Lead ¹	No	8/2024	0.007	mg/L	0	AL = 0.015	Corrosion of household plumbing
Copper ¹	No	9/2024	0.043	mg/L	1.3	AL = 1.3	Corrosion of household plumbing
Nitrate ⁴	No	5/24/2024	0.051	mg/L	10	MCL=10	
Sulfate	No	5/24/2024	5.9	mg/L	N/A	MCL = 250	Naturally occurring
Chloride	No	5/24/2024	3.9	mg/L	N/A	MCL = 250	Naturally occurring; indicative of road salt
Sodium	No	5/24/2024	2.8	mg/L	N/A	N/A	Naturally occurring; indicative of road salt; animal contamination, water softeners
Total Organic Carbon	N/A	2024	1.1125 1.9 – ND	mg/L	N/A	N/A	Naturally present in the environment and has no health effects. However TOC provides a medium for the formation of disinfection byproducts
THM's ² Trihalomethanes	No	2024	47.65 30.5 – 79.3	ug/L	N/A	MCL =80	By-product of drinking water chlorination
HAA5's ² Haloacetic Acids	No	2024	15.575 10.8 – 20.0	ug/L	N/A	MCL = 60	By-product of drinking water chlorination
Turbidity ³	No	6/26/2024	0.26	NTU	N/A	TT = <1 NTU	Soil Runoff
Turbidity ³	No	6/2024	0.108	NTU	N/A	TT = <1 NTU	
Turbidity ³	No	2024	100%	NTU	N/A	TT= 95% of samples <0.3 NTU	
Total Coliform ⁵	No	5/2/2024	1 Positive Sample	N/A	N/A	TT = 2 or more positive samples in any given month	Naturally present in the environment

Notes:

1 – The level presented represents the 90th percentile of the 30 samples that were collected in 2024. Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

2 – This level represents the highest locational running annual average calculated from data collected in 2024.

3 – We test turbidity levels because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for 2024 was 0.26 NTU and occurred on June 26, 2024. State regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU and that **all** turbidities are below 1 NTU. During 2024, the KWD met these requirements. The highest monthly average was 0.108 NTU and occurred in June 2024. During 2024, 2,190 turbidity measurements were taken, and the average turbidity reading was 0.081 NTU.

4 - All these substances were detected in trace quantities, many times lower than the maximum contaminant levels established for these substances. They were also detected BELOW the reportable detection limit for the substance. As such, KWD could have not listed these substances in this table as they were below the reportable detection limits. The KWD believes that as our consumers, you have a right to know the amount detected and we are reporting it.

5 - Total coliforms are non-pathogenic naturally occurring bacteria in our environment that are used as an indicator of potential microbial contamination. We collect about 25 samples each month from the distribution system to check for the presence of total coliform bacteria. In 2024, out of 305 samples collected, we had 1 positive coliform result. We have never had a positive test result for E. coli. In addition to the distribution samples that are tested for Total Coliform bacteria, we collect and analyze more than 1,500 samples for total coliforms at various points in the treatment process each year as quality control checks.

Definitions:

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.

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 Disinfection Level (MRDL): The highest level of a disinfectant that is allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. The Kingston Water Department disinfects with chlorine. The MRDL for chlorine is 4.0 mg/L. Kingston has never exceeded the MRDL and the annual average for 2020 was 0.65 mg/L

Maximum Residual Disinfection Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants. The MRDLG for chlorine is 4 mg/L.

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

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

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

UNREGULATED CONTAMINANT MONITORING

The 1996 amendments to the Safe Drinking Water Act and the Fourth Unregulated Contaminant Rule (UCMR4) require that every five years water suppliers serving 3,300 or more customers monitor for up to 30 unregulated contaminants. The purpose of the rule is to provide baseline occurrence data that EPA can use to make decisions about future regulations. The Kingston Water Department participated in the fourth round of this testing beginning in 2019 and concluded sampling in 2020. In UCMR4, testing was required for two metals, eight pesticides and one pesticide manufacturing byproduct, three brominated haloacetic acid (HAA) byproduct groups, three alcohols, three semi-volatile organic chemicals, and 10 cyanotoxins. The data from this most recent sampling can be found in Table of Detected Contaminants in this report. For more information about the Unregulated Contaminant Rule and to obtain a list of the unregulated contaminants, go to: <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr4.com> or contact Superintendent Matthew Dysard at water@kingston-ny.gov. The Fifth Unregulated Contaminant Monitoring Rule (UCMR5) has been finalized and will include sampling for 29 perfluorinated compounds and lithium. Sampling for the KWD began in 2024.

CRYPTOSPORIDIUM AND GIARDIA MONITORING

In 2006, the United States Environmental Protection Agency (EPA) published the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) which, among other provisions required the Kingston Water Department to begin monitoring our source water for E. coli, Cryptosporidium, Giardia, and turbidity. As per the requirements of the LT2ESWTR, Kingston began 24 months of monthly sampling in April 2008. A second round of monitoring for these organisms began in October 2016 and continued monthly until September 2018. None of the samples have detected the presence of E. Coli, Cryptosporidium, or Giardia in our source water. As additional safeguards, the KWD practices filtration geared to remove these substances should they occur and chlorine and ultraviolet light disinfection that is specifically designed to inactivate Cryptosporidium and Giardia.

INFORMATION ON LEAD SERVICE LINE INVENTORY

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. LSLs in the City of Kingston are owned by the property owner. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by emailing water@kingston-ny.gov or visiting the NYS DOH website at: https://health.ny.gov/environmental/water/drinking/service_line/.

OPERATIONS

The Water Department consists of a staff of 24 full-time employees whose responsibilities include the maintenance of approximately 100 miles of water mains, treatment and distribution of over 4 million gallons of water daily, and performance of business operations that accounts for an annual 6.49 million dollar budget. The Water Department can be contacted 24 hours per day, 7 days per week by customers encountering water problems or emergencies at 845-331-0205. To be notified in the event of an emergency or a service interruption involving the water supply, we urge you to sign up for direct notification via phone, email, or text via the Department's Smart911 system by going to: www.kingston-ny.gov. This will enable us to provide you with quick and efficient notification of any water-related emergency impacting you or your family.

The Business Office and Maintenance Shop are located at 111 Jansen Ave. Kingston, NY, 845-331-0175. Business Office hours are Monday thru Friday from 8:30 am to 4:30 pm except in July and August, when hours of operation are from 9:00 am to 4:00 pm. Payments for water bills can be mailed, paid in person at the Business Office, deposited in a night drop box located in the front of our Business Office, by signing up for automatic deduction by Electronic Funds Transfer payment option or by debit/credit/e-check using the website; www.kingston-ny.gov/waterpayments.

Water bills are mailed/emailed out on a quarterly basis. To sign up for electronic billing visit www.kingston-ny.gov/water Customers are assigned a particular zone designated by the location of their water account. To maintain a positive cash flow, mailing dates for water bills are staggered by zone. A mailing schedule may be requested from our Business Office by phone or by email at water@kingston-ny.gov, please supply a fax number, mailing address, or email address

DO I NEED TO TAKE PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, 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, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791). 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. The Kingston Water Department is responsible for providing high quality drinking water but cannot control the variety of materials used in the 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, contact the Kingston Water Department. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So, get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

In 2024, the Department reached final completion on the Cooper Lake Dam rehabilitation project. The mandated improvements were authorized by the Board in November 2017 and construction began in July 2021. This project represented the single largest capital improvement undertaken by the Department at a total cost of nearly \$18m. A \$3 million WIIA grant was awarded in 2022 and a High Hazard Potential Dam grant of \$100k was awarded in 2021 for design.

The Department published the lead service line inventory in October 2024, in compliance with Federal and State regulations. All service connections within the district are the responsibility of the property owner. However, the Water Board is actively looking to obtain grant funding to assist property owners with the cost of replacing lead services.

Department Goals for 2025: Residents of the City of Kingston enjoy water of the highest quality and the Department's infrastructure network is vital to our water system. Throughout its history the Board has continued to invest in our infrastructure and, over the past 15 years, has increased our asset valuation three-fold. This investment must continue so that this resource can be passed on to future generations. In addition, new regulations and security concerns dictate that we continue to upgrade our technology and improve capabilities. The Department will begin undertaking design for our Binnewater Reservoir to rehabilitate the dam to current State regulations. Staff will also continue to update the Lead Service Inventory for the next submittal date.

The Board of Water Commissioners struggles to fulfill the Department's mandate to provide the residents and businesses of the City with high quality water while keeping the rates affordable. The 2025 budget that was adopted by the Board includes a four percent rate hike. The increase in spending is largely due to the debt service associated with the Cooper Lake Dam Remediation. Kingston's tap water delivers public health protection, fire protection, support for the economy, and the overall quality of life that we enjoy at a cost of about \$2.13 for 250 gallons of water for most of our customers.



Dam at Cooper Lake Reservoir

Thank you for allowing us to continue to provide you with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.