

Annual Drinking Water Quality Report for 2017
City of White Plains
Department of Public Works
255 Main Street
White Plains, New York 10601
(Public Water Supply ID #5903464)

Introduction

To comply with State regulations, the City of White Plains, Department of Public Works (“City”) annually issues a report describing the quality of your drinking water. The purpose of this report is to increase your knowledge of drinking water and raise your awareness of the need to protect our drinking water sources. During 2017, your tap water met all State drinking water health standards. We conducted tests for over 170 contaminants last year and are proud to report that our system had no maximum contaminant level violations. Although 18 of those contaminants were at the detectable level, none of those contaminants were above the state’s allowable levels. This report provides an overview of the 2017 water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Richard G. Hope, Commissioner of Public Works, at (914) 422-1220. We want you to be informed about your drinking water.

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, 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. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The state Health Departments and the FDA’s regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Source

One hundred percent (100%) of the water delivered by the City of White Plains is purchased from The New York City Department of Environmental Protection through Westchester County Water District No. 1. The raw water purchased from New York City (NYC) is drawn from the Kensico Reservoir, which is an unfiltered surface water source. Kensico Reservoir delivers a high quality water and has sufficient capacity to supply the City. The City’s three wells, which supply a total of approximately 150,000 to 200,000 gallons per day, were removed from service in 2009. The Federal EPA had previously enacted the Surface Water Treatment Rule (SWTR), which required us to conduct a study to determine if these wells were under the influence of nearby surface water and that was found to be the case with our wells. Although the water quality from these wells has been consistently high for many decades, the new regulations (stated under NYSDOH PWS 43 Technical Reference) now require us to filter this water. As we had already begun the process of rehabilitating our reservoir filtration plant, we are redesigning the unit to also incorporate the well supply. This will enable us to meet the latest Federal and New York State Regulations pertaining to both our alternate water supplies (reservoirs and wells) using a single filtration plant. We expect to resume using both the reservoirs and the wells in 2020, as they are currently out of service. The City has an emergency interconnection to the Delaware Aqueduct (Shaft 22). This connection is located in Yonkers and water is distributed to the City of White Plains via the Kensico-Bronx Pipeline. This emergency connection can supply 100% of the City’s total requirements. During 2017 our system did not experience any restriction of our water source.

The New York State Department of Health (NYSDOH) has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. While nitrates (and other inorganic contaminants) were detected in our water, it should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. See section “*Are there contaminants in our drinking water?*” for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Source Water Assessment for Reservoirs

The source water assessment on the Reservoir #1 found no noteworthy risks to source water quality. The source water assessment for Reservoir #2 contains no discrete PCSs and none of the land cover contaminant prevalence ratings were above the low risk category. However, because microbial contaminants in reservoirs are generally highly mobile, this drinking water intake has a susceptibility rating of “medium-high” for protozoa and enteric bacteria and viruses.

Furthermore reservoirs are normally susceptible to water quality problems caused by phosphorous addition from surface water runoff of fertilizers and soaps, but our reservoirs have a substantial buffer distance from residential development.

Source Water Assessment for Dug Wells

The source water assessment for the groundwater sources has rated the dug wells as having a "medium-very high" susceptibility to microbials, protozoa, nitrites, nitrates, industrial solvents, metals, petroleum products, herbicides, pesticides and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities to the dug wells. This includes industrial/commercial facilities and the associated industrial activity in the assessment area. In addition, the wells draw from an unconfined aquifer of high hydraulic conductivity. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State’s drinking water standards for microbial contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us.

The NYSDOH has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph(s) below. It is important to stress that these assessments were created using available information and only estimate the *potential* for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur. As your Public Water Supply (PWS), we provide treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

We obtain 100% of our raw water from the New York City water supply system drawn from the Kensico Reservoir. Before it enters the Kensico Reservoir, water either comes from the Catskill/Delaware watersheds east of the Hudson River and/or from the Croton watershed in Putnam and Westchester Counties.

The reservoirs in the Catskill/Delaware watersheds lie within a mountainous rural area. They are relatively deep with little development along their shorelines. The main water quality concerns associated with land cover is agriculture, which can contribute microbial contaminants, pesticides, and algae-producing nutrients. There are also some potential contamination concerns associated with residential lands and associated wastewater discharges. There are also a number of other discrete facilities, such as landfills, chemical bulk storage, etc., that

have the potential to impact local water quality, but large significant water quality problems associated with these facilities are unlikely, due to the size of the watershed and surveillance and management practices.

The New York City Department of Environmental Protection (DEP) implements a series of programs to evaluate and protect source water quality within these watersheds. Their efforts focus on three important program areas:

- 1) The enforcement of strengthened watershed rules and regulations;
- 2) The acquisition and protection of watershed lands;
- 3) The implementation partnership programs that target specific sources of pollution in the watersheds.

Due to these intensive efforts, the SWAP methodologies applied to the rest of the state were not applied for this PWS. Additional information on the water quality and protection efforts in these New York City watersheds can be found at DEP's website www.nyc.gov/dep/watershed.

Treatment

All treatment of the water sources supplying the City of White Plains are treated in accordance with the requirements of the New York State Department of Health as follows:

Chlorination - Chlorine is added to ensure bacteriologically safe water.

Corrosion Control - Westchester County Water District No. 1 which supplies water to the City of White Plains, constructed a corrosion control treatment facility to adjust ph with the addition of ortho-phosphate. This treatment began operation in December 1995.

Fluoridation - Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for disease control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.7 to 1.2 mg/l (parts per million). The City of White Plains began fluoridation treatment of all water sources on October 1, 1972, as an additional public health measure. The Westchester County Commissioner of Health recently stated that the benefits of fluoridation are not appreciably heightened if the dosage is increased beyond the 0.7 mg/l value. Accordingly, we instituted a reduction in dosing to this level. We will still reap the health benefits of fluoride treatment, while receiving the economics of significantly lowering our fluoride chemical treatment and storage tanks costs.

To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. During 2017, monitoring showed fluoride at levels in the optimal range 99% of the time. None of the monitoring results showed fluoride at levels that approach the maximum permitted value of 2.2 mg/l.

Filtration - Since August 5, 1999 The City of White Plains has utilized microfiltration for its surface water supply source consisting of two city-owned reservoirs (combined volume of just under 200,000,000 gallons.) As previously noted, our microfiltration plant is being reconstructed to meet the latest regulations and incorporate the wells into the system.

Facts and Figures

The public water supply system of the City of White Plains serves the entire city, an area of approximately 9.8 square miles. The City's residential population is approximately 57,000.

The water is distributed through approximately 160 miles of water mains to provide service to more than 10,000 metered accounts. The total water produced in year 2017 was 2,941.2 million gallons. The daily average of water treated and pumped into the distribution system is 8.06 million gallons per day. Our highest single day was 12.6 million gallons. The amount of water delivered to customers was 2,119.6 million gallons. This leaves an unaccounted for total of 821.6 million gallons, which is 27.9% of the water produced. Unaccounted for water represents water used to flush mains, fight fires, as well as losses from water main breaks, and water service line leaks before the meter.

The City has a progressive water structure wherein the unit rate escalates with increased usage. In 2017, White Plains water customers were charged at unit rates starting at \$2.35 per 100 cubic feet of water, and the average family of four (4) had an annual bill of \$266.41 (Among the lowest of some fifty water surveyors in Westchester County).

Are there contaminants in our drinking water?

As the State regulations require, we routinely test our drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological 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 often than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Included as a supplement to this notice is a report of analytical testing results for contaminants required to be tested for by the United States Environmental Protection Agency and the New York State Department of Health. This supplement is available to consumers of the City of White Plains upon request.

It should be noted that all drinking water, including bottled drinking water, may 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 Westchester County Health Department at (914) 813-5000.

Table of Detected Contaminates

Central Avenue Pumping Station Entry Point (CAPS)							
Inorganic Chemicals & Physical Characteristics							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum or Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Chlorides	No	6/2017	14.7	mg/l	n/a	MCL 250	Naturally occurring or road salt
Nitrate	No	6/2017	0.120	mg/l	10	MCL 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium	No	6/2017	16.9	ug/l	2000	MCL 2000	Erosion of natural Deposits
Fluoride	No	2017	0.55 – 0.76	mg/l	n/a	MCL 2.2	Erosion of natural Deposits, Water additive to promote strong teeth
Sulfate	No	6/2017	4.40	mg/l	n/a	MCL 250	Naturally occurring
Nickel	No	6/2017	0.406	ug/l	n/a	N/A	Naturally occurring
Sodium ⁽¹⁾	No	6/2017	9.22	ug/l	n/a	N/A	Naturally occurring or road salt
Turbidity	No	12/27/17	1.0	NTU	n/a	MCL 5	Soil run-off
Chlorine	No	3/13/17	2.0	mg/l	n/a	4mg/l	Water additive used to control microbes
Manganese	No	6/2017	9.88	ug/l	n/a	300 MCL	Naturally occurring
Copper	No	6/2017	42.2	ug/l	1300	AL 1300	Internal Plumbing
Aluminum	No	6/2017	6.93	ug/l	n/a	n/a	Naturally occurring
Zinc	No	6/2017	10.6	ug/l	n/a	MCL 5000	Naturally occurring

Orchard Street Pumping Station Entry Point (OSPS)							
Inorganic Chemicals & Physical Characteristics							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum or Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Chlorides	No	6/2017	15.0	mg/l	n/a	MCL 250	Naturally occurring or road salt
Nitrate	No	6/2017	0.117	mg/l	10	MCL 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium	No	6/2017	16.8	ug/l	2000	MCL 2000	Erosion of natural Deposits
Fluoride	No	2017	0.59 – 0.80	mg/l	n/a	MCL 2.2	Erosion of natural Deposits, Water additive to promote strong teeth
Sulfate	No	6/2017	4.37	mg/l	n/a	MCL 250	Naturally occurring
Nickel	No	6/2017	0.337	ug/l	n/a	N/A	Naturally occurring
Sodium ⁽¹⁾	No	6/2017	9.69	ug/l	n/a	N/A	Naturally occurring or road salt
Turbidity	No	12/27/17	1.0	NTU	n/a	MCL 5	Soil run-off
Chlorine	No	3/13/17	1.9	mg/l	n/a	4mg/l	Water additive used to control microbes
Manganese	No	6/2017	10.8	ug/l	n/a	300 MCL	Naturally occurring
Aluminum	No	6/2017	7.27	ug/l	n/a	n/a	Naturally occurring

KENSICO RESERVOIR

Gross Alpha, Gross Beta Radium 226, Radium 228, and Uranium

Radiological Contaminants (Source Water - Kensico Reservoir):							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Gross Alpha Activity	No	10/15/2013	0.92	pci/1	n/a	15	Decay of natural deposits & manmade emissions
Gross Beta Activity	No	10/15/2013	0.69	pci/1	n/a	50	Erosion of natural deposits
Combined Radium 226 and Radium 228	No	10/15/2013	0.52	pci/1	n/a	5	Erosion of natural deposits
The state considers 50 pci/1 to be the level of concern for Beta Particles							

Distribution System							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg / Max Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Fluoride	No	2017	Avg 0.71 Max 1.1 (0.59–1.1)	mg/l	n/a	MCL 2.2	Water additive to promote strong teeth
Orthophosphate Treatment	No	2017	Avg. 0.715 Max 0.862 (0.602–0.862)	mg/l	n/a	n/a	Treatment additive for corrosion control
Turbidity	No	3/23/17	4.0	NTU	n/a	MCL=<5	Soil run off

Distribution System – Disinfection By-Products							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg / Max Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Total Trihalomethanes (TTHM) ⁽²⁾	No	1/2017 4/2017 7/2017 10/2017	34.7 ⁽⁶⁾ (17.4–34.2)	ug/l	n/a	80	By-products of drinking water disinfection needed to kill harmful organisms.
Haloacetic Acids (HAA5) ⁽²⁾	No	1/2017 4/2017 7/2017 10/2017	39.75 ⁽⁷⁾ (16.7–46.0)	ug/l	n/a	60	
Contaminants monitored under interim enhanced surface water treatment rule (Disinfection By-Products)							

Kensico Supply Entry Point							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum or Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity ⁽⁵⁾ (highest single monthly value)	No	3/10/2017	1.0	NTU	n/a	MCL=<1	Soil run off

Distribution System – Lead And Copper								
Contaminant	Violation Yes/No	Date of Sample	Number of Sites Above AL Total Number of Sites (Range of Results Above AL)	Level Detected (Maximum or Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Lead ⁽³⁾	No	6/2017	2 30 (28.5–47.6)	2.85 <1.0–47.6	ug/l	0	AL 15.0 ug/l	Corrosion of household plumbing systems
Copper ⁽⁴⁾	No	6/2017	0 30	349 27.9–471	ug/l	1300	AL 1300 ug/l	

As per State regulations, the City of White Plains routinely monitors your drinking water for various contaminants. Your water is tested for inorganic contaminants, nitrate, lead and copper, volatile organic contaminants, synthetic organic contaminants and total trihalomethanes. The contaminants detected in your drinking water are included in the Table of Detected Contaminants.

In addition, we monitored entry point samples for inorganic contaminants that were not detected. These include, cyanide, ammonia, manganese, antimony, arsenic, beryllium, mercury, lead, copper, thallium, selenium, cadmium, chromium, silver. Organic contaminants that were tested for and not detected in the source water include 3-Hydroxycarbofuran, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Carbaryl, Carbofuran, Methomyl, Oxamyl, Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Lindane, Methoxychlor, PCB's, Propachlor, Toxaphene, 2,3,7,8-TCDD (Dioxin), Diquat, Endothall, Glyphosate, 2,4,5,T, 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram, Silvex, 1,2-Dibromo 3-chloropropane, , 1,2-Dibromoethane, Butachlor, Metolachlor, Metribuzin, Alachlor, Atrazine, Benzo(a)pyrene, bis(2-Ethylhexyl) adipate, bis(2-Ethylhexyl) phthalate, Hexachlorobenzene, Hexachloro-cyclopentadiene, Simazine, 1,1,1,2-tetrachloroethane, 1,1,1-trichloro-ethane, 1,1,2,2-trichloroethane, 1,1,2-trichloroethane, 1,1-dichloro-ethane, 1,1-dichloroethene, 1,1-dichloropropene, 1,2,3-trichloro-benzene, 1,2,3-trichloropropane, 1,2,4-trichlorobenzene, 1,2,4-tri-methylbenzene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloro-propane, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloro-propane, 1,4-dichlorobenzene, 2,2-dichloropropane, 2-butanone, 2-chlorotoluene, 4-chlorotoluene, Benzene, Bromobenzene, Bromochloromethane, Bromomethane, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, cis-1,2-dichloroethene, cis-1,3-dichloro-propene, Dibromomethane,

Dichlorodifluoromethane, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, Methyl iso-butyl ketone, Methyl tert-butyl ether, Methylene Chloride, N-butylbenzene, N-propylbenzene, Naphthalene, O-Xylene, P & M-xylene, P-isopropyltoluene, SEC-butylbenzene, Styrene, TERT-butylbenzene, Tetrachloroethene, Toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, Trichloroethene, Trichlorofluoromethane, and Vinyl chloride. Radiological contaminants tested for and not detected in the source water include Strontium-90, and tritium. Unregulated Contaminants that were tested for and not found in the source water are Perchlorate, DCPA di-acid, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 4,4-DDE, Acetochlor, EPTC, Molinate, Terbacil, and Nitrobenzene.

The results of the lead and copper testing performed in 2017 fell below the action level threshold. Therefore, additional lead and copper testing is not required until June 2020.

Notes:

- (1) Sodium: 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.
- (2) This level represents the locational running average calculated annually from data collected
- (3) The level presented represents the 90th percentile of the 30 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead values detected in your water system. The lead values ranged from 1.0 ug/l to 47.6 ug/l. The 90th percentile was the 27th highest value (2.85 ug/l); 28 samples passed with TWO (2) failure. Lead results greater than 15 ug/l = “Fail”.
- (4) The level presented represents 90th percentile of the 30 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected in your water system. The action level for copper was not exceeded at any of the 30 sites tested. The copper values ranged from 27.9 ug/l to 471 ug/l. The 90th percentile was the 27th highest value (349 ug/l); all samples passed. Copper results greater than 1300 ug/l = “ Fail”.
- (5) Turbidity is a measure of the cloudiness of the water. Our highest single turbidity measurement for the year occurred in March 23, 2017. (4 NTU). State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 5NTU.
- (6) This level is the maximum locational running annual average for TTHM which occurred in the 2nd Quarter of 2017.
- (7) This level is the maximum locational running annual average for HAA5 which occurred in the 1st quarter of 2017.

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 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

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.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

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 - pph).

Not Applicable: (n/a)

What Does This Information Mean?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State Requirements. Although the action level for lead was not exceeded, we are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. White Plains is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available for the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Is our water system meeting other rules that govern operations?

During 2017, our system was in compliance with all applicable State drinking water operating, monitoring, and reporting requirements.

Variations, Exemptions, Administrative or Judicial Orders:

The Surface Water Treatment Rule (SWTR) required that all water suppliers drawing water from a surface water source provide filtration by June 29, 1993. After implementing a Watershed Protection Plan, the City of New York has been granted Filtration Avoidance. Early in 1997 the City of New York was granted a long term exemption from the filtration requirement by the U.S. Environmental Protection Agency and the New York State Department of Health for the Catskill source south of Kensico and the Delaware source. The City was granted this exemption based on the exceptional quality of the raw water and the continued demonstration that the City can protect the water at its source. The SWTR requires that treatment for unfiltered surface water sources must achieve at least a 99.9 percent inactivation of Giardia Lamblia cysts and 99.99% inactivation of enteric viruses.

In 1994, The City of White Plains completed the installation of improvements required to achieve the required contact time.

Westchester County Water District No.1 Consent Decree

The City of White Plains currently receives all of its drinking water from the Kensico Reservoir, which is owned and operated by the New York City Department of Environmental Protection. The water is delivered through, and received treatment by, Westchester County Water District (WCWD) #1. WCWD#1 has received a federal violation for not delivering water that meets the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). The LT2ESWTR addresses health effects associated with Cryptosporidium in surface water used as a drinking water supply.

WCWD#1 has entered into a Consent Decree with the U.S. Environmental Protection Agency (USEPA), which requires WCWD#1 to provide all consumers LT2ESWTR compliant water by March 15, 2018. The consent decree also required WCWD #1 to undertake a Cryptosporidium Action Plan, which includes weekly monitoring.

Test results of samples collected on a weekly basis from April 22, 2015 thru December 28, 2017 for cryptosporidium and giardia from the source water have not indicated the presence of cryptosporidium or giardia in the drinking water during this period except as follows:

The December 17, 2016 cryptosporidium results was 0.02 cysts/liter, well below the action level of 4 cysts/liter, and requires no action based on the approved action plan.

The January 24, February 14, March 7, May 4 and December 21, 2017 results indicate a minor presence of giardia, less than 0.06 cysts/liter.

As of March 13, 2018, WCWD #1 is **no longer** in violation of Federal drinking water requirements, specifically the Safe Drinking Water Act (SDWA) and the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR).

The White Plains Orchard Street Pump Station Ultraviolet (UV) Facility has been completed, accepted and placed into service on June 24, 2017 providing compliant water to the City of White Plains.

From January 1 to March 12, 2018 the Orchard Street Pumping Station and the UV facility was operated continuously to provide as much compliant water as possible to the City of White Plains. During the morning and evening hours when water demands exceed the capacity of the Orchard Street Pumping Station the water was not in compliance.

The Central Avenue Pumping Station UV Facility has been completed, accepted and placed into service providing compliant water. On March 13, 2018 the City of White Plains was placed into service from this facility.

Information on Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water and ground water under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause Cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water. In 2017, the City of New York Department of Environmental Protection (which sells us 100% of our raw water) collected 57 routine samples at their Kensico Reservoir effluents and analyzed them for Cryptosporidium oocysts using Method 1623HV. Of the 57 routine samples, they report that (3) three were positive for Cryptosporidium (0 to 2 oocysts/50L).

Information on Giardia

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. The source water is disinfected prior to reaching our distribution system to remove/inactivate the Giardia cyst. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present.

Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be tested with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand-washing practices are poor. In 2017, the City of New York Department of Environmental Protection (which sells us 100% of our raw water) collected 57 routine samples at Kensico Reservoir effluents and analyzed

them for Giardia using EPA Method 1623.1. Of the 57 routine samples, they report that 30 were positive for Giardia (0 to 6 cysts/50L).

Do I Need to Take Special 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).

ISO Rating

The Insurance Services Office, Inc. (ISO) is an independent company that serves companies, communities, fire departments, insurance regulators, and others by providing information about risk. ISO has a team of experts who collect information about municipal fire suppression and water supply and distribution efforts throughout the United States (over 44,000 fire protection areas have been evaluated and classified.) Both National Fire Protection Association and the American Water Works Association standards are applied. The water supply system portion of this Public Protection Classification (PPC) report and rating comprises 40% of the final grade. We are proud to say that in the last evaluation, our City of White Plains Public Works Water Bureau scored 38.55 points out of a possible 40. When combined with the City of White Plains Public Safety Fire Bureau, accounting for the remaining 60% of the rating, a total score of 92.3 (against a 100 point maximum) was achieved. This resulted in the City of White Plains having a final PPC number of "1". In New York State, out of approximately 2,000 rating studies, only the City of White Plains and one other municipality achieved this highest rating of "1", on a scale of "1" to "10"!

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 wells, 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.

Water System Improvements

In 2017, we completed the following:

1. Installation of new water main valves and hydrants throughout the City
2. Continued with the City's Annual Leak Survey to monitor for underground water main leaks
3. Completed our annual Hydrant Flushing and Water Main Valve Maintenance Program
4. Commenced with Residential Automated Meter Infrastructure (AMI) Project
5. Completed a Cybersecurity Assessment of the City's Water System
6. Assisting Westchester County Water District No. 1 with completion of their Ultraviolet (UV) Treatment facilities at OSPS and CAPS
7. Hydraulic and Water quality modeling of the water distribution system

In 2018, we are completing and/or planning the following capital improvements:

1. Water Main Replacement: Leith Place, Idlewood Road., Ritchey Place. and Miles Avenue
2. Upgrade of Chemical Bulk Storage Facilities at Central Avenue Pump Station (CAPS)
3. Rehabilitation of Filtration Facilities at OSPS to utilize and treat existing on-site well and Reservoir No. 1 and 2 water
3. Upgrade of Chemical Bulk Storage Facilities at Orchard Street Pump Station (OSPS)
4. Evaluation of existing OSPS well and Reservoirs No. 1 and 2 for future use for potable water supply
5. Watershed security upgrades
6. Replace large diameter water main valves throughout the City
7. Replace miscellaneous water lines throughout the City
8. Construction of two (2) – 4 million gallon MG Portland cement concrete water storage tanks
9. Complete Residential Installation of Automated Meter Infrastructure (AMI) Project
10. Update record utilities mapping and upgrade existing City GIS (Geographic Information System) database

Closing

Thank you for allowing us to continue to provide your family 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 and our way of life.

If you have any questions or comments, please do not hesitate to contact our office at (914) 422-1220.

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