

Town of Williamson

ANNUAL DRINKING WATER QUALITY REPORT FOR 2023

WILLIAMSON WATER UTILITIES

6380 Rt. 21 Suite 2

Williamson, New York 14589

(Public Water Supply ID# 5801258)

To comply with State regulations, this annual report is designed to inform you about the quality of water and the services we deliver to you every day. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water and continue to improve the water treatment process and its delivery. The Williamson Water Treatment Facility (WTF) is a surface treatment plant using Lake Ontario as its water source, which provides an abundant source of fresh water. The WTF is located in Pultneyville, NY, with a mailing address of Williamson Water Utilities 6380 Rt. 21 Suite 2, Williamson, NY 14589.

The Water Filtration Plant and the water distribution system is operated and maintained by the Town of Williamson personnel under the direction and guidance of the Highway Superintendent and the Williamson Town Board. Information about the Water System is discussed during the Town of Williamson Board meetings held at the Town Hall located at 6380 Rt. 21 every second and fourth Tuesday of the month at 7:30 PM. All Town residents are encouraged and welcome to attend. If you have any other questions about this report or the system, please contact the appropriate person. For questions about the water treatment process and any issues concerning this report contact Bill Dobie (Water Plant Manager) Phone: 315-589-3781 Cell: 585-748-6930, E-mail; watertreatment@towilliamson.com. For questions on the distribution system contact Randy Hess Phone: 315-589-9481 Cell: 585-424-0409 E-mail: waterforeman@towilliamson.com. For billing information contact, Sue Brennessel (Town Clerk) Phone: 315-589-8100 Fax: 315-589-9485 E-mail: townclerk@towilliamson.com. General concerns or comments about the whole system, Kurt Allman (Highway Superintendent /Water Department Supervisor) Phone: 315-589-2874 Cell: 585-748-6931 E-mail: superintendentofhighways@towilliamson.com or Anthony Verno (Town Supervisor) Phone: 315-589-2038 Fax: 315-589-9326 E-mail supervisor@towilliamson.com.

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.

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 number of certain contaminants in water provided by public water systems.

Water Purchasers

The WTF serves all the businesses and private dwellings within the Williamson, East Williamson and Pultneyville areas. The approximate population for this area is 6600 people. We also sell water to the Town of Sodus, to Ontario on Fisher and Arbor roads, and to the Wayne County Water & Sewer Authority (WCWSA), which in turn sells water to Marion and

other areas South and East of Williamson. In the event that an emergency may prevent the Treatment Plant from processing water for our needs, we have the capability of getting potable water through in-ground connections from the Towns of Ontario, WCWSA, and Sodus.

Water Production

The Town of Williamson treated an average 1.92 million gallons of potable water a day from Lake Ontario. Last year (2023), the Treatment Plant treated 698,197,550 gallons of water, of that amount, 556,465,641 gallons were sold to its customers – 78,470,639 gallons were sold to Wayne County Water & Sewer Authority (WCWSA), 24,220,576 gallons were sold to the Town of Sodus, 262,296,202 gallons sold to Cadbury/Motts, 191,478,224 gallons sold to Williamson residents. Hydrant meters and other incidental sales were 0 gallons. The unaccounted water this year was affected by flushing hydrants, fire flow testing, water main and service breaks, non-metered sites such as the Town Hall, the Sewer Plant and other Town properties, temporarily stopped meters and undetected leaks in the distribution system.

Water Revenue/Rates

The total gross water revenue for the Town was \$2,303,455.63. The charge for residential water customers is a \$30.00 minimum charge (covers up to 6,000 gallons), and \$3.80 per thousand over 6,000 gallons, billed quarterly.

Water Treatment

Lake water enters the plant by gravity through a cast iron pipe. This pipe, known as the intake line, has a screen-covered opening. As water enters our intakes, we seasonally add chlorine to control the growth of Zebra Mussels in the intake line and for disinfecting within the distribution system. The pipe runs along the bottom of the lake to the Treatment Plant, where it enters a well. From the well, pumps called low-lifts push the water through the plant for treatment. At this point, chlorine is added again for disinfectant. Chlorine kills disease-causing microorganisms. A chemical is also added for coagulation as the water enters a large tank called a clarifier. The chemical causes fine microscopic particles suspended in the water to coagulate into larger particles that settle out and are removed from the tank. We add activated carbon during the warmer months to help control taste and odor, which becomes prevalent when the lake water temperatures rise promoting the growth of Blue/Green Algae. Following the clarifier, the water goes into the filter beds. The filter beds are made up of 12" of anthracite coal, 12" of mixed sand, 3" of fine gravel and supported by porous plates. The water flows down through the beds removing the remaining fine particles. From that point the finished water is pumped out of the plant to the distribution system. As it leaves the plant, fluoride is added for dental health. The Treatment Plant is not automated so is manned during the hours of production. It is possible to treat 3.5 million gallons of water a day if needed. During the treatment process the water is monitored and tested continually through out the whole process.

Distribution System

The Williamson distribution system contains about 92 miles of water mains. Sizes of the mains range from 2" to 24" in diameter. Materials for the mains are copper, cast iron, ductile pipe, and plastic. Ages of water mains range from 1913 to 2023. The distribution system also contains approximately 800 fire hydrants and 330-line valves. The Town has two reservoirs with a total capacity of 2.75 million gallons. The system is maintained by use of the Town's own equipment and manpower. All Town roads have public water, and the Water Department is continuing to upgrade the existing infrastructure by replacing undersized and aged water mains and hydrants throughout the Town. Upgrades to the Marion Booster Pump Station on Rt. 21 and to the water mains going to the reservoir and pump station have been completed in 2023.

Water Treatment Plant

The Williamson Water Department in conjunction with The Williamson Town Board have undertaken major upgrades to the Water Treatment Plant (WTP). Early in 2017, the Town partnered with the MRB Group to evaluate the WTP. They published an evaluation in June of 2017 that showed an aging facility that was in need of an upgrade since the last major upgrade was in the 1980s. An action plan was developed, which involved two phases of rehabilitation and construction. All areas of the plant's operation and equipment will be upgraded as some of the equipment still in use goes back to the 1950s. Phase I, which started in the spring of 2018, was completed in the spring of 2019. This included all new valves and actuators, recoating all the filters and introducing a new SCADA system to help with the Plant's operation. With Phase I complete, we have built, under a NYS grant, an annex to the present building on the south side which houses the fluoride

supply tank and the feed system into the distribution system. This will allow better control of the fluoride in the distribution system; remove the chemical we use for fluoridation out of the water plant and a reduction of the off-gassing of this chemical by an updated ventilation system. With Phase II completed in 2021 we have started with Phase III in 2022. Phase III is an addition on the present Water Plant with the capability of treating 3 MGD. Phase III has been completed.

Introduction to SWAP

A report was completed under the New York State Department of Health's (NYS DOH) Source Water Assessment Program (SWAP). The purpose of this program is to compile, organize, and evaluate information regarding possible and actual threats to the quality of Public Water Supply (PWS) sources. The information contained in assessment reports will assist the State in overseeing public water systems and help local authorities in protecting their source water quality. It is important to note that source water assessment reports estimate the potential for untreated drinking water sources to be impacted by contamination. These reports do not address the safety or quality of treated finished potable tap water.

The source water assessment reports are based on reasonably available information, primarily from statewide databases. Although efforts have been made to check each source water assessment report for accuracy, the large scope of this program and the nature of the available data will make the elimination of all errors from these reports nearly impossible.

Executive Summary

The Great Lakes' watershed is exceptionally large and too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies which use these sources include: storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g. zebra mussels- intake clogging and taste and odor problems). This summary is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact drinking water quality at this PWS intake.

Water Quality Issues in 2023

Williamson Town is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. This year we did not have any health standard issues.

Water Quality in General

Water Utilities routinely monitors for contaminants in your drinking water according to Federal and State laws. The collected water is sent to and tested by outside testing facilities that are approved and monitored by NYS DOH. The results of our monitoring for the period of January 1st to December 31st, 2022 is the date range for this report. 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 New York State Department of Health at 315-789-3030.

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).

Are There Contaminants in Our Drinking Water?

Under the Safe Drinking Water Act (SDWA), the United States Environmental Protection Agency (EPA), sets national limits on contaminant levels to ensure the safety of your drinking water. These limits are known as 'Maximum Contaminant Levels' (MCL). An MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to

the 'Maximum Contaminant Level Goal' (MCLG) as possible. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. For some contaminants the monitoring techniques may be unreliable, too expensive, or too difficult to perform. In these cases, the EPA establishes 'treatment techniques' (TT). A required process intended to reduce the level of a contaminant in drinking water. The EPA regulations also specify testing and reporting requirements for each contaminant. 'Action Level' (AL) is the concentration of a contaminant, which if exceeded, triggers treatment or other requirements, that a water system must follow.

Something every regulation has in common is a requirement to notify the public if there is a regulation violation. If we violate a regulation, we are required to let you know. The EPA also requires water suppliers to monitor for unregulated contaminants to provide occurrence data for future regulations.

What Do We Test For?

The Town of Williamson routinely monitors for constituents in your drinking water according to Federal and State laws. We test for inorganic compounds, nitrate, nitrite, volatile organic compounds, principal organic compounds, total trihalomethanes, haloacetic acids, synthetic organic compounds, radioactive compounds, disinfection byproducts, Radium 226 and 228, asbestos, lead, and copper. In addition, we test for coliform bacteria, a minimum of eight samples per month. Five distribution samples per week are tested for turbidity, chlorine and fluoride. The treatment plant continuously monitors turbidity, chlorine, fluoride, PH, temperature and chemical treatment throughout the treatment process. In 2020, (October), we started monitoring for PFOA, PFOS, and 1,4-Dioxane as required by NYS.

What Findings Do We Report?

Any contaminants found, even in minute amounts and pose no health risk or violation; we are required by law to report it in this report. See the attached table for actual results.

Water Quality Results

We are pleased to report that our drinking water meets or exceeds all federal and state drinking water requirements and standards. In the period of January 1 to December 31, 2023, there were no Maximum Contaminant Level violations in the Treatment Plant or the distribution system.

Town of Williamson 2022 Detected Test Results

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max Range)	Unit of Meas.	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination	Required Frequency
Microbiological Contaminants								
Turbidity – Distribution	No	Daily	100% <0.75	NTU	n/a	NTU=5	Run off from soil erosion, organic and non-organic particles in the lake	Daily
Turbidity - Plant	No	Continuous	0.017 to 0.037 ³	NTU	n/a	TT=95% of samples ≤0.3	Run off from soil erosion, organic and non-organic particles in the lake	Continuous
Total Coliform	No	Monthly	None	Positive/Negative	Neg.	MCL=2 or more pos. per year	Naturally present in the environment	Eight samples per month
Inorganic Contaminants								
Copper	No	9-12-23	90%=.065 (0.0028-0.37)	mg/l	1.3	AL=1.3	Corrosion of plumbing – erosion of natural deposits	Once every three years
Lead	No	9-12-23	90%=1.2 (ND-14)	µg/l	0	AL=15	Corrosion of plumbing – erosion of natural deposits. See notes	Once every three years
Barium	No	05/11/23	0.022	mg/l	2	MCL=2	Discharge of drilling waste, discharge from metal refineries, erosion	Yearly
Nitrate	No	05/11/23	<0.33	mg/l	5	10	Runoff from fertilizer use, leaching from septic	Yearly

							tanks, sewage, erosion of natural deposits	
Fluoride	No	Daily	0.57 – 0.85	mg/l	n/a	MCL=2.2	Water additive for teeth, erosion of natural deposits, discharge from fertilizer and aluminum factories	Daily
Chromium	No	05/11/23	ND	mg/l	2	MCL=0.10	Discharge from steel and pulp mills, erosion of natural deposits	Yearly
Asbestos	No	5/26/2017	ND	MFL	7	7	Decay of asbestos cement water mains, erosion of natural deposits	Once every 9 years
Nickel	No	05/11/23	0.0020	mg/l	n/a	n/a	Run off from soil erosion	Yearly
Antimony	No	05/11/23	ND	mg/l	0.006	0.006	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	Yearly
Thallium	No	05/11/23	ND	mg/l	0.002	0.002	Leaching from ore processing sites; discharge from electronics, glass, and drug factories	Yearly
Alkalinity	No	Monthly	94 - 84	mg/l	n/a	n/a	Naturally present in the environment	Monthly
Organic Contaminants								
Organic Carbon	No	Monthly	1.6 – 1.3	mg/l	n/a	n/a	Naturally present	Monthly
Disinfection Byproducts								
Total Trihalomethanes	No	Quarterly ²	Stage II – 49.25 (22 - 75)	µg/l	n/a	MCL=80	Byproduct of drinking water disinfection needed to kill harmful organisms, TTHMs are formed when source water contains organics	Quarterly
Haloacetic Acids	No	Quarterly ²	Stage II – 26.38 (17-44)	µg/l	n/a	MCL=60	Byproduct of drinking water disinfection	Quarterly
Synthetic Organic Chemicals								
1,4-Dioxane	No	Yearly 5/11/23	ND	ug/l MCL	1 MCLG	n/a	Released into environment from commercial and industrial sources and is associated with inactive and hazardous waste sites	Yearly
PFOA	No	Yearly 12/08/22	1.9ng/l	ng/l MCL	n/a	MCL=10	Released into environment from widespread use in commercial and industrial applications	Yearly
PFOS	No	Yearly 12/08/22	2.7ng/l	ng/l MCL	n/a	MCL=10	Released into environment from widespread use in commercial and industrial applications	Yearly
Unregulated Perfluoroalkyl Substances								
PFHPA	No	12/8/22	1.0ng/l	ng/l	N/A	N/A	Breakdown product of stain- and grease-proof coatings on food packaging, couches, carpets	Yearly
PFHXS	No	12/8/22	1.0ng/l	ng/l	N/A	N/A	Used in stain-resistant fabrics, fire-fighting foams, food packaging, and surfactant in industrial processes	Yearly
PFHXA	No	12/8/22	1.5ng/l	ng/l	N/A	N/A	Breakdown product of other PFAS that are used in Stain-resistant fabrics, paper food packaging, and carpets	Yearly

Radioactive Particles								
Radium - 228	No	05/13/2020	2.7	pCi/L	5	5	Eroding of natural deposits	Every 9 Years
Radium - 226	No	05/13/2020	ND	pCi/L	5	5	Decay of natural deposits	Every 9 Years

Sample note: All PFOA/PFOS samples were taken and sent on 12-14-2023 to Life Science Laboratories in East Syracuse NY. We have been working with the department of health to get the results with no luck to this point. Complaints have been sent to Wadsworth and we will work to alleviate this problem.

Due to this situation we have to post this. "The Town of Williamson is required to Monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards. During 2023 we did not monitor or test for perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) and, therefore cannot be sure of the quality of your drinking water during that time.

Table Notes:

1. The State allows us to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old.
2. This represents the highest locational running annual average calculated quarterly from all the data collected.
3. Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement (0.037 NTU) for the year occurred during August 20, 2023 with an average for the year at 0.029 NTU. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. The levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.
4. Samples for Stage II were collected 02/08/23, 05/10/23, 08/10/23, and 11/09/23, on Arbor Road and at the Williamson High School which were selected during Stage I evaluations of the water system within the Williamson Water District. The range of the samples are in parenthesis.
5. These levels represent the 90th percentile of the 35 sites tested. No sites exceeded the Action Levels.
6. Sampling for PFOA, PFOS, PFHPA, FHFXS, and PFHXA started in October 2020 – Released into the environment from widespread use in commercial and industrial applications.

Terms and 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. MRDLGs 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 - ppb).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

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

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that is longer than 10 micrometers.

Nanograms per liter (ng/l): corresponds to one part of liquid in one trillion parts of liquid (parts per trillion – ppt)."

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 the level allowed by the State.

Is Our Water System Meeting Other Rules That Govern Operations?

During 2023, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

Fluoride

Our system is one of many water systems in New York State that provides drinking water with controlled, low level 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 a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7mg/l. During 2023 monitoring showed fluoride levels in your water were within 0.2 mg/l of the target level for 99% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

Lead

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Williamson Water Utilities is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Williamson Water Plant at watertreatment@towilliamson.com. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

Conservation

Unlike many areas in the country, Williamson has access to more than enough water to meet its current and future needs; Lake Ontario is our direct connection to the Great Lakes, which contain 25% of the world's surface fresh water. Even with this abundance, we need to use water wisely. It takes energy and resources to treat and deliver the water to your homes and businesses. On hot summer days, our output can reach a maximum limit of 3.5 million gallons a day. In an effort to promote the wise use of water, to avoid waste and reduce our energy demands, we offer the following conservation tips:

- Fix leaky faucets and toilets. A drop a minute can amount to 2,400 gallons over the course of a year.
- Water your lawn only when necessary. When you walk on the grass, does it spring back up? If it does, your lawn doesn't need watering.
- If water is needed, give your lawn a thorough soaking. The most effective time to water is before 10:00 AM, because

more of the water soaks into the ground. After that time, you lose water through evaporation. This also helps minimize energy and production peaks during the driest parts of the year.

- When washing your car, use a bucket for washing and turn on the hose only for rinsing. Don't let the water run continuously from the hose when you're not using it.
- Put a layer of mulch around trees and plants to hold water for your plants. The mulch will also discourage weed growth.
- If you have a swimming pool, fill it during the night when demands on power and production systems are less.
- Home car washing contributes to ground water contamination and uses more water, whereby professional car washing conserves water use due to water recovery systems at those places.

Closing

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 very important to our community. Please call if you have questions.