



TOWN OF WILLIAMSON

Williamson Water Plant

Phone: 315-589-3781

Williamson Water Utilities

Annual Water Quality Report

As required by the EPA, this report is designed to inform you about the quality of water and the services we deliver to you every day. 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 (WWTF) is a surface treatment plant using Lake Ontario as its water source, which provides an abundant source of fresh water. The WWTF 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 (federal *id number* 5801258) and the water distribution system is operated and maintained by the Town of Williamson personnel under the direction and guidance of 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 Suite 2 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 Calvin Hood at the water plant, phone - 589-3781, E-mail rwilli37@rochester.rr.com. For questions on the distribution system, Bill Dobie (Outside Foreman) *phone/fax* - 589-9481 *cell phone* -1-585-748-6930. For billing information contact, Marlene Gulick (Town Clerk) 589-8100 *fax* - 589-9485. General concerns or comments about the whole system, James Hoffman (Town Supervisor) *phone* - 589-2038 *fax* - 589-9326.

Water Purchasers -

The WWTF 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 Authority (WCWA), which in turn sells water to Marion. 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, WCWA, and Sodus.

Water Production -

The Town of Williamson treated an average 1.51 million gallons of potable water a day from Lake Ontario. Last fiscal year (2009) the Treatment Plant treated 549,842,000 gallons, of that amount, 495,313,818 gallons were sold to its customers – 72,667,000 gallons were sold to Wayne County Water Authority (WCWA), 9,760,000 gallons were sold to the Town of Sodus, 242,152,750 gallons sold to Cadbury, 170,734,068 gallons sold to Williamson residents, and 661,400 gallons sold to Hydrant meter users. The unaccounted water of over 9% was due to hydrant flushing, fire flow testing, new main installation flushing, main and service breaks, non-metered sites, temporarily stopped meters, and small undetected leaks in the system. Although there's going to be some unaccounted water loss in every system, we feel by replacing older mains and by being vigilant on stopped meters, that we can minimize this loss.

Water Revenue/Rates -

The total gross water revenue for the Town was \$1,418,025.24. A new water rate has been implemented, the charge for residential water customers (as of April 2010) is a \$25.00 minimum charge (covers up to 6,000 gallons), and \$3.75 per thousand over 6,000 gallons, on a quarterly billing cycle.

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 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. This reaction happens in a large chamber called the flocculation tank. 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 flocculation tank, 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 24 hours a day during the week and 16-24 hours on the weekends dependent on demand. It is possible to treat almost 4 million gallons of water a day if needed. During the treatment process the water is monitored and tested continually though out the whole process.

Distribution System -

The Williamson distribution system contains about 87 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, plastic, and transite. Ages of water mains range from 1913 to 2009. The distribution system also contains approximately 750 fire hydrants and 320 line valves. The Town has two reservoirs with a total capacity of 2.75 million gallons. The system is maintained by use of the Towns 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.

Introduction to SWAP -

A report was completed under the NYS DOH's 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). The summary below 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 -

Williamson 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 the DOH (Dept. of Health) for the State of New York. The results of our monitoring for the period of January 1st to December 31st, 2009 is the date range for this report. All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily indicate that water poses a health risk. Some people may be more vulnerable to disease causing micro-organisms or pathogens in drinking water than the general population, Immune-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 about drinking water from their health care providers. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline (800-426-4791).

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 materials 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 Department's and the FDA'S regulations establish limits for contaminants in bottled water which must provide the same protection for the public.

Are there contaminants in our drinking water?

Under the Safe Drinking Water Act, (SDWA), the United States Environmental Protection Agency, (EPA), and sets national limits on contaminant levels to ensure the safety of your drinking water. These limits are known as "Maximum Contaminant Levels, (MCL). A 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, 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 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.

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 *results table* below.

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, 2009, there were no Maximum Contaminant Level violations in the Treatment Plant or the distribution system.

Please refer to the attached table for actual results.

What does this information mean?

As you can see from the attached table we had no violations. We have learned through our testing that some contaminants have been detected: however these contaminants were detected below level allowed by New York State requirements.

Is our water system meeting other rules that govern operations?

During 2009 Williamson's Town water system was in compliance with applicable State drinking water

operating, monitoring and reporting requirements.

Cryptosporidium and Giardia -

Cryptosporidium is a microbial pathogen found in surface water and groundwater 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.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and Giardia other microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791). For additional information you can contact:

New York State Department of Health
624 Pre-Emption Rd.
Geneva, New York 14456
1-315-789-3030

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 an optimal range from 0.8 to 1.2 mg/l.

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 3.7 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.