

## *Annual Drinking Water Quality Report for 2010*

*Town of Glenville*

*18 Glenridge Road Glenville, New York 12302*

*(Public Water Supply ID# 4600091*

*[www.townofglenville.org](http://www.townofglenville.org)*

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### **INTRODUCTION**

To comply with State regulations, the Town of Glenville annually issues a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level. 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.

If you have any questions about this report or concerning your drinking water, please contact Mr. Roger Harrison, Plant Operator at (518) 382-1410 ([rharrison@townofglenville.org](mailto:rharrison@townofglenville.org)) or Thomas Coppola, Commissioner of Public Works at (518) 382-1406. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held on the 1st and 3rd Wednesdays of the month at 7:30 P.M. in the Glenville Municipal Center, 18 Glenridge Road.

#### **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 Department's and the FDA's regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water source is located west of the Village of Scotia between New York State Route 5 and the Mohawk River, actually a little west of the Route 5 and Van Buren Lane intersection. The Glenville water supply is taken from the Great Flats Aquifer (also known as the Schenectady Aquifer) through four drilled wells approximately 50-feet deep. The Great Flats Aquifer is one of the most productive in the State of New York and supplies the nearby Village of Scotia wells, the City of Schenectady well field, and the Town of Rotterdam wells. The aquifer is an extensive bed of sands and gravel underlying the Mohawk River channel. The Great Flats Aquifer produces clear, clean water without any major chemical constituents except the hardness.

During 2010, our system did not experience any restriction of our water source. Prior to distribution, the well water is pumped into a clear well where it is given a disinfecting treatment with chlorine before being pumped into the transmission and distribution mains. A chlorine residual of 0.2 is maintained throughout the distribution system as required by New York State Department of Health Regulations as continuing insurance against any bacterial growth occurring within the system. The NYS DOH 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. The section of the report entitled, "Are there contaminants in our drinking water?" provides a list of the contaminants that have been detected. As mentioned earlier in this report, our drinking water is derived from 4-drilled wells. The source water assessment has rated these wells as having an elevated susceptibility. In addition, the wells draw from an unconfined aquifer and the overlying soils are not known to provide adequate protection from potential contamination. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted below.

While the source water assessment rates our well(s) 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. The Glenville Water District # 11 recognizes the importance of watershed protection by implementing Watershed Rules and Regulations along with zoning restrictions. In 2004, many of the water related sites in the Town of Glenville were fenced off and alarm systems added for increased security.

#### **FACTS AND FIGURES**

Our water system serves approximately 15,000 people through 6201 service connections. The total water produced in 2010 was 740.9 million gallons. The daily average of water treated and pumped into the distribution system is 2,099,065 gallons per day. Our highest single day in 2010 was 5,015,000 gallons on May 31st. The amount of water delivered to customers was 678,361,000 gallons. The 62.5 million gallon difference is water that was used for firefighting, hydrant and system flushing and leaks in the system. In 2010, water customer charges were a minimum of \$40.00 for water usage of up to 30,000 gallons. Water usage above 30,000 gallons is charged \$2.35 per 1,000 gallons of water.

#### **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, we routinely test your drinking water for numerous contaminants. There were 180 microbiological samples taken throughout the system. We are required to collect 15 samples every month that are tested for coliform bacteria and chlorine residual. Ninety-two elements consisting of Synthetic-Organic Chemicals and Primary Inorganic Chemicals were tested for in 2008. Principal Organic Chemicals and Total Trihalomethanes were tested for in 2010. Nitrate was also included in those tests. Any parameters, at detectable levels, will appear in the following table. Radiological tests for three parameters were done in 2010. The results for all three tests were not at a detectable level so they do not appear in the following table.

In 2008, the town conducted sampling at 30 sites for lead. The 90th percentile for the lead tests was 3.3 ug/l. The sample results ranged from <1 ug/l to 4.3 ug/l. We comply with the state because less than 5 percent of the samples exceeded the 15 ug/l Action Level. In 2005, the town also conducted sampling at 30 sites for copper. The 90th percentile for the copper tests was 0.148 mg/l. The sample results ranged from <0.020 mg/l to 0.300 mg/l. The Action Level for copper is >1.3 mg/l. In 2011, we will again test for lead and copper in our system.

If present, elevated levels of 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. The Town of Glenville 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 from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

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 per 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, 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 Schenectady County Health Department at (518) 386-2818

#### **.WHAT DOES THIS INFORMATION MEAN?**

We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

#### **DID WE HAVE ANY VIOLATIONS IN 2010?**

On February 23rd during routine monthly sampling one location and well #2 tested positive for e-coli. To verify the results, on February 25th the same routine location that tested positive was retested along with two other locations in close proximity to the original sample. Another sample was taken in the general water district. In addition, all four operating wells were tested, with well #2 being tested four times. All samples were negative, and there have been no positive samples since that incident.

## IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2007, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

Parameter	Sample Date	Violation (Y/N)	Level Detected	Units	MCL	MCLG	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Nitrate	8/10	N	0.218	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Secondary Inorganic Standards</b>							
Hardness (CaCo3)	4/10	N	238 (14 gr.)	mg/l	N/A	N/A	
Sodium	5/01	N	50	mg/	N/A see note (1)	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Fluoride	8/09	N	0.083	mg/l	2.2	N/A	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Chromium	8/09	N	0.0036	mg/l	0.1	0.1	Some people who use water containing chromium well in excess of MCL, over many years could experience allergic dermatitis.
Selenium	8/09	N	<0.001	mg/l	0.05	N/A	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
<b>Miscellaneous Parameters</b>							
Alkalinity	5/01	N	140	mg/l	N/A	N/A	
<b>Synthetic Organic Chemicals</b>							
1,2-dibromo-3-chloropropane	12/09	N	<0.000044	mg/l	0.0002	0	
<b>Disinfection Byproducts</b>							
Total Trihalomethanes	8/10	N	0.0003	Mg/l	0.80	N/A	By-product of drinking water chlorination needed to kill harmful organisms. THMs are formed when source water contains large amounts of organic matter.
Total HAA5's	8/10	N	0.031	Mg/l	0.60	N/A	By-product of drinking water chlorination

(1) Water containing more than 20 mg/l sodium should not be used for drinking water by people on severely restricted sodium diets.

### 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 that 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).

**Nanograms per liter (ng/l):** Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

**Picograms per liter (pg/l):** Corresponds to one part of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

**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.

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

### **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).

### **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; and
- ♦ 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 fire fighting 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 up 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**

The Town continues to upgrade our system. Upgrades have been made in our chlorine monitoring system and the control system for chlorine distribution.

### **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. Please call our office at (518) 688-1217 if you have questions.