

**Annual Drinking Water Quality Report for 2015**  
**Village of Stillwater**  
**1 School Street Stillwater, New York 12170**  
**(Public Water Supply ID# 4500171)**

**INTRODUCTION**

To comply with State regulations, the Village of Stillwater will be annually issuing 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. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resource.

If you have any questions concerning this report or concerning your drinking water, please contact: *Village of Stillwater PO Box 507, Stillwater, N.Y. 12170 at (518) 664-3298*. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. The meetings are held at 7:00 p.m., the third Tuesday of each month at the Village Boardroom on Palmer Street.

**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 which must provide the same protection for public health.

Our water source is purchased from Saratoga County Water Authority (SCWA). The source is the upper Hudson River in Moreau where it is treated by membrane filters and disinfected with chlorine. Water flows through a water main to the Luther Forest Technology Park. A new 12" transmission main constructed by the Village of Stillwater brings water from the SCWA system to our two storage tanks. The Village of Stillwater has a 488,000-gallon steel storage tank located off Dick Lynch Road and an older 200,000-gallon steel standpipe located near Saratoga Hills Mobile Home Park.

**FACTS AND FIGURES**

Our water system serves over 4,000 people through 1,500 service connections. The total water purchased in 2015 was 111,888,000 gallons. The daily average of water treated and pumped into the distribution system is 306,500 gallons per day. Our highest monthly average daily water demand was 544,582 gallons in February, 2015. The amount of water used includes an accounting of the total annual amount of water delivered to customers in addition to the water that is lost from the system. In 2015, the amount of water delivered was 33,385,421 gallons to customers of the Village of Stillwater, 33,059,900 gallons delivered to customers of the Town of Stillwater and 12,696,000 gallons delivered to residents of Saratoga Hills. This leaves an unaccounted for total of 32,746,700 gallons. This water was used to flush hydrants and mains three times per year, fight fires and leakage in the system. A significant leak was discovered and repaired within the system in 2015. In 2015, water customers were charged \$4.50 per 1,000 gallons of water for Village residents. The Town of Stillwater was charged \$6.38 per 1,000 gallons and Saratoga Hills Mobile Home Park was charged \$6.38 per 1,000 gallons.

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

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include total coliform bacteria, turbidity, inorganic compounds, Nitrate, Lead and Copper, Disinfection Byproducts, and Radiological. 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, might be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's**

**Safe Drinking Water Hotline (800-426-4791) or the NYS Department of Health Glens Falls District Office at (518) 793-3893.**

| <b>Table of Detected Contaminants<br/>Village of Stillwater</b> |                         |   |   |                        |             |  |   |
|---|-------------------------|---|---|------------------------|-------------|--|---|
| <b>Contaminant</b>  | <b>Violation Yes/No</b> | <b>Date of Sample</b>                     | <b>Level Detected (Avg/Max) (Range)</b>   | <b>Unit of measure</b> | <b>MCLG</b> | <b>Regulatory Limit (MCL, TT or AL)</b>                  | <b>Likely Source of Contamination</b>   |
| Total Coliform Bacteria   | No                      | Monthly                                   | N/A   | N/A                    | 0           | Two or more positive samples represents an MCL violation | Naturally present in the environment  |
| Turbidity <sup>1</sup>  | No                      | Daily                                     | 0.0 to 7.0  | NTU                    | N/A         | Above 5 NTU for monthly average                          | Corrosion/Rust especially during flushing or hydrant use.   |
| <b>Inorganic compounds</b>                                      |                         |   |   |                        |             |  |   |
| Copper  | No                      | 5/20/15<br>11/20/15                       | 0.261 <sup>2</sup><br>(0.090-0.437) <sup>3</sup><br><br>0.165 <sup>2</sup><br>(0.00-0.433) <sup>3</sup> | mg/L                   | 1.3         | 1.3 (AL)   | Corrosion of household plumbing Systems; erosion of natural deposits; Leaching from wood preservatives. |
| Lead  | Yes                     | 5/20/15<br>11/20/15                       | 0.072 <sup>2</sup><br>(0.00-0.430) <sup>3</sup><br>0.038 <sup>2</sup><br>(0.00-0.076) <sup>3</sup>      | mg/L                   | 0.0         | 0.015 (AL)   | Corrosion of household plumbing systems; erosion of natural deposits.                                   |
| <b>Disinfection Byproducts<sup>6</sup></b>                      |                         |   |   |                        |             |  |   |
| Total Trihalomethanes   | No                      | 2/11/15<br>5/13/15<br>8/18/15<br>11/13/15 | RAA (Q1) 75.6 <sup>4</sup><br>(45.0-83.3) <sup>3</sup>  | ug/L                   | N/A         | 80 (MCL)   | Byproduct of drinking water chlorination  |
| Total Haloacetic Acids  | No                      | 2/11/15<br>5/13/15<br>8/18/15<br>11/13/15 | RAA (Q1) 40.5 <sup>4</sup><br>(23.0-76.1) <sup>3</sup>  | ug/L                   | N/A         | 60 (MCL)   | Byproduct of drinking water chlorination  |

- Notes 1-Turbidity is a measure of cloudiness of the water. The Saratoga County Water Authority tests it because it is a good indicator of the effectiveness of the filtration system. State regulations require that turbidity must be below 1 NTU at the treatment and 5 NTU in the distribution system.
- 2-The level presented represents the 90<sup>th</sup> percentile of the 20 sites tested. In this case, 20 samples were collected at our water system and the 90<sup>th</sup> percentile value was the 2<sup>nd</sup> highest sample results.
- 3-This number represents the range of sample results.
- 4-The level presented represents the highest running annual average calculated for 2015. The running annual average is calculated by taking the average of the four most recent samples collected.

**Table of Detected Contaminants  
Saratoga County Water Authority**

| Contaminant                                | Violation<br>Yes/No | Date of<br>Sample      | Level<br>Detected<br>(Avg/Max)<br>(Range) | Unit<br>Measurement | MCLG | Regulatory<br>Limit (MCL, TT<br>or AL)   | Likely Source of<br>Contamination  |
|--|---------------------|------------------------|---|---------------------|------|--|--|
| <b>Microbiological Contaminants</b>        |                     |                        |   |                     |      |  |  |
| Total Coliform Bacteria                    | No                  | N/A                    | None                                      | N/A                 | 0    | Systems with less than 40 samples per month- two or more samples positive for Total Coliform represents an MCL violation | Naturally present in the environment.  |
| Turbidity<br>(Highest Result -Entry Point) | No                  | 5-6-15                 | 0.115                                     | NTU                 | N/A  | TT-1.0   | Soil Runoff.   |
| Transmission System                        | No                  | 5-19-15                | 0.67                                      | NTU                 | N/A  | TT-5.0   |  |
| Total Organic Carbon<br>(TOC)              | No                  | Raw Avg<br>Treated Avg | 3.9 mg/l<br>2.2 mg/l                      | mg/l                | N/A  | TT   | Naturally present in the environment.  |
| <b>Inorganics</b>                          |                     |                        |   |                     |      |  |  |
| Contaminant                                | Violation<br>Yes/No | Date of<br>Sample      | Level<br>Detected<br>(Avg/Max)<br>(Range) | Unit<br>Measurement | MCLG | Regulatory<br>Limit (MCL, TT<br>or AL)   | Likely Source of<br>Contamination  |
| Nitrate                                    | No                  | 2/24/2015              | 0.19                                      | mg/l                | 10   | 10   | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits. |

|           |    |           |       |      |     |      |   |
|-----------|----|-----------|-------|------|-----|------|---|
| Fluoride  | No | 1-11-2011 | 0.038 | mg/l | N/A | 2.2  | Erosion of Natural Deposits; Water additive that promotes strong teeth.                     |
| Manganese | No | 1/22/2013 | 12    | ug/l | N/A | 300  | Naturally occurring; Indicative of landfill contamination                                   |
| Sodium    | No | 1/22/2013 | 8.44  | mg/l | N/A | 270* | Naturally occurring; Road salt; Water softeners; Animal waste.                              |
| Zinc      | No | 1/22/2013 | 21    | ug/l | N/A | 5000 | Naturally occurring; Mining waste.  |
| Chloride  | No | 1/22/2013 | 10.8  | mg/l | N/A | 250  | Naturally occurring or indicative of road salt contamination.                               |
| Sulfate   | No | 1/22/2013 | 3.8   | mg/l | N/A | 250  | Naturally occurring.  |
| Barium    | No | 2/24/2015 | 6.0   | ug/l | 2   | 2000 | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |

**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.

**Running Annual Average (RAA):** The arithmetic average of the average results for each of four consecutive quarters. For disinfection byproducts the MCL and RAA are rounded to the nearest tenth when the results are given in micrograms per liter.

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

**Secondary Standards:** Established standards that are based on aesthetics and are not based on health risk. These contaminants may cause color, taste or odor problems but will not cause illness.

**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 per 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.

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

As you can see by the table, our system did not have any violations for HAA5's and THM's for 2015. (Disinfection Byproducts).

The Village of Stillwater exceeded the Action Level for Lead in 2015. The Village monitors lead in drinking water by sampling tap water at select households throughout the Village. Village water is virtually lead-free when it is delivered from the Saratoga County Water Authority, but water can absorb lead from solder, fixtures and pipes found in the service lines and plumbing of some buildings or homes. To identify the source of lead sampled at Village households, the Village tested its water distribution mains at multiple locations and the results were non-detectable. The likely source of lead is the corrosion of household service lines and plumbing systems. The Village has an active corrosion control program aimed at reducing lead absorption from service lines and internal plumbing.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women 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. The Village 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://water.epa.gov/drink/info/lead/index.cfm>. You may also contact the N.Y.S D.H. at (518) 793-3893

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

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

The Department of Health has indicated that the certification of the "Annual Water Quality Report" delivery was provided by the Village to the DOH late in 2015. In addition, the quarterly testing completed for disinfection by-products for May, 2015 was completed at a location not approved by the Department of Health.

The Village of Stillwater is in violation of State lead control requirements for elevated lead results during 2015. We are working with the New York State Department of Health to determine the extent of the problem and the best possible solution. Therefore, we must include the following statement in this report: "Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink this water over many years could develop kidney problems or high blood pressure."

## **DO I NEED TO TAKE SPECIAL PRECAUTIONS**

Some people may be more vulnerable to disease causing microorganisms 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 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;
- 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, and then check the meter after 15 minutes. If it moved, you have a leak.

## **SYSTEM IMPROVEMENTS**

- The Village flushed the distribution system three times to remove sediment to insure the delivery of clean water.
- The Village installed a tank aeration system to reduce the level of disinfection byproducts.
- The Village began adding a blended poly-orthophosphate to reduce lead levels in the fall of 2014.
- The Village has plans to replace the Hillside Water Storage Tank.

## **SOURCE WATER ASSESSMENT**

Our drinking water is purchased from the Saratoga County Water Authority, which is derived from the Hudson River in the Town of Moreau, upstream of Fort Edward. Hydrologic characteristics generally make rivers highly sensitive to existing and new sources of nitrate, phosphorus and microbial contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this Public Water System (PWS). This PWS provides treatment and regular monitoring to ensure that the water delivered to consumers meets all applicable standards. Continued vigilance in compliance with water quality protection and pollution prevention programs as well as continued monitoring and enforcement will help to continue to protect our source water quality.

The State Health Department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning and education programs. Copy of the assessment can be obtained by contacting us.

**CLOSING**

Thank you for allowing us to continue to provide your family with drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. **Please call our office if you have questions at 664-3298.**