Annual Drinking Water Quality Report for 2013
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: *Mayor Ernest Martin, 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 2013 was 112,839,000 gallons. The daily average of water treated and pumped into the distribution system is 309,100 gallons per day. Our highest single day of water demand was 570,656 gallons on May 8, 2013 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 2013, the amount of water delivered was 64,892,832 gallons to customers of the Village of Stillwater, 31,701,168 gallons delivered to customers of the Town of Stillwater and 12,411,000 gallons delivered to residents of Saratoga Hills. This leaves an unaccounted for total of 5,671,000 million gallons. This water was used to flush hydrants and mains three times per year, fight fires and leakage in the system. In 2013, water customers were charged $4.12 per 1,000 gallons of water for Village residents. The Town of Stillwater was charged $6.00 per 1,000 gallons and Saratoga Hills Mobile Home Park was charged $6.00 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.**

Table of Detected Contaminants
Village of Stillwater

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Total Coliform Bacteria	Yes No	06/17/13 06/19/13 10/16/13	N/A	N/A	0	Two or more positive samples represents an MCL violation	Naturally present in the environment
Turbidity[1]	No	Daily	0.015	NTU	N/A	5 NTU	Soil Run Off
Inorganic compounds							
Barium[5]	No	6/29/11	0.01	mg/L	2	2 (MCL)	Discharge of drilling waste; Discharge from metal refines; Erosion of natural deposits
Copper	No	6/6/13	0.361[2] (ND-0.454)[3]	mg/L	1.3	1.3 (AL)	Corrosion of household plumbing Systems; erosion of natural deposits; Leaching from wood preservatives
Lead	Yes	6/6/13	49[2] (ND-80)[3]	ug/L	0	15 (AL)	Corrosion of household plumbing systems; erosion of natural deposits.
Disinfection Byproducts[6]							
Total Trihalomethanes Stage 1	Yes	2/12/13 6/17/13 8/8/13	RAA 121 (Q3) 43-164[3]	ug/L	N/A	80 (MCL)	Byproduct of drinking water chlorination
Total Haloacetic Acids Stage 1	Yes	2/12/13 6/17/13 8/8/13	RAA 102 (Q3) 47-157[3]	ug/L	N/A	60 (MCL)	Byproduct of drinking water chlorination
Total Trihalomethanes Stage 2	No	11/7/13, 11/21/13	62-81[3,6]	ug/L	N/A	80 (MCL)	Byproduct of drinking water chlorination
Total Haloacetic Acids Stage 2	No	11/7/13, 11/21/13	12.9-22[3,6]	ug/L	N/A	60 (MCL)	Byproduct of drinking water Chlorination

Radiological[5]							
Radium 228	No	Sampled quarterly in 2008	0.7-4.0 2.1 Average	pCi/L	0	5 (MCL)	Erosion of natural deposits
Radium 226	No	08/06/08	0.07	pCi/l	0	5 (MCL)	Erosion of natural deposits.

Table of Detected Contaminants
Saratoga County Water Authority

Microbiological Contaminants							
Contaminant	**Violation Yes/No**	**Date of Sample**	**Level Detected (Avg/Max) (Range)**	**Unit of measure**	**MCLG**	**Regulatory Limit (MCL, TT or AL)**	**Likely Source of Contamination**
Turbidity[1] Entry Point (Highest Result)	No	7/3/13	0.88	NTU	N/A	1.0	Soil runoff
Transmission Main	No	August (monthly avg)	0.571	NTU	N/A	5.0	
Total Organic Carbon (TOC)	No	Raw Avg. Treated Avg.	4.2 1.0	Mg/L	N/A	N/A	Naturally present in the environment
Inorganic compounds							
Nitrate	No	1/22/13	0.18	Mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Manganese	No	1/22/13	12	Ug/L	N/A	300	Naturally occurring; indicative of landfill contamination
Sodium	No	1/22/13	8.44	Mg/L	N/A	270*	Naturally occurring; road salt, water softeners; animal waste
Zinc	No	1/22/13	21	Ug/L	N/A	5000	Naturally occurring; mining waste
Chloride	No	1/22/13	10.8	Mg/L	N/A	250	Naturally occurring or indicative of road salt contamination
Sulfate	No	1/22/13	3.8	Mg/L	N/A	250	Naturally occurring
Barium	No	1/22/13	6	Ug/L	N/A	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

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. Our highest single turbidity measurement for the year occurred on 7/3/13. State regulations require that turbidity must always be below 1 NTU at the treatment plant and 5 NTU in the distribution system.

2 The level presented represents the 90th percentile of the 20 sites tested. In this case, 2 samples were collected at our water system and the 90th percentile value was the 2nd highest sample result.

3 This number represents the range of sample results.

4 The level presented represents the highest running annual average calculated for 2013. The running annual average is calculated by taking the average of the four most recent samples collected

5 These samples were collected from the Village of Stillwater's wells that are no longer in use. We are required to report all sample results that are less than 5 years old.

6 Due to a change in the drinking water regulations, our disinfection byproducts sampling points were modified during the 4th quarter of 2013. A running annual average will be calculated to determine compliance with the new regulations once either four consecutive quarters of data is obtained unless we are found to be out of compliance after less than four quarters of data is obtained.

* Water containing more than 20 mg/L of sodium should not be consumed by persons on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be consumed by persons on moderately 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.

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 had MCL violations during the 1st, 2nd and 3rd Quarter of 2013 for Total Trihalomethanes; the 2nd and 3rd Quarter of 2013 for Haloacetic Acids. Public notification was posted in the Daily Gazette and on the Village web site. Disinfection products include two types of chemicals, Total Trihlaomethanes (TTHM) and Haloactic Acids (HAA5). TTHMs are four volatile organic chemicals and HAA5s are five haloacetic acid compounds which form when disinfectants react with natural organic matter in the water. We are working with the Saratoga County Water Authority to minimize the formation of TTHMs and HAAS while ensuring we maintain an adequate level of disinfectant.

People who drink water containing Trihalomethanes or Haloacetic Acids in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous system and may have an increased risk of getting cancer.

The Village of Stillwater exceeded the Action Level for Lead in 2013. 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. Stillwater 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 hup:// *www.eva.gov/safewater/tear. ,*

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.

During the month of June, the Village of Stillwater received a total coliform MCL violation. Two samples during that month tested positive for total coliform.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

The Village of Stillwater was in compliance with all monitoring and reporting requirements in 2013.

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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 Saratoga County Water Authority began adding a blended poly-orthophosphate to reduce lead levels

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.**