

Annual Water Quality Report for 2015
Village of South Glens Falls
46 Saratoga Avenue, South Glens Falls, NY 12803
Public Water Supply ID Number: NY4500170

INTRODUCTION

To comply with New York State regulations, the Village of South Glens Falls will issue an annual 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 resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. John A. Dixon, Jr., Operator in Charge, Village of South Glens Falls, 116-1/2 Saratoga Avenue, South Glens Falls, NY 12803; Telephone (518) 792-5046 (work), (518) 792-8812 (home).* We want our valued customers to be informed about their drinking water. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 1st and 3rd Wednesday of each month, beginning 7:00 PM at the Village Hall located at 46 Saratoga Avenue, South Glens Falls, NY 12803; Telephone (518) 793-1455.

WHERE DOES OUR WATER COME FROM?

The Village is served by 20 underground springs that are located on a hillside above the flood plain of the Hudson River in the southwest corner of the Village. The springs have a yield of approximately 850,000 gallons per day and feed our 600,000 gallon concrete reservoir. The Village previously also had three wells. Two of the well supplies have been taken off-line and will be abandoned; one well supply is still available but is currently not connected to the water system. Treatment of the spring supply consists of cartridge filtration and chlorination to protect against contamination from harmful bacteria and other organisms. We also have an interconnection with the Town of Moreau that can be used during emergencies.

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 NYS DOH and the US EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. NYS DOH and U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health and safety as for public water supplies.

The source water assessment (SWAP) performed by the New York State Health Department has rated our source water as having an elevated susceptibility to microbial contamination, nitrates and industrial contaminants. It should be noted that the SWAP looks at the untreated water only. Our water is treated to minimize the potential sources of contamination. A copy of the full Source Water Assessment is available for review by contacting the Village Office at the number provided in this report.

FACTS AND FIGURES

The Village of South Glens Falls water system serves approximately 3,700 individuals through 1,658 service connections. The total amount of Water produced for the year in the Village was 206,685,000. Our average daily demand during 2015 was 566,260 gallons per day. Our single highest day was 1,034,000 gallons. The lowest water production day was 283,000 gallons. Village Residential customers are not metered. Current water rates are as follows: *Residential Village Customers - \$125.00 semi-annually (customers are not metered); Commercial Customers - flat rate of \$125.00 semi-annually plus \$2.25 per 1,000 gallons for quantities over 25,000 gallons (commercial customers are metered); There are no longer any Town of Moreau residents outside of the Village using the Village of South Glens Falls Water supply. As of May 2012, Fenimore*

water district customers began using the Town of Moreau water which is supplied by the Town of Queensbury and Saratoga County Water Authority.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In accordance with State regulations, the Village of South Glens Falls routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, and synthetic organic contaminants. In addition, we test four samples each month for coliform bacteria. The results of this testing are listed on the following Table I, which lists what contaminants were detected in your drinking water in 2015. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old and is so noted. A listing of the parameters we analyzed that were not detected, along with the frequency of testing for compliance with the NYS Sanitary Code is provided on Table I (noted as Appendix Table A)

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 pose a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791) or the NYS DOH, Office of Public Health (518 793-3893). Information is also available through the US EPA's drinking water website (www.epa.gov/safewater/hfacts.html) and the NYS DOH website (www.health.state.ny.us)

WHAT DOES THIS INFORMATION MEAN?

We have learned through our monitoring and testing that some constituents have been detected; however, these compounds were detected below New York State requirements. Maximum contaminant levels (MCLs) are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters (0.53 gallons) of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATION?

We are currently in compliance with the Surface Water Treatment Rule. ▼

Deleted: We did not collect Synthetic Organic or inorganic samples during 2013. We will collect these samples in 2014.

INFORMATION ON DISINFECTION BY-PRODUCTS

We were required to monitor for the disinfection by-products - Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5) within the distribution system. In 2015, four samples were collected for TTHMs and HAA5 at state specified locations. The sampling results showed that disinfection by-product concentrations were well below the maximum contaminant levels (MCLs); *i.e.* less than 80 µg/L for TTHMs and less than 60 µg/L for HAA5. Sample results are presented in the Table I later in this report.

INFORMATION ON LEAD

Testing for Lead (Pb) and copper (Cu) was not required in 2015, and were last collected in September 2014. The next required sampling for lead and copper (per NYS DOH monitoring requirements) will be in 2016. Samples were collected in 2014 from twenty (20) residences within the Village's distribution system and were analyzed for lead and copper. The results of this testing showed that lead concentrations at all of the 20 points tested were less than the safe drinking water lead action level, which is 15 micrograms per liter (µg/L) and all 20 points tested were below the copper action level, which is 1.3 mg/L. The highest lead concentration for all the points sampled in 2014, was 14µg/L and the highest copper concentration was 0.326 mg/L. Although all of the lead levels in the Village water tested were below the safe drinking water action limit, we are required to include the following information on lead:

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 Village of South Glens Falls 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>.

WATER CONSERVATION TIPS

The Village of South Glens Falls encourages water conservation. There are many things you can do to conserve water in your own home. Conservation tips include:

- Only run the dishwasher and clothes washer when there is a full load
- Use water saving showerheads
- Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute
- The Village promotes conservation of water by limiting outside water usage. The Village requests that the outside use of water for lawns and gardens be performed on odd/even days, corresponding to your property address. In addition, outside water should be performed between the hours of 6:00 to 9:00 AM and 6:00 to 9:00 PM.
- Check faucets, pipes and toilets for leaks and repair all leaks promptly
- Take shorter showers

CAPITAL-IMPROVEMENTS

There were no new capital projects in 2015.

CLOSING

Thank you for allowing us to continue providing your family with clean quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. You will be informed of system improvements in future Annual Water Quality Reports. We ask that all our customers help us protect our water source, which is the heart of our community. Please call the Village office if you have questions.

**Table I
Table of Detected Contaminants in 2015 for the Village of South Glens Falls
Spring Box Source Water**

(Note: Some test data shown on table are from previous years monitoring program.)†

	Violation Yes/No	Date(s) of Sample	Level Detected (Maximum) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Chloride	No	12/29/11	131	mg/L	N/A	250 = MCL	Geology, naturally occurring; and road salt
Chloromethane	No	12/16/2015	0.6	µg/L	5	5 = MCL	Naturally occurring
Copper (At customers tap)	No	9/16/14 to 9/24/14	0.287 ¹ (0.035-0.326)	mg/L	1.3	1.3 = AL	Corrosion of household plumbing systems and erosion of natural deposits.
Lead (At customers tap)	No	9/16/14 to 9/22/14	0.002 ² (ND-0.006)	mg/L	0	15 = AL	Corrosion of household plumbing systems; and erosion of natural deposits.
Barium	No	12/16/15	0.015	mg/L	N/A	2 = MCL	Naturally occurring.

Deleted: '

Nitrate (as Nitrogen)	No	12/16/15	4.02	mg/L	10	10 = MCL	Runoff from fertilizer use; leaching from septic tanks, sewage; and erosion of natural deposits
Sodium ³	No	12/13/12	80.1	mg/L	N/A	N/A	Naturally occurring and road salt
Sulfate	No	12/29/11	17	mg/L	N/A	250 = MCL	Naturally occurring
Zinc	No	12/29/11	0.016	mg/L	N/A	5 = MCL	Naturally occurring
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	No	Quarterly during 2015	Village Hall 8.2 (average) 6.7-10.7 (range) Chestnut St 6.3 (average) 4.1-9.3 (range)	µg/L	N/A	80 = MCL	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5)	No	Quarterly during 2015	Village Hall 2.9 (average) 1.2-2.9 (range) Chestnut St 1.0 (average) ND-2.1 (range)	µg/L	N/A	60 = MCL	Byproduct of drinking water chlorination
Free Chlorine Residual							
Chlorine Residual	No	Daily Samples	1.08 (average) 0.50-1.40 (range)	mg/L	MRDLG N/A	MRDL 4	Used in the disinfection and treatment of drinking water
Combined Filter Effluent Turbidity (6 filters) and Microbiologicals							
Turbidity ⁴	No	1/31/2015	0.166	NTU	N/A	TT=<1 NTU	Soil Runoff
Turbidity ⁴	No	2015	100	%	100%	TT=95% of samples <0.3 NTU	Soil Runoff
Total Organic Carbon	No	Monthly	<1.0-1.1 (range) ⁵ 1.01 (average)	mg/l	N/A	TT	Naturally Present in the environment

*Note: † All contaminants listed on Table I and tested for in previous years, were not required to be tested for in 2014

- (1.) The level presented represents the 90th percentile of the 20 sites tested in 2014. A percentile is a value on a scale of 1 to 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 copper values detected at your water system. The action level for copper was **not** exceeded at any of the sites tested.
- (2.) The level presented represents the 90th percentile of 20 sites tested in 2014. The action level for lead was **not** exceeded at any of 20 sites tested.
- (3.) Water containing more than 20 mg/L of sodium should not be consumed by persons on severely restricted sodium diets.
- (4.) Turbidity is a measure of the cloudiness of the water. We measure it because it is a good indicator of the effectiveness of our filtration system. Our highest single entry point turbidity measurement for the year occurred on 1/31/2015 (0.166 NTU). State regulations require that entry point turbidity must always be below 1.0 NTU. The regulations also require that 95% of the entry point turbidity samples collected have measurements below 0.3 NTU. Most levels recorded were well below the acceptable range allowed and did not constitute a treatment violation.
- (5.) Total Organic Carbon is not regulated, but its calculated removal and compliance ratio must equal or exceed performance requirements established by the USEPA. All levels recorded were well below the acceptable range allowed and did not constitute a treatment technique violation.

Table II
Table of Detected Contaminants for the Town of Queensbury 2015

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit MCL	Likely Source of Contamination
<i>Radiologicals</i>							
Combined Radium 226 and 228	No	2008	0.468	pCi/l	0	5 pCi/L	Erosion of natural deposits.
Radium 228	No	5/13/08 2/14/08	0.139 0.129	pCi/l	0	5pCi/L	Erosion of natural deposits.

Radium 226	No	2/19/08	0.0334	pCi/l	0	5pCi/L	Erosion of natural deposits.
<i>Combined Filter Effluent Turbidity (5 filters) and Microbiologicals</i>							
Turbidity ¹	No	5/2/2015	0.12	NTU	N/A	TT=<1 NTU	Soil Runoff
Turbidity ¹	No	May 2015	100%	%	100%	TT=95% of samples <0.3 NTU	Soil Runoff
<i>Inorganic Contaminants</i>							
Copper	No	8/20/14	73.0 ³ 4.0 – 110.0	µg/l	1300 µg/l	AL – 1300 µg/l	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	8/20/14	2.0 ⁴ ND – 5.0	µg/l	0	AL-15 µg/l	Corrosion of household plumbing systems; Erosion of natural deposits
Barium	No	2/4/15	0.005	mg/l	2.0 mg/l	2.0 mg/l	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit MCL	Likely Source of Contamination
Sodium	No	5/6/15 8/5/15 11/4/15	13.5 9.29 35.1 ²	mg/l	N/A	N/A	Naturally occurring, road salt, animal waste, sodium carbonate
Nitrate	No	2/4/15	0.2	mg/l	10 mg/l	10.0 mg/l as Nitrogen	Erosion of natural deposits, Runoff from fertilizer
Chloride	No	2/13/2013	5.8	mg/l	N/A	250 mg/l	Erosion of natural deposits, water disinfection by-product
Iron	No	2/13/2013	0.009	mg/l	N/A	0.3 mg/l	Erosion of natural deposits
Manganese	No	2/13/2013	0.005	mg/l	N/A	0.3 mg/l	Erosion of natural deposits
Sulfate	No	2/13/2013	11.5	mg/l	N/A	250 mg/l	Erosion of natural deposits, Runoff from fertilizer
Zinc	No	2/13/2013	0.006	mg/l	N/A	5.0 mg/l	Erosion of natural deposits
Disinfection Byproducts							
Total Trihalomethanes	No	Quarterly Samples 2/4/15, 5/6/15, 8/5/15, 11/4/15	54.3 – Highest location annual average ⁶ 24.3-57.6 – Annual range	µg/l	N/A	80 µg/l	By-products of drinking water chlorination. THM's are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids	No	Quarterly Samples 2/4/15, 5/6/15, 8/5/15, 11/4/15	20.0 – Highest location annual average ⁶ 12.1-23.0 – Annual range	µg/l	N/A	60 µg/l	By-products of drinking water chlorination. HAA5's are formed when source water contains large amounts of organic matter.
Total Organic Carbon	No	Monthly	Annual Range ⁵ 1.5-2.5 Average – 1.92	mg/l	N/A	TT	Naturally present in the environment
Unregulated Contaminant Monitoring Regulation 3 (UCMR3)⁷							
Strontium	No	Quarterly Samples 2/13/15, 4/13/15, 7/16/15, 10/15/15	22 – 28 Annual Range	ug/L	N/A	N/A	Erosion of Natural Deposits
Chlorate	No	Quarterly Samples 2/13/15, 4/13/15, 7/16/15, 10/15/15	44-160 Annual Range	ug/L	N/A	N/A	Agriculture Runoff
Vanadium	No	Quarterly Samples 2/13/15, 4/13/15, 7/16/15, 10/15/15	0.2-0.5 Annual Range	ug/L	N/A	N/A	Erosion of Natural Deposits
Chromium (hexavalent)	No	Quarterly Samples 2/13/15, 4/13/15, 7/16/15, 10/15/15	0.03 Annual Range	ug/L	N/A	N/A	Erosion of Natural Deposits

1 - Turbidity is a measure of the cloudiness of the water. We measure it because it is a good indicator of the effectiveness of our filtration system. Our highest single entry point turbidity measurement for the year occurred on 5/2/15 (0.12 NTU). State regulations require that entry point turbidity must always be below 1.0 NTU. The regulations also require that 95% of the entry point turbidity samples collected have measurements below 0.3 NTU. All levels recorded were well below the acceptable range allowed and did not constitute a treatment violation.

2 - Water containing more than 20 mg/l sodium should not be used for drinking by people on severely restricted diets. This represents 4.73 mg of sodium in one 8 fluid oz. glass of water.

3 – The level presented represents the 90th percentile of the 30 sites tested. 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 copper values detected at your water system. In this case, 30 samples were collected at your water system and the 90th percentile value was 73.0 µg/l. The action level for copper was not exceeded at any of the sites tested with the highest level being 110 µg/l.

4 – The level presented represents the 90th percentile of the 30 samples collected. The 90th percentile is equal to or greater than 90% of the lead values detected at your water system. In this case, 30 samples were collected at your water system and the 90th percentile value was 2.0. Of the 30 samples taken 24 results were **NON-DETECTS**. The action level for lead was not exceeded at any of the sites tested with the highest level being 5.0 µg/l. ND (**NON-DETECTS**) is any sample less than 1.0 µg/L.

5 - Total Organic Carbon is not regulated, but its calculated removal and compliance ratio must equal or exceed performance requirements established by the USEPA. All levels recorded were well below the acceptable range allowed and did not constitute a treatment technique violation.

6 – Stage 2 of the DBP Rule calculates the highest average at a single location- Locational Running Annual Average (LRAA).

7- In 2015, we were required to collect and analyze drinking water samples under the Unregulated Contaminant Monitoring Regulation 3 (UCMR3). The contaminants currently do not have a maximum contaminant level but are being tested for future regulations. More information can be found the EPA website under UCMR3.

Table III
Table of Detected Contaminants Saratoga County Water Authority 2015

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
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 (Highest Result) Entry Point	No	5-6-15	.0115	NTU	N/A	TT-1.0	Soil Run Off
Transmission System	No	5-19-15	0.67	NTY	N/A	TT-5.0	
Total Organic Carbon (TOC)	No	Raw Average Treated Average	3.9mg/l 2.2 mg/l	mg/l	N/A	TT	Naturally present in the environment
Inorganic compounds							
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

Table III Table of Detected Contaminants Saratoga County Water Authority 2015							
							refineries; Erosion of natural deposits.
Copper	No	4/15/2014	0.473 (1) 0.167-0.495	mg/l	N/A	1.3	Corrosion of household plumbing
Lead	No	4/15/2014	0.001 (1) ND-0.002	mg/l	N/A	0.015	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfection Byproducts							
Haloacetic Acids -(mono-, di, and trichloroacetic acid, and mono- and di-bromoacetic acid) (3)	No	2/10/2015 Location #3 Highest	LRAA(2) 38.9 (13.0-67.8)	ug/l	N/A	60	By-product of drinking water chlorination needed to kill harmful organisms.
Trihalomethanes - (Chloroform, bromodichloromethane, dibromochloromethane, and bromoform) (2)(3)	No	2/10/2015 Location #1 Highest	LRAA(2) 44.6 (21.0-69.2)	ug/l	N/A	80	By product of drinking water chlorination needed to kill harmful organisms. TTHM's are formed when source water contains large amounts of organic matter.

¹ Includes the 90th percentile for the most recent sampling.

² LRAA means Locational Running Annual Average. This is a calculation of all samples collected during the running 4 quarter sampling period and averaged for that specific location.

³ Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

** Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

** Location #1= LFTC Tank Out; Location #2= Wilton Connection; Location #3= LFTC Tank In; Location #4= Ballston Connection.

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. Regulatory level is 4.0 mg/L chlorine.

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, 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.

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). **N/A = Not Applicable.**