Annual Drinking Water Quality Report for 2017
Town of Stillwater, New York
881 Hudson Ave., Stillwater, New York 12170
(Public Water Supply ID# 4517534, 4530198, 4530040 & NY4530219)

INTRODUCTION

To comply with State regulations, the Town of Stillwater 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. In 2013, the Town consolidated former Water District #1, #3, and #4 into Water District #6. Water District #5 was not a part of this district consolidation. The consolidation was undertaken in preparation of the project to connect Water District #6 to a new supply source, the Saratoga County Water Authority (SCWA). The SCWA connection project was completed in Fall 2017. As of November 7, 2017, the SCWA began supplying Water District #6. Moving forward, information for Water District #6 will be permitted under Public Water Supply ID# 4530267 (Stillwater Town SCWA).

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. Last year, we conducted the State required testing to identify potential drinking water contaminants.

If you have any questions about this report or concerning your drinking water, please contact Mark Minick, Superintendent of Highways, Town of Stillwater, 1 Lansing Road, Stillwater, New York 12170, Phone: (518) 664-4611. 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 first and third Thursday evenings of each month at 7:00 p.m. in the Town Government Complex, located at 881 Hudson Ave., Stillwater, NY 12170.

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.

TOWN OF STILLWATER WATER DISTRICT #6

As previously indicated, the Town formed Water District #6 in 2013 by consolidating former Water Districts #1, #3, and #4. Water District #6 was created in preparation of the district being supplied by the SCWA system following the completion of the ongoing water system connection project. The connection to the new supply was completed in November of 2017. Drinking water information has been provided for each former water district until such time that the district began getting their water from the SCWA system. It should be noted that Water District #6 began collecting total coliform in 2016 and that there were none detected. Testing for disinfection byproducts, lead and copper began in 2017. Until November 2017, Water District #6 only serviced the Kings Isle Development and several out of district users along McDermott Road. The results are discussed below.

TOWN OF STILLWATER FORMER WATER DISTRICT #1

The Town of Stillwater Water District #1 does not have its own supply of raw water or a water treatment facility. Therefore, the Town is a secondary water purveyor, receiving drinking water through one of two inter-municipal system connections with adjacent municipalities. The primary supply for Water District #1 is the interconnection with the Village of Stillwater water system. An interconnection also exists with the City of Mechanicville system; however, the Town typically does not utilize this connection.

The Town of Stillwater Water District #1 usually purchased its supply of drinking water from the Village of Stillwater. The Village completed an improvements project to connect its distribution system to the SCWA system in 2012 and currently receives water from that supply. Starting November 7, 2017, Water District #1 began receiving water supply through the Town of Stillwater's new connection with the SCWA system.

FORMER DISTRICT #1 FACTS AND FIGURES

The Town of Stillwater Water District #1 system serves approximately 1,566 customers through 525 service connections. In 2017, Water District #1 customers purchased a total of 25,462,700 gallons from the Village of Stillwater through November 7th. At which time, the connection with the SCWA water system was completed and Water District #1 began receiving water directly from the SCWA. The daily average amount of water used by Water District #1 customers in 2017 was approximately 81,900 gallons per day (GPD). The maximum day production of 207,100 gallons occurred on June 26, 2017. In 2017, water customers within the District #1 paid $8.95 per thousand gallons of water.

As identified above, the water source for the Village of Stillwater is the SCWA system. As of the date of this publication, the Village is utilizing the SCWA as its sole water source.

TOWN OF STILLWATER FORMER WATER DISTRICTS #3 AND #4

The Town of Stillwater Water Districts #3 and #4 did not have their own supply of raw water or a water treatment facility. Therefore, the Town was a secondary water purveyor, purchasing its regular supply of drinking water from the City of Mechanicville.

The City of Mechanicville operates a surface water filtration plant, which is fed by two reservoirs. The Mechanicville Reservoir, located in the Luther Woods, is the primary source of raw water. The Terminal Reservoir, located on George Thompson Rd., is the secondary raw water source. The City's Water Treatment Plant is a conventional treatment facility utilizing the processes of coagulation using poly-aluminum chloride; sedimentation; rapid sand filtration; sodium permanganate and post chlorination.

On August 4th, 2017, Water Districts #3 and #4 began receiving water supply from the SCWA water system.

FORMER DISTRICTS #3 AND #4 FACTS AND FIGURES

The Town of Stillwater Water Districts #3 and #4 serve approximately 950 customers through approximately 327 service connections. Usage for Water District #3 and Water District #4 is measured in combination and is further described below.

In 2017, the Water Districts purchased a total of 13,272,240 gallons, through August 4th, when they began receiving their water supply from the SCWA system. The daily average amount of water used by the Water Districts' customers in 2017 was approximately 61,450 gallons per day (GPD). The maximum day production of 141,800 gallons occurred on May 4, 2017. In 2017, water customers within the Water Districts #3 and #4 paid $8.56 per thousand gallons of water.

TOWN OF STILLWATER WATER DISTRICT #5

The Town of Stillwater Water District #5 does not have its own supply of raw water or a water treatment facility. Therefore, the Town is a secondary water purveyor, purchases its regular supply of drinking water from the Village of Stillwater.

DISTRICT #5 FACTS AND FIGURES

The Town of Stillwater Water District #5 system serves approximately 40 customers through 12 service connections. In 2017, Water District #5 customers purchased a total of 890,110 gallons. The daily average amount of water used by Water District #5 customers in 2017 was approximately 2,439 gallons per day (GPD). In 2017, water customers within Water District #5 paid $8.95 per thousand gallons of water.

TOWN OF STILLWATER WATER DISTRICT #6 EXTENSION #1 (KINGS ISLE)

The Town of Stillwater Water District #6 Extension #1 does not have its own supply of raw water or a water treatment facility. Therefore, the Town is a secondary water purveyor, receiving drinking water from the SCWA water system. Information regarding the SCWA water system is provided as an attachment to this report. The Town receives water from the SCWA from a connection on Cordero Boulevard. At this location, the Town boosts chlorine and adds zinc orthophosphate (a pipe corrosion inhibitor) to the water.

DISTRICT #6 EXTENSION #1 FACTS AND FIGURES

The Town of Stillwater Water District #6 Extension #1 services the Kings Isle Apartments. In 2017, Water District #6 Extension #1 King's Isle purchased a total of 4,636,650 gallons. The daily average amount of water used by Water District #6 Extension #1 in 2017 was approximately 12,703 gallons per day (GPD). In 2017, Water District #6 Extension #1 paid $8.95 per thousand gallons of water.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

Stillwater Water District staff is responsible for testing the water in the distribution system. The water is tested for Total Coliform bacteria, lead and copper and disinfection byproducts and once every 9 years for asbestos. Source water monitoring is completed by the Saratoga County Water Authority and the City of Mechanicville. The water sources are tested for inorganic compounds, volatile and semi volatile organic compounds, synthetic organic compounds, PCBs, nitrate, and radiologicals. The tables presented below summarize the test results from the distribution systems. The Table of Detected Contaminants for the Village of Stillwater, Saratoga County Water Authority, and the City of Mechanicville are also included below.

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 New York State Department of Health (518) 793-3893.

Table of Detected Contaminants
Former Stillwater WD #1 - NY4517534

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	No	Quarterly 1st, 2nd, 3rd, and 4th Quarter-2017	Avg.=71.45[1] Range=37.4-113.3[1]	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids (HAA5)	No	Quarterly 1st, 2nd, 3rd, and 4th Quarter-2017	Avg.=58.5[1] Range=41-89[1]	ug/L	N/A	MCL=60	By-product of drinking water chlorination.
Inorganic Compounds							
Lead	No	6/17/2017	8[2] (ND-27)	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	No	6/17/2017	0.125[2] (.015-0.259)	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.

1. Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. For example, the 1st Quarter 2017 Running Annual Average was calculated using data collected during the 1st Quarter 2017, the 4th Quarter 2016, the 3rd Quarter 2016, and the 2nd Quarter 2016. During 2017, the highest running annual average for HAA5s occurred during the 4th Quarter of 2017 and the highest running annual average for TTHMs occurred during the 4th Quarter of 2017 (58.5 ug/l for HAA5s and 71.45 ug/l for TTHMs). The running annual average for TTHMs and HAA5 did not exceed the MCL during 2017. The levels presented are the range of Stage 1 TTHM and HAA5 sample results from 2017.
2. The level presented represents the 90th percentile of the sites tested. 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 lead copper values detected at your water system. During June 2017, 20 samples were collected for lead and copper analysis. Copper and Lead were not detected above the action level in 2017. District #1 stopped using water supplied by the Village and switched to the SCWA supply in November, so no samples were taken for the second half.

Table of Detected Contaminants Former Stillwater WD #3 - NY4530198							
Contaminant	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
Disinfection Byproducts[3]							
Total Trihalomethanes (TTHMs)	No	Quarterly 1st, 2nd, and 3rd Quarter-2017	Avg.=51.8[1] Range=34.4-86[1]	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids (HAA5)	No	Quarter 1st, 2nd and 3rd Quarter-2017	Avg.=54.75[1] Range=49-70[1]	ug/L	N/A	MCL=60	By-product of drinking water chlorination.
Inorganic Contaminants							
Copper	No	6/15/16	0.45 [2] .058-0.717 [2]	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.
Lead	No	6/15/16	0.5[2] ND-1[2]	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.

1. Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. For example, the 1st Quarter 2017 Running Annual Average was calculated using data collected during the 1st Quarter 2017, the 4th Quarter 2016, the 3rd Quarter 2016, and the 2nd Quarter 2016. During 2017, the highest running annual average for HAA5s occurred during the 3rd Quarter of 2017 and the highest running annual average for TTHMs occurred during the 2nd Quarter of 2017. The running annual averages for TTHMs and HAA5s did not exceed the MCL during 2017. The levels presented are the range of TTHM and HAA5 sample results collected during the first three quarters of 2017. For the 4th Quarter, WDs #3 and #4 were combined with WD #1 to form District #6.
2. The level presented represents the 90th percentile of the sites tested. 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 lead copper values detected at your water system. During June 2016, 5 samples were collected for lead and copper analysis. Copper and lead were not detected above the action level at any of the sites tested during the sampling round.

Table of Detected Contaminants Former Stillwater WD #4 - 4530040							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Copper	No	6/15/16	0.447 [1] 0.082-0.538[1]	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.
Lead	No	6/15/16	3[1] ND-3[1]	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfection Byproducts							
TTHMs	No	Quarterly 1st, 2nd and 3rd, Quarter-2017	Avg.=67.25[2] Range=51-75[2]	ug/L	N/A	MCL=80	By-product of drinking water chlorination.
HAA5s	No	Quarterly 1st, 2nd and 3rd Quarter-2017	Avg.=38.9[2] Range=29-53[2]	ug/L	N/A	MCL=60	By-product of drinking water chlorination.

1. The level presented represents the 90th percentile of the sites tested. 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 lead copper values detected at your water system. During June 2016, 5 samples were collected for lead and copper analysis. Copper and lead were not detected above the action level at any of the sites tested during the sampling round.
2. Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. For example, the 1st Quarter 2017 Running Annual Average was calculated using data collected during the 1st Quarter 2017, the 4th Quarter 2016, the 3rd Quarter 2016, and the 2nd Quarter 2016. During 2017, the highest running annual average for TTHMs occurred during the 1st Quarter of 2017 and HAA5s occurred during the 3rd Quarter of 2017. The running annual averages for TTHMs and HAA5s did not exceed the MCLs during 2017. The levels presented are the range of TTHM and HAA5 sample results collected during the first three quarters of 2017. For the fourth quarter, WD #3 and #4 were combined with WD#1 to create WD #6.

Table of Detected Contaminants Stillwater WD #5 - NY4530219							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of 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.
Inorganic Compounds							
Copper	No	9/21/2017	Avg.=0.076 [1] Range=0.013-0.107 [2]	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.
Lead	No	9/21/2017	Avg.=0[1] Range=ND-ND[2]	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfection Byproducts							
TTHMs	No	Quarterly 1st, 2nd, 3rd and 4th Quarter-2017	Avg.=57.05[3] Range=27.2-99.5[4]	ug/L	N/A	MCL=80	By-product of drinking water chlorination.
HAA5s	Yes	Quarterly 1st, 2nd, 3rd and 4th Quarter-2017	Avg.=67.75[3] Range=30-134.1[4]	ug/L	N/A	MCL=60	By-product of drinking water chlorination.

1. The level presented represents the 90th percentile of the sites tested. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. During September 2017, 5 samples were collected for lead and copper analysis. The 90th percentile value, which is presented above, was the average of the two highest sample results. Lead and copper were not detected above the action level at any of the sites tested during the sampling round.
2. The levels presented are the range of the samples collected.
3. Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. For example, the 1st Quarter 2017 Running Annual Average was calculated using data collected during the 1st Quarter 2017, the 4th Quarter 2016, the 3rd Quarter 2016, and the 2nd Quarter 2016. During 2017, the highest running annual average for TTHMs occurred during the 4th Quarter of 2017 and HAA5s occurred during the 4th Quarter of 2017. The running annual average for TTHMs did not exceed the MCL in 2017. The running annual average for HAA5s exceeded the MCL during the 4th Quarter and notifications to users were mailed out.
4. The levels presented are the range of TTHM and HAA5 sample results collected during 2017.

Table of Detected Contaminants Stillwater Town SCWA - NY4530267							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Compounds							
Copper	No	12/14/2017	Avg.=0.162 [1] Range=0.011-0.317[2]	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; and erosion of natural deposits.
Lead	No	12/14/17	Avg.=0.0124[1] Range=ND-0.0999[2]	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfection Byproducts							
TTHMs	No	Quarterly 1st, 2nd, 3rd and 4th Quarter-2017	Avg.=67.78[3] Range=33.6-113.7[4]	ug/L	N/A	MCL=80	By-product of drinking water chlorination.
HAA5s	Yes	Quarterly 1st, 2nd, 3rd and 4th Quarter-2017	Avg.=64.2[3] Range=43-90.5[4]	ug/L	N/A	MCL=60	By-product of drinking water chlorination.

1. The level presented represents the 90th percentile of the sites tested. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. During September 2017, 5 samples were collected for lead and copper analysis. The 90th percentile value, which is presented above, was the average of the two highest sample results. Lead and copper were not detected above the action level at any of the sites tested during the sampling round.
2. The levels presented are the range of the samples collected.
3. Compliance for TTHM and HAA5 MCLs is based on a running annual arithmetic average, computed quarterly, of quarterly averages of all samples. Since this was the first full year of sampling for Kings Isle the running averages were calculated by taking the average of each Quarter and the Quarter(s) before. For example, the 1st Quarter 2017 Running Annual Average is just using data collected during the 1st Quarter 2017. The 2nd Quarter 2017 Running Annual Average was calculated using data collected during the 1st Quarter 2017 and the 2nd Quarter 2017, and so forth. During 2017, the highest running annual average for TTHMs occurred during the 4th Quarter of 2017 and HAA5s occurred during the 4th Quarter of 2017. The running annual average for TTHMs did not exceed the MCL in 2017. The running annual average for HAA5s exceeded the MCL during the 4th Quarter and notifications to users were mailed out.
4. The levels presented are the range of TTHM and HAA5 sample results collected during 2017.

Table of Detected Contaminants
Saratoga County Water Authority
Public Water Supply Identification Number NY4530222

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
Microbiological Contaminants							
Total Coliform Bacteria	No	*Monthly*	None	*Monthly*	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	7-21-2017	0.092	NTU	*NIA*	TT-1.0	Soil Runoff.
Transmission System	No	7-5-2017	0.28	NTU	*NIA*	TT-5.0	
Total Organic Carbon (TOC)	No	Raw Avg Treated Avg	4.30 1.65	mg/l	*NIA*	TT	Naturally present in the environment.
Inorganics							
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**
Nitrate	No	2/28/2017	0.16	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Manganese	No	3-28-2017	3	ug/1	*NIA*	300	Naturally occurring; Indicative of landfill contamination
Sodium	No	3-28-2017	9.07	mg/l	*NIA*	270*	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	3-28-2017	10.8	mg/l	*NIA*	250	Naturally occurring or indicative of road salt contamination.
Barium	No	3-28-2017	0.005	mg/l	2	2000	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural
Copper	No	8-22-2017	0.496 0.017-0.954	mg/l	*NIA*	1.3	Corrosion of household plumbing
Lead (GlobalFoundries Test Sites Only)	Yes	8-22-2017	0.0349[1] <.0010-0.108	mg/l	*NIA*	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 acid2, 3.4,	No	LRAA#l Range #1 LRAA#2 Range #2 LRAA#3 Range #3 LRAA#4 Range #4	49.7 (19.5-104.6) 29.013 (12.4-54.6) 47.13 (16.5-97.8) 42.68 (16.0-98.3)	ug/l	*NIA*	60	By-product of drinking water chlorination needed to kill harmful organisms.
Trihalomethanes-(Chloroform, Bromodichloromethane, dibromochloromethane, and bromoform)[2] [3] [4]	No	LRAA#l Range #1 LRAA#2 Range #2 LRAA#3 Range #3 LRAA#4 Range #4	53.08 (23.7-104) 36.08 (17.36-63.05) 46.43 (19.4-86.7) 48.39 (19.8-95.5)	ug/l	*NIA*	**80**	By product of drinking water chlorination needed to kill harmful organisms.

[1] The level presented represents the 90th percentile of the fourteen samples collected. The action level for lead was exceeded at three of the sites tested at GlobalFoundries. Follow-up tests were found within the limits.

[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.

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

* Water containing more than 20 mg/1 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.

Table of Detected Contaminants
City of Mechanicville
Public Water Supply Identification Number NY4500166

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity (sample from 8/4/17)	Y	1.041[1,2] 100%	NTU	N/A	TT=1.0 NTU TT=95% samples < 0.3	Soil runoff
Inorganic Contaminants (samples from 10/26/17 unless otherwise noted)						
Barium	N	42.8	ppb	2000	2000	Naturally occurring
Chloride	N	27.6	ppm	N/A	250	Naturally occurring or indicative of road salt contamination.
Copper (samples from 9/7/17-9/20/17) Range of copper concentrations	N	0.33[3] ND-0.56	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (samples from 9/7/17-9/20/17) Range of lead concentrations	N	7[3] ND-24	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Manganese 8/1/17-12/31/17 (average) range	N	9.2 ND-34.9	ppb	N/A	300	Naturally occurring
Nickel	N	0.87	ppb	N/A	N/A	Erosion of natural deposits
pH	N	7.73	units		6.5-8.5	
Sodium[4]	N	13.9	ppm	N/A	N/A	Geology; Road Salt
Sulfate	N	30.9	ppm	N/A	250	Geology
Disinfection Byproducts *(Quarterly samples from 2/16/17 5/18/17, 8/15/17, 10/19/17, 11/16/17 & 12/21/17)*						
Stage 2 Haloacetic Acids (HAA5)(Average)[5] Range of values for HAA5	**Y**	63.4 4.51-58.6	ppb	N/A	60	By-product of drinking water chlorination
Stage 2 TTHM[Total Trihalomethanes](Average)[5] Range of values for TTHM	N	61.6 23.4-120	ppb	0	80	By-product of drinking water chlorination
Chlorine Residual (average) range	N	1.21 0.76-2.13	ppm	MRDLG N/A	MRDL 4	Used in the treatment and disinfection of drinking water
Total Organic Carbon[7] (monthly samples from 2017)						
Total Organic Carbon Monthly Compliance Ratio	N	1.01-1.85	N/A	Compliance ratio >=1	TT	Organic material both natural and man made; Organic pollutants, decaying vegetation.

FOOTNOTES-

1. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest level detected. Distribution system turbidity performed 5 times a week with 1.53 NTU being highest level detected and 0.283 NTU being the average level detected.
2. This number represents the weighted average of the 3-individual filter turbidimeters.
3. The level presented represents the 90th percentile of 20 test sites. The action level for copper was not exceeded at any of the 20 sites tested.
4. The level presented represents the 90th percentile of 20 test sites. The action level for lead was exceeded at 1 of the 20 sites tested.
5. Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets.
6. The average is based on a Locational Running Annual Average (LRAA). The average shown is the highest LRAA for the 2 sites monitored in of 2017. The highest LRAA for the HAA5s and THMs was in the 2nd quarter. We exceeded the MCL for the HAA5's in the 1st and 2nd quarters at one of the sites monitored.
7. The Interim Enhanced Surface Water Treatment Rule (IESWTR) requires monitoring of raw and finished water Total Organic Carbon (TOC). Depending on the raw water alkalinity value, proper water treatment should remove between 15% to 50% of the raw water TOC thus reducing the amount of disinfection byproducts produced.

Glossary

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.
Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.
Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
90th Percentile Value- The values reported for lead and copper represent the 90th percentile. 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 lead and copper values detected at your water system.
Action Level - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.
Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal The "Goal" (MCLG) is 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.
Locational Running Annual Average (LRAA): The LRAA is calculated by taking the average of the four most recent samples collected at each individual site
N/A-Not applicable

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 which a water system must follow.

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).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables, our system had two MCL violations in 2017 for disinfection byproducts in Water District #5 and Stillwater Town SCWA. Notifications were submitted to all Town residents at the time of the violation.

Some studies suggest that people who drank chlorinated drinking water containing disinfection by-products (possibly including HAAs) for long periods of time (e.g., 20 to 30 years) have an increased risk for certain health effects. These include an increased risk for cancer. However, how long and how frequently people actually drank the water as well as how much HAAs the water contained is not known for certain. Therefore, the evidence from these studies is not strong enough to conclude that the observed increased risk for cancer is due to HAAs, other disinfection by-products, or some other factor. Studies of laboratory animals show that the individual HAAs, dichloroacetic acid and trichloroacetic acid, can cause cancer following exposure to high levels over their lifetimes. Dichloroacetic acid and trichloroacetic acid are also known to cause other effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, and nervous system and on their ability to bear healthy offspring. The effects reported in studies of laboratory animals occur at exposures much higher than exposures that could result through normal use of the water. The risks for adverse health effects from HAAs in drinking water are small compared to the risk for illness from drinking inadequately disinfected water.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

The Town of Stillwater is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. We were not issued any monitoring and reporting violations in 2017 for any of the water districts.

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. 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).

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 Stillwater 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.

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.

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.*

INFORMATION ON CRYPTOSPORIDIUM

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. The Saratoga County Water Authority utilizes membrane filtration technology which removes these contaminants at higher rates than conventional water treatment technologies. During 2017, as part of our routine sampling, eleven samples were collected of untreated Hudson River source water and analyzed for Cryptosporidium oocysts. Of these samples, one showed one oocysts and ten showed no oocysts. Therefore, our testing indicates the presence of Cryptosporidium in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. 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.

INFORMATION ON GIARDIA

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During 2017, as part of our routine sampling, eleven samples were collected of untreated Hudson River source water and analyzed for Giardia cysts. Of these samples, six samples showed a total of six cysts and five samples showed no cysts. Therefore, our testing indicates the presence of Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. The Saratoga County Water Authority utilizes membrane filtration technology which removes these contaminants at higher rates than conventional water treatment technologies. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand washing practices are poor.

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 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 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.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.