

***Annual Drinking Water Quality Report for 2016***  
***Consolidated Water Area***  
***Village of Woodbury***  
***Public Water Supply ID# 3503573***

**INTRODUCTION**

To comply with State and Federal regulations, the Woodbury Consolidated Water System is issuing this 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. Last year, we conducted hundreds of tests for contaminants. None of those sampled contained contaminants at a level higher than the State allows. We are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or your drinking water, please contact Michael Phillips, Water Administrator (845-928-9514 x1256). We want you to be informed about your drinking water. If you want to learn more, please attend any of the regularly scheduled Village Board meetings on the second and fourth Thursdays of each month.

**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 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.

The Consolidated Water System's water supply is obtained from five wells in Highland Mills, three rock wells on Ridge Road and three new sand and gravel wells near Trout Brook Road (Trout Brook Well Field). All well water is treated by disinfection with chlorine to destroy any microorganisms that might find their way into the water supply prior to distribution. The wells on Ridge Road are filtered through a zeolite process to remove objectionable but not harmful manganese and iron to levels meeting State Health Department levels. The new wells approved for operation by the Department of Health along Trout Brook are filtered through a series of 5 and 1 micron cartridge filters followed by ultraviolet disinfection and chlorine to meet treatment standards for groundwater under the direct influence of surface water.

**Source Water Assessment**

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water resource were evaluated. This state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to customers is, or will become contaminated. See "Table of Detected Contaminants" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Highland Mills Wells – This well water supply is derived from five (5) drilled wells in Highland Mills.

Ridge Road Wells – This water supply is derived from three (3) wells along Ridge Road.

Independent source water assessments for the Highland Mills and Ridge Road well fields has rated these wells as having a medium susceptibility to microbials and nitrates. These ratings are due primarily to the close proximity of SPDES permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and low-level residential activity located in the assessment area. In addition, the wells draw from a confined aquifer where the estimated recharge area within the selected time of travel and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

A copy of the Highland Mills and Ridge Road assessments, including a map of the assessment area, can be obtained by contacting us, as noted in this report.

## **FACTS AND FIGURES**

Our water system serves a population of approximately 10,105 people through 2,895 service connections. The total amount of water produced in 2016 was 332.5 million gallons. The daily average water treated and pumped into the distribution system was 910,960 gallons per day. Our highest single day was 1,522,000 gallons. The amount of water delivered to customers was 278.9 million gallons. This leaves an unaccounted for total of 53.6 million gallons. The difference accounts for an average unaccounted portion of approximately 146,849 gallons per day (16%) which can be attributed primarily to filter backwash water, watermain breaks, hydrant flushing, fire department usage, normal system losses, inaccuracies of water meters and other un-metered use. In 2016, the annual average water charge for a typical user was \$190.00.

## **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, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. The table presented below lists which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Orange County Health Department at (845-291-2331).

Last year, we conducted tests for hundreds of contaminants. We detected only those contaminants listed in the table below and none were at a level higher than the State allows.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Average) (Range)	Unit Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Combined Uranium</b>							
Trout Brook TP	No	12/07/2016	1.171	ug/l	0	MCL=30	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium Well # 1,2,3 & 6 Wells # 5 Trout Brook TP	No No No	5/27/2015 5/27/2015 12/01/2016	0.029 0.037 0.058	mg/l <sup>1</sup>	2	MCL=2	Erosion of natural deposits
Chloride Well # 5	No	4/2012	122	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination
Sulfate Wells #1,2,3 & 6 Well # 5 Trout Brook TP	No No No	5/2015 5/2015 12/2016	23.1 15.1 19.5	mg/l	N/A	250	Naturally occurring
Manganese Well # 6	No	9/2014	260	ug/l	N/A	300	Naturally occurring; indicative of landfill contamination
Nickel Wells #1,2,3 & 6 Well #5	No No	5/2015 5/2015	1.0 0.86	ug/l	N/A	MCL=100	Naturally occurring.
Copper (see note 3.1) (System Samples)	No	7/2015	90 <sup>th</sup> = 0.11 Range = 0.014 to 0.140	mg/l	1.3	AL=1.3	Corrosion of copper pipes
Lead (see note 3.2) (System Samples)	No	7/2015	90 <sup>th</sup> = 8.1 Range = ND to 28.0	ug/l	0	AL=15	Corrosion of household plumbing systems
<b>Inorganics</b>							
Nitrate Well #1,2,3 & 6 Well #5	No No	12/07/2016 12/07/2016	0.183 0.504	mg/l	10	MCL=10	Erosion of natural deposits
Sodium Well #1,2,3 & 6 Well #5 Trout Brook TP	No No No	12/07/2016 12/07/2016 12/07/2016	114 61 17	mg/l	N/A	NOTE 4	Naturally occurring and road salt:
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>							
<b>Disinfection Byproducts</b>							
Total Haloacetic Acids see Note 7	No	8/31/2016	ND – 11.9	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs) see Note 5	No	8/31/2016	1.63 – 30.5	ug/l	N/A	MCL = 80	Byproduct of drinking water disinfection needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
<b>Coliform</b>							
Distribution System	No	5/2016	2 Positive Samples	N/A	0	Any Positive Confirmed Sample <sup>9</sup>	Naturally present in the environment

ND – Non Detect

**Notes:**

- 1 Milligrams per liter (mg/l) or parts per million (ppm).
- 2 Micrograms per liter (ug/l) or parts per billion (ppb).
- 3.1 The level presented represents the 90<sup>th</sup> percentile of the 32 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 32 samples were collected at your water system and the 90<sup>th</sup> percentile value was 0.11 mg/l. The action level for copper was not exceeded at any of the sites tested.
- 3.2 The level presented represents the 90<sup>th</sup> percentile of the 32 samples collected. The action level for lead was exceeded at two of the 32 sites tested. Therefore, we must include the following information on Lead in your drinking water: *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 abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.*

- 4 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.
- 5 TTHM's - Chloroform, bromodichloromethane, dibromochloromethane, and bromoform are formed when source water contains large amounts of organic matter.
- 6 This represents the average value of the samples collected with the range of sample results listed in parenthesis.
- 7 Haloacetic Acids (mono, di-and trichloroacetic acid, and mono- and di-bromoacetic acid) are a by-product of drinking water disinfection need to kills harmful organisms.
- 8 A violation occurs when the average of two consecutive daily entry point analyses exceeds the MCL rounded off to the nearest whole number.
- 9 The positive coliform samples collected were not confirmed; all required repeat test samples were collected and were negative for coliform.

#### **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 water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect 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.

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

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

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level for lead was exceeded in two of the samples collected. We are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, 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 of Woodbury 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

#### **Is our water system meeting other rules that govern operations?**

We are required to monitor your drinking water for specific contaminants on a regular basis. During 2016, our system was in compliance with all applicable State drinking water requirements for all samples collected.

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

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

## **WHY SAVE WATER AND HOW TO AVOID WASTING IT?**

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's moved, you have a leak.

## **SYSTEM IMPROVEMENTS**

In 2016, three (3) new wells with a aggregate capacity of 524,160 gallons per day and distribution system piping along Trout Brook Road and Smith Clove Road were connected to the Consolidated Water Area to provide new water supply from the Trout Brook well field in the northern portion of the Village. The wells, treatment facilities and pipeline have been completed and approved by operation by the State Health Department.

In 2016 the Village completed a new and improved connection to the Highland Lake Estates portion of the distribution system that improved the reliability of water supply to this area.

## **Water Supply Security**

Since the terrorist attacks on Sept. 11th, 2001 customers have expressed concerns with the security of their water supply. The Environmental Protection Agency and the FBI have stated it's highly improbable for the nation's drinking water to be compromised by terrorists. Nevertheless, we have implemented heightened security measures. While we cannot disclose specific details, we can assure you we have strengthened the security of our water supply programs and law enforcement coordination. In cooperation with the New York State Department of Health and the Federal EPA we completed an evaluation of our system and have regularly modified our emergency response plan to reflect our heightened security.

As a first line of defense, we ask all of our customers to contact the Police Department at 845-928-2341 if you notice any suspicious activity in connection with any of the Village's water facilities (hydrants, reservoirs, wells, etc.)