# Annual Drinking Water Quality Report for 2016 Woodland Water District Town of Oneonta Public Water Supply ID#3810454

#### INTRODUCTION

To comply with state regulations, the Town of Oneonta Woodland Water District annually issues a report describing the quality of your drinking water. The purpose is to raise your awareness of the need to protect our drinking water sources. Last year, your tap water met all state drinking water health standards. We are proud to report that our system has never violated a maximum contaminant level or any other water quality statement. 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 itcompares to state standards.

If you have any questions about this report or concerning your drinking water, please contact Gale G. Gilmartin, Administrator, at the District Office 432-4581, Monday through Friday from 8:00AM to 4:30PM, or Peter Andrews, Water Operator, at 286-9809. 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 the second Tuesday of each month at 7:30PM in the Town Hall, 3966 State Highway 23 in West Oneonta.

# WHERE DOES OUR WATER COME FROM?

In general, 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, 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.

Your water system serves 360 people through 117 service connections. Your water source is groundwater drawn from two 139-foot deep drilled wells which are located at the west end of Woodland Drive in Morningside Heights. The water is pumped from the wells, through a treatment process and then to the water tank for storage prior to distribution. The treatment process used is chlorination and pH adjustment to reduce the corrosive nature of the water.

# WHAT IS OUR SOURCE WATER ASSESSMENT?

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to the drinking water sources were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminantscan 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 the water delivered to consumers is, or will become contaminated. While nitrates (and other inorganic contaminants) were detected in our water, 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 from natural sources. The nitrate levels in our sources are slightly elevated in comparison with other sources in this area. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected.

As mentioned before, our water is derived from two drilled wells. The source water assessment has rated these wells as having a medium-high susceptibility to microbials and nitrates. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government), low intensity residential activities, and septic systems within the assessment area. In addition, the wells draw from an unconfined aquifer of unknown hydraulic conductivity. 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 assessment, including a map of the assessment area, can be obtained by contacting us, as noted.

# ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the state regulations require, we routinely test your drinking water for numerous contaminants, including total coliform, radiological contaminants, inorganic compounds, nitrate, lead and copper, volatile organic compounds and synthetic organic compounds. The attached table 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, 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 Health Department at 28 Hill St., Suite 201, Oneonta, New York, (607) 432-3911.

				Tab	ele of Detected Contaminants
Contaminant	Units	MCL	MCLG	Sources in Drinking Water	Health Effects Language
Chloride 9/15/10 20.1 Well House	mg/l	250	N/A	Naturally occurring or indicative of road salt contamination.	No health effects. The MCL for chloride is the level above which the taste of water may become objectionable. In addition, to the adverse taste effects, high chloride concentration levels in the water contribute to the deterioration of domestic plumbing and water heaters. Elevated chloride concentrations may also be associated with the presence of sodium in drinking water.
Copper 9/8-9/2016 90 <sup>th</sup> % = 0.568 Distribution System	mg/l	AL = 1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Lead 9/8-9/2016 90 <sup>th</sup> % = 0.002 Distribution System	mg/l	AL=0.015	0	Corrosion of household plumbing systems; Erosion of natural deposits.	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.
Mercury (Inorganic) 7/12/07 0.0002mg/l or 0.2ug/l Well house	ug/l	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
Sodium 9/15/10 14 well house	mg/l	(see Health Effects)	NA	Naturally occurring; Road salt; Water softeners; Animal waste.	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.
Nickel 12/26/13 0.0007 well house	mg/l	N/A	N/A	Naturally occurring	This metal does not have a maximum contaminate level.

Table of Detected Contaminants							
Contaminant	Units	MCL	MCLG	Sources in Drinking Water	Health Effects Language		
Sulfate 9/15/2010 10.2 well house	mg/l	250	N/A	Naturally occurring	High concentrations of sulfate in drinking water have three effects: (1) water containing appreciable amounts of sulfate tends to form hard scales in boilers and heat exchangers; (2) sulfates cause taste effects; and (3) sulfates can cause laxative effects with excessive intake. The laxative effect of sulfates is usually noted in transient users of a water supply because people who are accustomed to high sulfate levels in drinking water have no adverse response. Diarrhea can be induced at sulfate levels greater than 500 mg/l but typically near 750 mg/l.		
Iron 9/15/10 8.0 well house	ug/l	300	N/A	Naturally occurring	Iron has no health effects. At 1,000 ug/l a substantial number of people will note the bitter astringent taste of iron. Also, at this concentration, it imparts a brownish color to laundered clothing and stains plumbing fixtures with a characteristic rust color. Staining can result at levels of 50 ug/l, lower than those detectable to taste buds. Therefore, the MCL of 300 ug/l represents a reasonable compromise as adverse aesthetic effects are minimized at this level. Many multivitamins may contain 3,000 or 4,000 micrograms of iron per capsule.		
Zinc 9/15/10 0.023 well house	mg/l	5	N/A	Naturally occurring; mining waste	Zinc has no health effects unless detected in very high concentrations. The presence of zinc may result in an undesirable taste in drinking water.		
Total Trihalo- methanes (TTHMs — chloroform, bromodichloro methane, dibromochloro methane, and bromoform) 9/15/10 2.09 Distribution System	ug/l	80	N/A	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.	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.		
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and di- bomoacetic Acid) 9/15/10 1.2 Distribution System	ug/l	60	N/A	By-product of drinking water disinfection needed to kill harmful organisms.	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.		
Nitrate 9/22/16 1.82 well house	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.		
Barium 6/9/15 0.0066 well house	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.		

	Table of Detected Contaminants								
Contaminant	Units	MCL	MCLG	Sources in Drinking Water	Health Effects Language				
Combined radium - 226 and 228 Composite 2008 0.06 (Radium 226 0.06) (Radium 228 ND) well house	Pci/L	5	0	Erosion of natural deposits.	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.				

<sup>-</sup> The level presented represents the 90<sup>th</sup> percentile of the 10 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 or lead values detected at your water system. (In this case, 10 samples were collected at your water system and the 90<sup>th</sup> percentile value was the 9<sup>th</sup> value).

#### **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.

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

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).

NA: Not applicable.

ND: Not detected.

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

The results show that water delivered to your home exceeds federal and state purity standards. You can use your water with confidence, knowing that it is reliable and safe to drink.

#### 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 the level allowed by the state.

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

During 2016, our system was in compliance with applicable state drinking water operating, monitoring and reporting requirements.

# 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 WASTNG 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 or \$124.50 on your water bill.
- 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.
- Listen for unusual "noise" in your plumbing. A "running" toilet can make a rushing sound and a similar noise will carry from a leak in your service line or water main. Let us know if your suspect a problem in the water main.

# 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.