

Annual Drinking Water Quality Report for 2017
TOWN OF BENTON WD # 1
1000 ROUTE 14A, PENN YAN, NY 14527
(Public Water Supply ID# 6130011)

INTRODUCTION

To comply with State regulations, the Town of Benton will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. 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 concerning your drinking water, please contact **Jayson Hoover, Water Operator, at 585-329-6904**. 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 in the Town Hall located at 1000 Route 14A, Penn Yan, NY, on **every second Wednesday of the month at 7:00 P.M.**

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.

Our water is purchased from the Town of Geneva whose source consists of three drilled wells located at Kashong. Well #3 is their primary source with Wells #1 and #2 used as a back up during periods of increased demand. The Town of Geneva treats the ground water in a variety of ways prior to entering distribution. The water is disinfected through the use of chlorine. Fluoride is added to the water for the promotion of healthy teeth and gums and orthophosphate is used for corrosion control purposes prior to distribution.

FACTS AND FIGURES

Our water system serves 2,690 people through 1,070 service connections. The total water purchased in 2017 was 253,065,000. The daily average of water treated and pumped into the distribution system was 693,329 gallons per day. Our highest single day was 1,148,000 gallons. The amount of water delivered to customers was 231,208,000. This leaves an unaccounted for total of 21,857,000 gallons. This is approximately 9.1% of the total purchased and is attributed to the flushing of mains, firefighting, and leakage. In 2017, water customers were charged per quarter \$40.00 for the first 6,000 gallons and \$2.70 per thousand gallons above 6,000 gallons. For the average family using 18,000 gallons per quarter, the cost of purchasing water was \$289.60 annually in 2017. This equates to an annual charge of \$4.02 per 1,000 gallons used or about \$.79 cents per day.

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

It should be noted that all drinking water, including bottled drinking water, may reasonably be 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 (Geneva District Office) at 315-789-3030.

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source 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

contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential or contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "Are there contaminants in our drinking water?" 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.

As mentioned before, our water is derived from 3 drilled wells. The source water assessment has rated these wells as having a medium-high susceptibility to microbials, nitrates, metals, herbicides and pesticides, petroleum products, halogenated solvents, and other industrial contaminants. Susceptibility to enteric viruses was found to be high. These ratings are due primarily to the close proximity of residential development to the wells, and that the wells draw from an unconfined aquifer with high hydraulic conductivity. 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 presence of contaminants does not necessarily indicate that the water poses a health risk. Please note that, while the source water assessment rates our well as being susceptible to microbials, our water is disinfected to ensure that that the finished water delivered into your home meets the New York State drinking water standards for microbial contamination.

County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted below.

Table of Detected Contaminants							
Contaminant	Violation?	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure -ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Nitrate	NO	8/17/17	2.3	Mg/l	10	MCL = 10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Barium	NO	8/11/16	0.081	Mg/l	2	MCL = 2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	NO	Monthly 2017	0.9 (0.7 - 1.3)	Mg/l	N/A	MCL = 2.2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Total Coliform	NO	Monthly 2017	None	Present/Absent	0	0	Naturally present in environment.
Sodium	NO	9/5/17	33	Mg/l	0	No Designated Limits ***	Naturally occurring, road salt, water softeners and animal waste.
Copper	NO	8/2015 15 samples taken 90 th % was 1.13*	1.13 (0.04 - 1.68)	Mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	NO	8/2015 15 samples taken 90 th % was 3.6*	3.6 (ND - 4.0)	Ug/l	N/A	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits.
Volatile Organic Contaminants							

THM's (trihalomethanes)	NO	8/09/17	40.1 **	Ug/l	0	MCL = 80	A byproduct of drinking water disinfection, needed to kill harmful organisms.
HAA5 (haloacetic acids)	NO	8/09/17	4.8**	Ug/l	0	MCL = 60	A byproduct of drinking water disinfection, needed to kill harmful organisms.
Radiological Contaminants							
Gross Alpha	NO	8/31/17	1.78 +/- 1.67	pCi/L	0	MCL = 15	Erosion of natural deposits.
Radium 226	NO	8/31/17	0.904 +/- 0.474	pCi/L	0	MCL = 5	Erosion of natural deposits.
Radium 228	NO	8/31/17	0.590 +/- 0.352	pCi/L	0	MCL = 5	Erosion of natural deposits.

Notes: * The level presented represents the 90th percentile of the 15 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, 15 samples were collected at your water system and the 90th percentile value was the 18th value of 1.13 mg/l. The action level for copper was not exceeded at any of the sites tested.

** THM/HAA5 levels represents the highest locational running annual average calculated from data collected.

*** 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.

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 disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants

Maximum Residual Disinfectant Level Goal (MRDLG): The level of 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).

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

Picocuries per liter (pCi/L): picocuries per liter is a measure of radioactivity in water.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Our water system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

The Town of Geneva 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.

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. Fluoride is added to your water by the Town of Geneva before it is delivered to us. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that the Town of Geneva monitor fluoride levels on a daily basis. During 2017 monitoring showed fluoride levels

in your water were in the optimal range 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

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.

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)

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, 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 any questions.