

***2017 Annual Drinking Water Quality Report for  
Village of Waverly Water Department 32 Ithaca Street, Waverly, NY 14892  
(Public Water Supply ID# 5304410)***

**INTRODUCTION**

To comply with State regulations, the Waverly Water Department, 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 2017, your tap water met all county, state, and federal drinking water health standards. We are proud to report that our system did not violate 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 all health standards.

If you have any questions about this report or concerning your drinking water, please contact Pat Roney, Water System Operator, 607-259-7285. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled water board meetings. Meetings are held at 6:30 PM on the third Tuesday of each month at Village Hall, 32 Ithaca Street, Waverly, NY.

**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 County, State, and federal governments (EPA & FDA) all 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 source is groundwater drawn from four (4) wells. Well 1 is located on Spring Street, Wells 2 and 4 are located in East Waverly Park, and Well 3 is located on Pembleton Place. The water from each well is chlorinated before distribution. All wells pump into two (2) storage tanks (1) 750,000 gallons and (2) 1.25 million gallons which are located above the Waverly Glen. During 2017, our system did not experience any restriction of our water sources.

**Source Water Assessment**

The NYS Department of Health has completed a source water assessment for this system. Possible and actual threats to this drinking water source were evaluated. The State's 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 potential for 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 assessment has rated our four wells as having medium high susceptibility to microbial, nitrates, industrial solvents, and other contaminants. While nitrates (and other inorganic contaminants) were detected in our water, it should be noted that all drinking water, including bottled water, may be reasonably expected to contain trace amounts of some contaminants from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. These ratings are primarily due to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and federal governments) to the wells and associated industrial activity in the assessment area. The wells draw from an unconfined aquifer and the hydraulic conductivity is unknown. Please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water quality standards for microbial contamination, as well as all federal standards.

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 plan, can be obtained by contacting us as noted below.

### **FACTS AND FIGURES**

Our water system serves 4,800 persons through 1,780 service connections. The total water produced in 2017 was approximately 500 million gallons. The daily average of water treated and pumped into the distribution system was 1.2 million gallons per day. Our highest single day was 1.7 million gallons. The amount of water delivered to customers was 400 million gallons. This leaves an unaccounted total of 100 million gallons or approximately 22%. This water was used to operate the wastewater treatment plant, fill pools, flush hydrants & water mains, and fight fires. The remainder was due to leakage. In 2017 our customers were charged \$35.00 for the first 800 cubic feet (approximately 6,000 gallons) of water per quarter. That works out to about one-half cent per gallon.

### **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, haloacetic acids, radiological and synthetic organic compounds. 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 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 Tioga County Health Department at 607-687-8600.

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. None of the compounds we analyzed were detected in your drinking water.

**Table of Detected Contaminants**

Water Source	Contaminant	Violation (Yes/No)	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT, or ACL)	Likely Source of Contamination
Well #1 Spring St.	Inorganic Contaminants Nitrate as N	No	Dec 17	<0.0250	mg/L	NA	1.0	Runoff from fertilizer, leaching from septic tanks, sewage, erosion from natural deposits
Well #3 Spring St.	Inorganic Contaminants Nitrate as N	No	Dec 17	<0.0250	mg/L	NA	1.0	Runoff from fertilizer, leaching from septic tanks, sewage, erosion from natural deposits
Well #4 Spring St.	Inorganic Contaminants Nitrate as N	No	Dec 17	<0.0250	mg/L	NA	1.0	Runoff from fertilizer, leaching from septic tanks, sewage, erosion from natural deposits
Well #4 Spring St.	Radium, Combined (Ra226 + Ra228, Calc)	No	Dec 17	0.39	pCi/L	NA	5.00	Erosion from natural deposits

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU.

2 – The level presented represents the highest level of the lead values detected in your water system. In this case, 20 samples were collected and the highest value was 0.0077 mg/L. The action level for lead (0.015 mg/L) was not exceeded at any of the sites tested.

3 – The level presented represents the highest level of the copper values detected in your water system. In this case, 20 samples were collected and the highest value was 0.251 mg/L. The action level for copper (1.3 mg/L) was not exceeded at any of the sites tested

**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.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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).

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

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

**WHAT DOES THIS INFORMATION MEAN?**

As you can see by the above 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 and federal governments, as all water contains some trace contaminants.

## **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. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2017, our system was in compliance with all applicable county, state, and federal 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. Immunocompromised 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. 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, and then check the meter after 15 minutes. If it moved, you have a leak.

## **SYSTEM IMPROVEMENTS**

We continue to maintain and improve our drinking water system. To that end, we are currently working to improve our wells, replace older fire hydrants, valves, pipes, and aging water meters. Should you find a problem, especially a leak, please do not hesitate to contact our office.

## **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office at 607-565-8106 if you have any questions or to report a concern.