

*Annual Drinking Water Quality Report for 2016  
Village of Wellsville Water  
111 W. State St.  
Wellsville, NY 14895  
Public Water Supply ID# NY 0200327*

## **INTRODUCTION**

To comply with State regulations, the Wellsville Water Department, 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. Last year, we conducted tests for over 80 contaminants. We only found one of those contaminants at a level higher than the State allows. As we told you at that time, our water temporarily exceeded a drinking water standard and we rectified the problem by retesting. 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 Dana Harris, water plant supervisor at (585) 593-3333 or [dana@wellsvillewater.com](mailto:dana@wellsvillewater.com) . We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings which are held the 2<sup>nd</sup> and 4<sup>th</sup> Monday of each month at 7:00 pm. You may also view our website at: [www.wellsvillewater.com](http://www.wellsvillewater.com) .

## **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 source is the Genesee River. The water is drawn from the river at our intake south of the treatment plant. During 2016, our system did not experience any restriction of our water source. The water is pumped from our intake to the treatment plant. After filtration, disinfection, pH adjustment, fluoridation, and corrosion control treatment, the water is then pumped to our (2) two million gallon reservoirs. The water then flows to our consumers.

The New York State Department of Health has completed a source water assessment for this water system. The final report hasn't been published yet. When this becomes available, you may call (585) 593-3333 or [dana@wellsvillewater.com](mailto:dana@wellsvillewater.com) for a copy and it will be posted on our website.

## **FACTS AND FIGURES**

Our water system serves 5700 people through 2300 service connections. The total water produced in 2016 was 261 million gallons. The daily average water pumped into the system was 713,967 gallons. Our highest single day was 1,784,400 gallons. The amount of water delivered to customers was 157 million gallons. This leaves an unaccounted-for total of 104 million gallons (40% of the total amount produced). This water was used to flush mains, fight fires and leakage.

In 2016, water customers were charged \$0.54 per unit of water (1 unit equals 748 gallons) for 1 to 3 units. \$3.68 for 4 to 50 units. \$2.54 for 51 to 100 units. \$2.27 for 101 to 150 units. \$1.32 for over 150 units. Plus, a monthly service charge of \$15.25. For a more detailed explanation of our billing rates: <http://wellsvillewater.com/water-rates/>

## **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. For more detailed testing results, please visit our website for the latest sampling results at: <http://wellsvillewater.com/lab-results/>

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 Allegany County Health Department at (585) 268-9250

| Table of Detected Contaminants      |                  |                |                                  |                  |      |                                  |   |
|-------------------------------------|------------------|----------------|----------------------------------|------------------|------|----------------------------------|---|
| 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                                    |
| <b>Microbiological Contaminants</b> |                  |                |                                  |                  |      |                                  |   |
| Turbidity <sup>2</sup>              | No               | 01/11/2016     | 0.22<br>0.04 – 0.22              | NTU              | n/a  | TT<br>0.3                        | Soil runoff   |
| Total Coliform <sup>1</sup>         | Yes              | 09/2016        | 2 positive samples               | n/a              | 0    | MCL = 2 or more positive samples | Naturally present in the environment                              |
| <b>Radiological Contaminants</b>    |                  |                |                                  |                  |      |                                  |   |
| Uranium                             | No               | 06/15/2016     | 0.056                            | ug/l             | 0    | 30                               | Erosion of natural deposits                                       |
| Gross Alpha                         | No               | 06/15/2016     | -0.128                           | pCi/L            | 0    | 15                               | Erosion of natural deposits                                       |
| Gross Beta                          | No               | 06/15/2016     | 0.5777                           | pCi/L            | 0    | MCL = 4 mrem/yr                  | Decay of natural deposits and man-made emissions.                 |
| Radium 228                          | No               | 06/15/2016     | 1.59                             | pCi/L            | 0    | MCL = 5                          | Erosion of natural deposits                                       |
| <b>Inorganic Contaminants</b>       |                  |                |                                  |                  |      |                                  |   |
| Barium                              | No               | 01/20/2016     | 0.045                            | mg/l             | 2    | MCL = 2                          | Discharge of drilling wastes, metal refineries, natural deposits. |
| Chloride                            | No               | 08/18/2016     | 18.2                             | mg/l             | n/a  | MCL = 250                        | Naturally occurring or road salt contamination.                   |
| Copper <sup>3</sup>                 | No               | 07/18/2016     | 0.1100<br>0.0085–0.1200          | mg/l             | 1.3  | AL = 1.3                         | Corrosion of galvanized pipes, natural deposits.                  |
| Fluoride                            | No               | 07/03/2016     | 1.11                             | mg/l             | n/a  | MCL = 2.2                        | Natural deposits, water additive that promotes strong teeth.      |
| Lead <sup>4</sup>                   | No               | 07/18/2016     | 0.0013<br>nd – 0.0032            | mg/l             | 0    | AL = 0.015                       | Corrosion of household plumbing systems, natural deposits         |
| Nitrate                             | No               | 01/06/2016     | 1.48                             | mg/l             | 10   | MCL = 10                         | Runoff from fertilizer use.                                       |
| Sodium                              | No               | 02/17/2016     | 16.0                             | mg/l             | n/a  | n/a                              | Naturally occurring.  |
| Sulfate                             | No               | 02/06/2013     | 7.57                             | mg/l             | 250  | n/a                              | Naturally occurring.  |
| <b>Synthetic Organic Chemicals</b>  |                  |                |                                  |                  |      |                                  |   |
| 04/06/2016 no detections            |                  |                |                                  |                  |      |                                  |   |
| <b>Volatile Organic Compounds</b>   |                  |                |                                  |                  |      |                                  |   |
| 01/20/2016 no detections            |                  |                |                                  |                  |      |                                  |   |
| <b>Disinfection Byproducts</b>      |                  |                |                                  |                  |      |                                  |   |
| HAA5 <sup>5</sup>                   | No               | Quarterly      | 29.5<br>18.0 – 47.0              | ug/l             | n/a  | 60                               | Byproduct of drinking water chlorination.                         |
| TTHM <sup>6</sup>                   | No               | Quarterly      | 51.0<br>17.4 – 88.0              | ug/l             | n/a  | 80                               | Byproduct of drinking water chlorination.                         |
| <b>Total Organic Compounds</b>      |                  |                |                                  |                  |      |                                  |   |
| Entry Point <sup>7</sup>            | No               | Quarterly      | 1.39<br>1.21 – 1.72              | mg/l             | n/a  | TT = 35% removal                 | Disinfection byproduct precursor.                                 |
| Source <sup>7</sup>                 | No               | Quarterly      | 2.17<br>1.90 – 2.63              | mg/l             | n/a  | n/a                              | Disinfection byproduct precursor.                                 |

1 – A violation occurs in systems collecting less than 40 samples per month when two or more samples are total coliform positive.

2 – 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. State regulations require that turbidity must always be below 0.30 NTU. 100% of our samples met this turbidity performance standard.

3 – The level presented represents the 90<sup>th</sup> percentile of the 20 sites sampled. The action level for copper was not exceeded at any of the sites tested.

4 – The level presented represents the 90<sup>th</sup> percentile of the 20 sites sampled. The action level for lead was not exceeded at any of the sites tested.

5 – HAA5's (mono-, di-, & trichloroacetic acid, and mono-, & dibromoacetic acid) The level presented represents the annual average from both testing sites.

6 – TTHM's (chloroform, bromodichloromethane, dibromochloromethane and bromoform) The level presented represents the annual average from both testing sites.

7 – The level presented represents the annual average.

### **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.

**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).

**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.

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

The table shows that our system uncovered some problems this year. The violation was for total coliform bacteria. The duration of the violation was two days. the potential adverse health effects are:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Our repeat testing has confirmed that this violation has been corrected.

We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

## **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).

## **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. 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, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/. During 2016 monitoring showed that fluoride levels in your water were within 0.1 mg/l of the target level for 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

## **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 several 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.

## **SYSTEM IMPROVEMENTS**

We continually strive to maintain and improve your water system to better serve you our customers.

Each year we work on replacing the older mains and services.

Each year we perform routine preventative maintenance on our hydrants.

Each year we perform preventative maintenance on our water meters.

We are always updating our treatment plant equipment and monitoring devices.

We are consistently staying up to date on all rules and regulations pertaining to your water system.

## **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community and our way of life. Please call (585) 593-3333 or e-mail me at: [dana@wellsvillewater.com](mailto:dana@wellsvillewater.com) if you have questions. Please visit our website periodically as it is updated as new information becomes available.

Dana L. Harris  
Water Treatment Plant Supervisor