

# *Annual Drinking Water Quality Report for 2017*

## **Beaver Valley Water District**

Public Water Supply ID# NY0701007

To comply with State regulations, Beaver Valley Water District 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. 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, you may contact Neil Scriven, system operator, at (607) 215-6481 or the Chemung County Health Department at (607) 737-2019. You can also contact our town supervisor, LaVerne Phelps at (607) 739-6658. You are always welcome to attend meetings of our Town Board, which meets the second Thursday 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.

Our water source is groundwater supplied from two 55-foot-deep wells. The water is disinfected with chlorine prior to distribution to your home and our reservoir. We also feed polyphosphate to "tie up" dissolved iron and manganese at the wellhead, before it can react with chlorine to discolor the water. We also flush our water mains on a regular basis to prevent buildup of mineral sediments. If you have problems with cloudy water, please inform the water department by calling our office at 739-5598, extension 5.

Our system was built in 1953. We completed well upgrades in 2013, and installed a new reservoir in 2014. The work brings us up to standards currently required by New York State. Our water system serves 550 people through 155 service connections. During 2017, our system supplied sufficient water to meet our needs.

### **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 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 well. The susceptibility rating is an estimate of the 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 assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from one drilled well. The source water assessment has rated this well as having a medium-high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. While no significant sources of contamination have been identified in the assessment area, the well draws from an unconfined aquifer with unknown high hydraulic conductivity. Please note that, while the source water assessment rates our well as being susceptible to microbials, our water is disinfected to ensure 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.

### 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, natural radioactivity, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, 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.

It should be noted that all drinking water, including bottled drinking water, might 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 Chemung County Health Department at 737-2019.

#### Contaminants Detected in 2017 (or most recent test)

Contaminant	Violation Y/N	Date Sampled	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Barium	N	7/2015	0.4	mg/L	2	2	Naturally occurring
Chlorine residual	N	Monthly	Average 0.4 Range 0.06 – 0.9	mg/L	MRDLG 4	MRDL 4	Disinfectant necessary to control microbes
Copper 10 Samples <b>Note 1</b>	N	7/2016	90 <sup>th</sup> % = 0.2 range: 0.02 to 0.3	mg/L	1.3	AL 1.3	Corrosion of household plumbing and fixtures
Lead 10 Samples <b>Note 1</b>	N	7/2016	90 <sup>th</sup> % = 1.2 range: ND to 1.6	ug/L	0	AL 15	Corrosion of household plumbing and fixtures
Iron	N	11/2016	430	ug/L	N/A	300 <b>Note 3</b>	Naturally occurring
Manganese	N	11/2016	343 <b>Note 2</b>	ug/L	N/A	300 <b>Note 3</b>	Naturally occurring
Nitrate	N	10/2017	0.05	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks
Sodium	N	11/2016	28	mg/L	N/A	<b>Note 4</b>	Naturally occurring; Road salt; Water softeners; Animal waste.

Contaminant	Violation Y/N	Date Sampled	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Total Trihalo-methanes	N	8/2017	14	ug/L	N/A	80	By-product of drinking water chlorination

**Note 1:** The 90<sup>th</sup> percentile means 90% of all results were less than or equal to the value given. 10 samples were collected at homes throughout the system. None of the samples exceeded the State's Action Level (AL) for copper or lead.

**Note 2:** Manganese is an essential nutrient and is not harmful to most people even at levels near the Maximum Contaminant Level. However, too much Manganese can harm a baby's development. Because baby formula already includes the correct amount of manganese, our water could add more manganese than is healthy. To be on the safe side, prepare baby formula with other municipal water or bottled water certified by the State of New York.

**Note 3:** The MCL for both iron and manganese is set at 300 ug/L due to staining and discoloration problems. The sum of the two should not exceed 500 ug/L. Because there are no health effects (except for baby formula, above) the State permits us to operate with slightly higher levels because of the expense of removing iron and manganese. As stated earlier, we also add polyphosphate to minimize staining.

**Note 4:** No MCL; 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 used in the table:

**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 that 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).

**Not Detected (ND):** The laboratory tested for the contaminant but did not find a measurable amount.

**Not Applicable (N/A)**

### What does this information mean?

As you can see by the table, our system met water quality standards during 2017. We have learned through our testing that some contaminants have been detected; however, these contaminants were measured below the level allowed by the State.

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

In 2017, our system was in compliance with all applicable drinking water regulations.

## **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).

**Lead Educational Notice:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Beaver Valley Water District 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 or at <http://www.epa.gov/safewater/lead>.

## **How can I help save water?**

Saving water lessens the strain on the water system during a dry spell or drought. 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. One of the easiest things to check is your toilets. Check 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 can save more than 30,000 gallons a year.

## **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 source, which is the heart of our community.