

# ***Annual Drinking Water Quality Report for 2017***

## ***Beaver Dam Lake-American Water***

***(Public Water Supply ID#3503550)***

To comply with State regulations, American Water 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. 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 the System Operator, JCO, Inc. (845) 888-5755. We want you to be informed about your drinking water.

### ***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 system serves 154 households through 154 service connections. Our water source is groundwater wells drawn from three wells. Well #1 is 328 feet deep. Well #2 is 225 feet deep and Well #3 is 600 feet deep. The water from these wells is treated through a membrane filtration system. It is then disinfected with sodium hypochlorite as it is transferred to the storage tank at the top of Maple Ave.

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 contaminants can 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 that the water delivered to consumers is or will become contaminated. See "Table of Detected Contaminants" 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 three drilled wells. The source water assessment has rated these wells as having a medium to medium-high susceptibility to microbials and nitrates. These ratings are due primarily to the close proximity of low-level residential activity that is located in the assessment area. In addition, the wells draw from a confined and unconfined aquifer with the estimated discharge area within the selected time of travel and the overlying soils are not known to provide adequate protection from potential contamination. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is filtered and 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 above.

### ***ARE THERE CONTAMINANTS IN OUR DRINKING WATER?***

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: Microbial Contaminants, Inorganic Compounds, Pesticides and Herbicides, Organic Chemical Contaminants, Radioactive Contaminants and Disinfectant Byproducts.

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 Orange County Health Department at 845-291-2331.

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 of the water quality, is more than one year old.

**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
Arsenic	No	8-15-17	1.8	ug/l	N/A	MCL = 10	Erosion of natural deposits
Barium	No	8-15-17	0.087	mg/l	2	MCL = 2	Erosion of natural deposits.
Copper (See Note 1 )	No	9-6-17	90 <sup>th</sup> = 0.145 Range = 0.047- 0.16	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems
Lead (See Note 2 )	No	9-6-17	90 <sup>th</sup> = 4.8 Range = <0.001- 0.0065	ug/l	0	AL = 15	Corrosion of household plumbing systems
Nickel	No	8-15-17 12/28/17	2.1 6.6	ug/l	100	MCL = 100	Erosion of natural deposits
Selenium	No	8-15-17	2.3	ug/l	50	MCL = 50	Erosion of natural deposits
Sodium	No	8-15-17	61	mg/l	N/A	See Note 3	Road salt
Trihalomethanes (TTHMs)	No	8-17-17	3.5	ug/l	N/A	MCL = 80	Byproduct of drinking water disinfection needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Five Haloacetic Acids (HAA5)	No	8-17-17	1.3	ug/l	N/A	MCL = 60	
Fluoride	No	8-15-2017	0.267	mg/l	N/A	MCL = 2.2	Erosion of natural deposits
Nitrate	No	8-15-2017	0.0529	mg/l	N/A	MCL = 10	Erosion of natural deposits
Distribution System Turbidity (See Note 5)	No	9-2017	.70	NTU	N/A	MCL = 5	Soil runoff.
Turbidity	No	Every Month in 2017	100 % of readings ≤ 0.3	N/A	N/A	TT = 95% of 4-hour readings ≤ 0.3 NTU every month	Soil runoff. Note that two of our wells are GWUDI (Groundwater Under the Direct Influence of Surface Water), necessitating filtration.
Turbidity	No	8-20-2017	0.222	NTU	N/A	TT ≤ 1	
Chromium	No	12-28-17	16.4	ug/l	100	MCL = 100	Erosion of natural deposits
Gross Alpha	No	2017	Max = 5.02 Range ND – 5.02	pCi/l	0	MCL = 15	Erosion of natural deposits

## NOTES:

1. The level presented represents the 90<sup>th</sup> percentile of the 5 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 values detected at your water system. In this case, five samples were collected at your water system and the 90<sup>th</sup> percentile value was the average of the two highest values (0.145 mg/l). The action level for copper was not exceeded at any of the sites tested.
2. The level presented represents the 90<sup>th</sup> percentile of five samples collected. The action level for lead was not exceeded at any of the five sites tested.
3. 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.
4. 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 1 NTU. Our highest single turbidity measurement for the year occurred on 8/20/17 (0.222 NTU). The regulations also require that 95% of the turbidity samples collected have measurements at or below 0.3 NTU. 100% of readings were below 0.3 NTU. The levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.
5. Five samples are collected per week, averaged for the month and compared to the MCL; here we report the highest monthly average for the year.

## 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).

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

As you can see by the table, our system had no MCL 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. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards.

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

During 2017, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

## ***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.

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.

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.