



# 2018 WATER QUALITY REPORT

## Mt. Ebo Waterworks, Inc.

Public Water Supply ID# NY3920885

January 1 to December 31, 2018



This report complies with Part 5-1.72, New York State Sanitary Code (10 NYCCR) and federal Consumer Confidence Report regulations (40 CFR Part 141, Subpart O).

### Introduction:

New York American Water (NYAW) is issuing this report describing the quality of drinking water supplied to customers of the Mt. Ebo Waterworks Inc. 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, we conducted tests for over 108 contaminants. We detected 17 of those contaminants and found sodium at a level higher than the State recommends for individuals on severely restricted sodium diets. For this reason, during 2019 sodium will continue to be sampled on a quarterly basis. 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.

Please share this information with all the other people who drink this water especially those who may not have received this notification directly (for example people in apartments, nursing homes, school, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

If you have any questions about this report or concerning your drinking water, please contact our customer call center at 877-426-6999, or at NewYorkAmWater.com, or the Allied Pollution Control President, John Muro II at 1-845-878-0007. We want you to be informed about your drinking water.

### A Message from the New York American Water President



To Our Valued Customer:

New York American Water is proud to be your local water service provider, and I am pleased to share some very good news about the quality of your drinking water. As you read through our Annual Water Quality Report, you will see that

we continue to supply water that meets or surpasses all state and federal water quality standards. **Better yet, the price you pay for this high-quality water service is about a penny per gallon.**

This is an exceptional value when you consider the facilities and technology needed to draw water from the source and treat it, along with miles and miles of pipeline hidden below the ground to bring water to your tap. What's more, our plant operators, water quality experts, engineers and maintenance crews work around the clock to make sure that quality water is always there when you need it.

Delivering safe, reliable water service requires significant investment to maintain and upgrade aging facilities. **In 2018 alone, we invested approximately \$46 million in system improvements across the state; and plan on investing another \$40 million in 2019.**

Because water is essential for public health, fire protection, economic development and overall quality of life, New York American Water's employees are committed to ensuring that quality water keeps flowing not only today, but well into the future.

Please take the time to review this report. It provides details about the source and quality of your drinking water using the data from water quality testing conducted for your local system between January and December 2018.

Thanks for allowing us to serve you.

**WE KEEP LIFE FLOWING.**

Sincerely,

Lynda DiMenna  
President, New York American Water



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## About New York American Water

New York American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water company in New York, providing high-quality and reliable water and/or wastewater services to approximately 350,000 people.

## About American Water

With a history dating back to 1886, American Water is the largest and most geographically diverse publicly traded water and wastewater utility company. The company employs more than 7,100 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to more than 14 million people in 46 states and Ontario.

## 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 Departments 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 ten drilled wells located within the property boundaries of the Mt. Ebo Corporate Park. A new well was drilled and placed online in 2018 with Putnam County Department of Health approval. It supplements the existing supply wells. The water is pumped from the wells to a 500,000 gallon storage tank. Well water is disinfected with sodium hypochlorite before entering the distribution system. The water system has 405 service connections.

The NYSDOH 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 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.

The drinking water is derived from eleven drilled wells. The source water assessment has rated north wells 1 and 2 as having a medium to high susceptibility to microbials, nitrates, halogenated solvents, petroleum products, herbicides, pesticides, metals, and other industrial organics. South wells 1, 2, 3 and 4 have a medium to high susceptibility to microbials, nitrates, and halogenated solvents. These ratings are due primarily to the close proximity of permitted wastewater discharge facilities, and associated activity in the assessment area. The wells draw from fractured bedrock and the overlying soils are not known to provide adequate protection from potential contamination.

Please note that the drinking water is disinfected to ensure that the finished water delivered to you meets the New York State drinking water standards for microbial contamination.

## Are there contaminants in our drinking water?

As NY State regulations require, we routinely test your drinking water for numerous contaminants, including: Total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, and synthetic organic compounds, total trihalomethanes, haloacetic acids and radiologicals. The tables presented below show 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. Please refer to the "Water Quality Results" chart for more information.

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 Putnam County Health Department at (845) 808-1390.

## Definitions:

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**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



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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.

**Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (µg/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)

**N/A:** Not applicable.

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

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

## Water Quality Results

TABLE OF DETECTED CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	Regulatory Limit MCL or AL	Likely Source of Contamination
<b>Radioactive Contaminants</b>						
1. Uranium - 1/23/2017 North Well #1 North Well #2	No No	5 3	ug/l	0	30	Erosion of natural deposits
2. Combined Radium - 226&228 Well #1 (1/23/2017)	No	5	pCi/l	0	5	Erosion of natural deposits
3. Gross Alpha - 1/24/2017 South Well #3	No	0	pCi/L	0	15	Erosion of natural deposits
4. Uranium - 1/24/2017 South Well #1 South Well #2 South Well #3 South Well #4	No No No No	4 3 5 3	ug/l	0	30	Erosion of natural deposits
5. Combined Radium - 226&228 South Well #2 (1/24/2017)	No	2	pCi/l	0	5	Erosion of natural deposits
6. Gross Alpha - 1/23/2017 #3 Pump House Well #8 #3 Pump House Well #9 #3 Pump House Well #10 #3 Pump House Well #11	No No No No	1 0 1 3	pCi/L	0	15	Erosion of natural deposits
7. Uranium - 1/23/2017 #3 Pump House Well #8 #3 Pump House Well #9 #3 Pump House Well #10 #3 Pump House Well #11	No No No No	4 5 4 4	ug/l	0	30	Erosion of natural deposits

<b>Disinfection Byproducts</b>						
<b>Trihalomethanes</b>						
Total Trihalomethanes (7/19/2018)	No	5.93	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
<b>Haloacetic Acids</b>						
Total Haloacetic Acids (7/19/2018)	No	1.1	ug/l	N/A	60	By-product of drinking water chlorination needed to kill harmful organisms.

<b>Inorganic Contaminants</b>						
1. Copper <sup>*1</sup> (September 2018)	No	0.136 (0.020-0.396)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives.
2. Lead <sup>*2</sup> (September 2018)	No	4.5 (<1 - 4.6)	ug/l	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits.



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Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	Regulatory Limit MCL or AL	Likely Source of Contamination
3. Barium – 1/22/2018 North Entry Point South Entry Point #3 Pump House Entry Point	No No No	0.097 0.079 0.066	mg/l	2	2	Erosion of natural deposits
4. Chloride – 1/22/2018 North Entry Point South Entry Point #3 Pump House Entry Point	No No No	109 171.2 *3 15.2	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination
5. Chromium – 1/22/2018 #3 Pump House	No	1.0	ug/l	N/A	100	Discharge from steel and pulp mills; erosion of natural deposits
6. Iron *4 - 1/22/2018 #3 Pump House entry point	No	15	ug/l	N/A	300	Naturally occurring
7. Manganese *4 - 1/22/2018 North Entry Point South Entry Point	No No	3.0 51	ug/l	N/A	300	Naturally occurring; Indicative of landfill contamination.
8. Nickel - 1/22/2018 North Entry Point South Entry Point #3 Pump House Entry Point	No No No	0.004 0.003 0.003	mg/l	N/A	N/A	Erosion of natural deposits
9. Nitrate as Nitrogen – 10/9/2018 North Entry Point South Entry Point #3 Pump House Entry Point Fieldstone well #2 (12/13/18)	No No No No	0.23 0.39 0.45 1.60	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, erosion of natural deposits
10. Sodium *5 North Entry Point (10/9/2018) (7/19/2018) (4/6/2018) (1/22/2018)	No No No No	15.3 18.8 18.0 18.6	mg/l	N/A	*3 see below	Naturally occurring; road salt, water softeners
11. Sodium *5 South Entry Point (10/9/2018) (7/19/2018) (4/6/2018) (1/22/2018)	No No No No	16.6 27.6 9.42 50.5	mg/l	N/A	*3 see below	Naturally occurring; road salt, water softeners
12. Sodium *5 #3 Pump House (10/9/2018) (7/19/2018) (4/6/2018) (1/22/2018)	No No No No	7.80 8.30 10.1 10.4	mg/l	N/A	*3 see below	Naturally occurring; road salt, water softeners
13. Sulfate – 1/22/2018 North Entry Point South Entry Point #3 Pump House Entry Point	No No No	39.2 44.5 23.9	mg/l	N/A	250	Naturally occurring
14. Zinc - 1/22/2018 North Entry Point South Entry Point #3 Pump House Entry Point	No No No	0.005 0.039 0.023	mg/l	N/A	5	Naturally occurring
<b>Unregulated Contaminants</b>						
1. Perfluorooctanoic Acid *6 (PFOA) - (12/14/2017)	N/A	(0.0022 - 0.0045) Avg. 0.0034	ppb	N/A	Unregulated	Perfluorinated aliphatic carboxylic acid; used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives, and photographic films
2. Perfluorooctanesulfonic Acid (PFOS) *6 (12/14/2017)	N/A	(0.0023 - 0.0030) Avg. 0.0027	ppb	N/A	Unregulated	Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps; U.S. manufacture of PFOS phased out in 2002; however, PFOS still generated incidentally

**Notes:**

\*1 – The level presented represents the 90<sup>th</sup> percentile of the 10 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, 10 samples were collected at your water system and the 90<sup>th</sup> percentile value was the 9<sup>th</sup> highest sample which equaled 0.136 mg/l. The action level for copper was not exceeded at any of the sites tested.



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Copper (mg/l)	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10
August / September 2018	0.020	0.059	0.064	0.093	0.098	0.100	0.108	0.120	0.136	0.393

\*2 – The level presented represents the 90<sup>th</sup> percentile of the 10 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, 10 samples were collected at your water system and the 90<sup>th</sup> percentile value was the 9<sup>th</sup> highest sample which equaled 4.5 ug/l. The action level for lead was not exceeded at any of the sites tested.

Lead (ug/l)	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10
August / September 2018	<1	<1	<1	<1	1.1	1.7	2.0	2.1	4.5	4.6

\*3 – The level represents the average of the two detected levels. A routine chloride sample was collected on January 22, 2018 and detected chloride at 276 mg/L. A re-sample collected on February 8, 2018 detected chloride at 66.4 mg/L. The average of both samples was 171.2 mg/L which is below the MCL. Chloride is essential for maintaining good health. Research has not conclusively demonstrated that human exposure to chloride itself causes adverse health effects, although exposure to high levels of certain chloride salts has been associated with adverse health effects in humans. For example, high dietary intake of sodium chloride can be a contributing factor to high blood pressure, but this has been attributed mainly to the presence of sodium. The New York State standard for chloride is 250 milligrams per liter, and is based on chloride's effects on the taste and odor of the water.

\*4 – If iron and manganese are present, the total concentration of both should not exceed 500 ug/L.

\*5 – 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 sodium should not be used for drinking by people on moderately restricted sodium diets.

\*6 – PFOA and PFOS are fluorinated organic chemicals that are part of a larger group of chemicals referred to as perfluoroalkyl substances (PFASs). They have been used to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials (e.g., cookware) that are resistant to water, grease or stains. They are also used for firefighting at airfields and in a number of industrial processes. There is currently no regulatory limit established for PFOA in drinking water. In 2016, the EPA issued a lifetime Health Advisory for PFOA and PFOS of 0.070 parts per billion (ug/L), which is equal to 70 parts per trillion (ppt). When both PFOA and PFOS are found in drinking water, the combined concentrations of PFOA and PFOS should be compared with the 70 parts per trillion health advisory level. For more information on PFOA and PFOS, you can visit the following Environmental Protection Agency website

<https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos> or call the Safe Drinking Water Hotline at (1-800-426-4791). The level presented in the table above represents the average of the detected levels and the range of the sites tested. We detected PFOA and PFOS at levels below the USEPA Health Advisory threshold.

## What does this information mean?

As you can see from the table our system had no violations. We have learned through our testing that some contaminants have been detected; however, with the exception of sodium, these contaminants were detected below the level allowed by the State. In 2018, two sodium samples taken from the South entry point were above the recommended value for individuals on severely restricted sodium diets.

The following steps were initiated in order to ensure the water meets State drinking water standards:

**Sodium:** As per the Putnam County Department of Health, during 2019, we will continue to monitor the level of sodium in the drinking water by collecting samples on a quarterly basis.

Although lead was detected below the action level, it was detected, therefore we are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Mt. Ebo Waterworks 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## Is our water system meeting other rules that governs operations?

During 2018, our system was in compliance with all 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).

## Why Save Water and How to Avoid Wasting it?

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

- Saving water lowers your water bill;



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- 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 up 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.

New York American Water is offering a free 'leak detection kit' for home use. If desired, please call our 24-hour customer call center at 877-426-6999 and request one.

## Protecting your Home Against Cross Connections

Under Part 5 Section 5-1.31 of the New York State Sanitary Code, the New York State Department of Health requires water system to have a Cross Connection Control Program and to educate its customers in preventing cross connections in their homes.

Without proper protection devices, something as useful as your garden hose has the potential to poison your home's water supply. In fact, over half of the nation's cross-connections involve unprotected garden hoses.

### What is a "cross-connection?"

A cross-connection is a permanent or temporary piping arrangement, which can allow your drinking water to be contaminated if a backflow condition occurs.

### What is "backflow"?

It's just what it sounds like: the water is flowing in the opposite direction from its normal flow. With the direction of flow reversed, due to a change in pressures, backflow can allow contaminants to enter our drinking water system through cross-connections.

A potentially hazardous cross-connection occurs every time someone uses a garden hose sprayer to apply insecticides or herbicides to their lawn. Another cross-connection occurs when someone uses their garden hose to clear a stoppage in their sewer line.

Without a backflow prevention device between your hose and hose bib (spigot or outside faucet), the contents of the hose and anything it is connected to can backflow into the piping system and contaminate your drinking water.

This hazardous situation sometimes can affect more than a single home. In 1977, an entire town in North Dakota had to be rationed drinking water from National Guard water trucks while the town's water distribution system was flushed and disinfected following contamination by DDT. Investigation determined that two residents spraying DDT had made direct cross-connections to their homes. A backflow condition had occurred, sucking the DDT through the home piping systems and out into the town's water distribution system.

Backflows due to cross-connections are serious plumbing problems. They can cause sickness and even death. However, they can be avoided by the use of proper protection devices. Each spigot at your home should have a hose-bib vacuum breaker installed. This is a simple, inexpensive device which can be purchased at any plumbing or hardware store. Installation is as easy as attaching your garden hose to a spigot.



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Now you know how cross connections can occur and how to avoid and prevent them. If you know of a cross connection in your plumbing and need assistance in correcting the hazard, please contact Allied Pollution Control, Inc. or New York American Water immediately. For more information about cross connections, you may contact the Putnam County Health Department at (845) 808-1390 <http://www.putnamcountyny.com/health> .

### Closing Comments

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, our way of life and our children's future. Please call our office at (845) 878-0007 if you have questions.

This report was compiled and prepared by your water system operator:

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