



2014 Annual

# Water Quality Report

Cambridge Water System

PWS ID: NY5700117



NEW YORK  
AMERICAN WATER

New York American Water (NYAW) is issuing this report describing the quality of drinking water supplied to customers of the Cambridge Water Works Company. 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.

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](http://newyorkamwater.com). 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 remains 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 reliable, high-quality water service also requires significant investment to maintain and upgrade aging facilities. **In 2014 alone, we invested approximately \$26 million in system improvements across the state; and plan on investing another \$37 million in 2015.**

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. We hope you agree that your water service is worth every penny.

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 2014.

Thanks for allowing us to serve you.

Sincerely,

William M. Varley  
President, New York American Water



WE CARE ABOUT WATER. IT'S WHAT WE DO.®

## 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 system has a population of approximately 2,475 through 483 service connections. Our water source is two groundwater wells located near the intersection of Route 313 and Fish Hatchery Road in Jackson Township. The water is chlorinated at the source prior to the distribution system. Zinc orthophosphate is added for corrosion control to reduce the amount of lead and copper leached from household plumbing into the water supply.

The New York State Department of Health 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'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 the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See the section, "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The source water assessment has rated our water source as having an elevated susceptibility to microbial matter and nitrate contamination. These ratings are due primarily to the close proximity of the wells to permitted discharge facilities (industrial / commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the associated industrial activity in the assessment area. In addition, the wells are high yielding wells, drawing from an unconfined aquifer, which is a shallow aquifer that occurs immediately below the ground surface and has no overlying protective layer for protection from potential sources of contamination. While the source water

assessment rates our wells as being susceptible to microbial matter, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards. Previous tests conducted have indicated the drinking water source to be free of herbicides, pesticides and volatile organic contaminants.

The 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 at the telephone number provided in this report.

## ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

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 at 800-426-4791, or the Glen Falls District Office of the New York State Department of Health at 518-793-3893.

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, and synthetic organic compounds. The tables presented on the next page depict 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.

## WHAT DOES THIS INFORMATION MEAN?

Although some contaminants were detected, only copper exceeded levels allowed by the State. Please see Public Notification statement at the end of this brochure for more information.

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

During 2014, our system was in compliance with all other 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).

## Straight Talk

Our water systems are designed and operated to deliver water to our customers' plumbing systems that complies with state and federal drinking water standards. This water is disinfected using chlorine, but it is not necessarily sterile. Customers' plumbing, including treatment devices, might remove, introduce or increase contaminants in tap water. All customers, and in particular operators of facilities like hotels and institutions serving susceptible populations (like hospitals and nursing homes), should properly operate and maintain the plumbing systems in these facilities. You can obtain additional information from the EPA's Safe Drinking Water Hotline at 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 new pumping equipment and sources of supply; 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 fire fighting 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. 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.

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

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. For questions concerning this report or your water quality, please contact Michael Nofi, Water Quality Manager, at 516-900-1193; or New York American Water's customer call center at 1-877-426-6999; or on the web at [newyorkamwater.com](http://newyorkamwater.com).

## 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 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 (ug/L):** Corresponds to one part of liquid in one *billion* parts of liquid (parts per billion - ppb).

**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 and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>						
Barium, mg/l	09/11	N	0.018	2	2	Erosion of natural deposits
Chloride, mg/l	09/11	N	23	NA	250	Naturally occurring or indicative of road salt contamination
Copper, mg/l	09/12	N	0.007	1.3	1.3	Corrosion of household plumbing
Lead, ug/l	09/12	N	3	0	15	Corrosion of household plumbing
Nitrate, mg/l	09/14	N	1.34	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sulfate, mg/l	09/11	N	12	NA	250	Naturally occurring
Sodium, mg/l <sup>1</sup>	09/11	N	4.5	NA	(See health effects)	Naturally occurring
Zinc, mg/l	09/11	N	0.72	NA	5	Naturally occurring
Iron, µg/L	09/11	N	40	NA	300	Naturally occurring
Cadmium, µg/L	09/11	N	2	NA	5	Improper disposal of waste metals

<sup>1</sup>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.

<b>Disinfectant/ Disinfection Byproduct (D/DBP) Parameters</b>							
Contaminant and Unit of Measurement	Date of Sample (mo/yr)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
TTHM [Total Trihalomethanes], µg/L	08/14	N	ND	N/A	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.
HAA [Haloacetic Acids], µg/L	08/14	N	2.2	N/A	N/A	60	By-product of drinking water chlorination needed to kill harmful organisms. HAA's are formed when source water contains large amounts of organic matter.
<b>Disinfectants</b>							
Chlorine, mg/l	2014	N	1.8	1.7–1.9	NA	MRDL = 4	Water additive used to control microbes

### Lead and Copper Rule (Tap water samples were collected from 10 customer homes in the service area)

Contaminant (units)	Date Sampled	Action Level	MCLG	Amount Detected (90th %tile)	Range: Low-High	Homes Above Action Level	Violation	Typical Source
Copper(ppm) <sup>2</sup>	07/14	1.3	1.3	1.74	0.350–1.76	7	YES	Corrosion of household plumbing systems
Lead (ppb) <sup>2</sup>	07/14	15	0	2	ND–2	0	NO	Corrosion of household plumbing systems

Ten samples were collected in your water system for Lead and Copper in July of 2014.

(2) 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. NYAW 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>



**Public Notification for Copper Action Level Exceedance  
Cambridge Water Works  
(January 1, 2014 – December 31, 2014)**

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely sample water at consumers' taps for lead and copper. First draw samples were collected from 10 homes/buildings served by the Cambridge Water Works water system in July 2014. The test results show that copper was detected above the regulatory action level in 7 of these samples. The regulatory action level is based on the 90th percentile of results meaning that if more than 10% of the samples exceed the action level, steps must be taken to address the problem. The regulatory limit for copper in drinking water is 1.3 mg/l. The 90th percentile for samples collected in July 2014 was 1.74 mg/l. As a result of our copper exceedance, the State Health Department mandated that we re-adjust our corrosion control treatment. This treatment helps prevent lead and copper in the pipes from dissolving into the water. Please note that lead levels were below the regulatory action level in the July 2014 samples.

New York State and federal drinking water regulations require that standard health effects information be distributed whenever a drinking water standard is violated. This information is presented below.

**HEALTH EFFECTS OF COPPER IN DRINKING WATER**

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their doctor.

The results are for first draw samples, meaning the samples are collected immediately following at least 6 hours of nonuse at a kitchen or bathroom tap. Levels of copper, and lead, may be reduced by flushing your tap for several seconds, or until the water runs cold, whenever it has not been used for several hours.

If you have further questions or concerns you can contact the New York State Department of Health Glens Falls District Office at 518-793-3893. Additional information is available on the Environmental Protection Agency website at <http://water.epa.gov/drink/contaminants/basicinformation/copper.cfm>.





**There's a lot more  
to your water bill  
than just water.**

When you turn on the tap, it's easy to see what your water bill buys. What's not as easy to see is what it takes to bring that water to your home. The miles of pipeline hidden below the ground. The facilities that draw water from the source. The plant where it's treated and tested. The scientists, engineers, and maintenance crews working around the clock to make sure that water is always there when you need it. Your water payments are helping to build a better tomorrow by supporting needed improvements that will keep water flowing for all of us—today and well into the future. All for less than a penny a gallon.



**WE CARE ABOUT WATER. IT'S WHAT WE DO.**  
**FIND OUT WHY YOU SHOULD, TOO, at [amwater.com](http://amwater.com).**

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