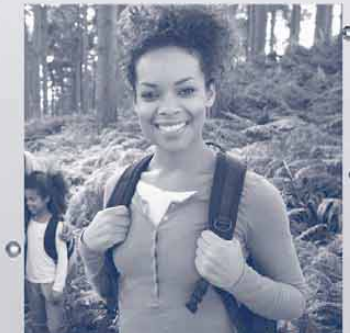
AQUARION
Water Company

Stewards of the Environment™

2015 Water Quality Report

It's Time To Conserve. Water: It's Too Precious To Waste.



A Message from the Vice President

John Walsh
Vice President, Operations
Aquarion Water Company of MA

Dear Aquarion Customer:

Delivering safe drinking water to you is Aquarion's highest priority. That's why, in 2015, we conducted 8,111 tests on the water we supplied to our Massachusetts' customers. We're proud to publish the test findings in this report, again showing that our water continued to meet or surpass every quality standard set by state and federal agencies.

Along with delivering high-quality water, Aquarion has a strong, ongoing commitment to investing in infrastructure. Last fall, we successfully completed the second phase of our project to replace the water main on Main Street, north of Old Depot Road. We will continue this project over the next two years, replacing 5,400 feet of water main before we are done. This investment will help improve reliability by reducing the risk of water main breaks and increasing our capacity to move water to and from the Jevic Tank, in the northern extent of our system, to the rest of our system in Oxford.

We enjoy supporting the communities we serve and getting involved in local organizations and events through sponsorship and participation. This past year, we sponsored and/or participated in activities of the Oxford Little League, Oxford Lassie League, Barton Center for Diabetes, Oxford Lion's Club, Operation Santa, Oxford Firefighters Association and Oxford Business Association.

We continue to meet regularly with our Customer Advisory Board in Oxford. This board comprises a group of residents and business leaders from town who provide ongoing feedback about our service. I want to thank them for their contribution and their support.

In closing, I'd like to thank all our employees for their excellent work in providing you with safe, clean water and dependable service. From all of us at Aquarion, it is a pleasure serving you and all our customers in Oxford.

Please feel free to share with us your questions about water-related issues in town. Our customer service line is 1-800-732-9678, or you may contact us at our dedicated Oxford email address: oxford@aquarionwater.com.

Sincerely,

John Walsh
Vice President, Operations
Aquarion Water Company of MA

In This Report

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Facts and Figures

Aquarion conducts an extensive quality testing program each year to ensure its 56,000 customers in Massachusetts have safe, clean drinking water. In 2015, we collected 1,697 samples, on which we conducted 8,111 quality tests. These tests are designed to detect and measure the presence of more than 100 compounds, many of which occur through erosion of natural deposits. Constant testing enables us to confirm that the water we supply meets or exceeds state and federal standards.

The results reported in the table on the next page demonstrate the effectiveness of our ongoing efforts to protect the purity of Aquarion water every step of the way from the source to your tap.

Water Quality Table for Customers in the Oxford System

Your water has been tested for more than 100 compounds that are important to public health. Only 15 of these were detected, all of which were below the amounts allowed by state and federal law. Most of these compounds are either naturally occurring or introduced as treatment to improve water quality. Monitoring frequency varies from daily to once every nine years per EPA regulation, depending on the parameter.

Our testing encompasses the full range of regulated inorganic, organic and radiological compounds and microbiological and physical parameters. Results shown below are for detected compounds only

	Highest Allowed by Law				Oxford System Detected Level	
Substance (Units of Measure)	**MCLG**	**MCL**	**Compliance**	**Test Date**	**Average**	**Range**
Inorganic Compounds						
Arsenic (ppb)	0	10	**YES**	2015	ND < 1	ND < 1 – 4
Barium (ppm)	2	2	**YES**	2015	0.012	0.007 – 0.020
Copper (ppm)	1.3	AL = 1.3	**YES**	2013	0.84*	
Fluoride (ppm)	4.0	4.0	**YES**	2015	0.79	0.69 – 0.94
Lead (ppb)	0	AL = 15	**YES**	2013	2**	
Nitrate (ppm)	10	10	**YES**	2015	2.29	0.110 – 3.40
Perchlorate (ppb)	NA	2	**YES**	2015	0.33	0.07 – 0.56
Disinfectant						
Chlorine (ppm)	MRDLG 4	MRDL 4	**YES**	2015	0.77	0.42 – 1.06
Organic Compounds						
Total Trihalomethanes (ppb)	NA	80	**YES**	2015	36***	36
Total Haloacetic Acids (ppb)	NA	60	**YES**	2015	4***	4
Radiologicals						
Alpha Emitters (pCi/L)	0	15	**YES**	2010	ND < 2.8	ND < 2.8 – 3.6
Uranium (ppb)	0	30	**YES**	2010	ND < 1.0	ND < 1.0 – 1.1
Inorganic Compounds						
Chloride (ppm)	NA	SMCL = 250	**NA**	2015	78.6	40.0 – 140
Manganese (ppb)	HA = 300	SMCL = 50	**NA**	2015	33	ND < 2 – 1,400^
Sodium (ppm)	NA	ORSG = 20	**NA**	2015	36.1	18.0 – 58.0

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Footnotes and Definitions for table on left

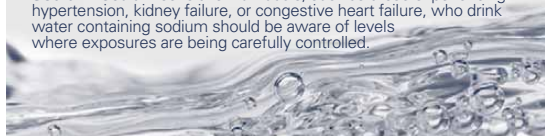
<	Less than
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
HA	Health Advisory
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal: 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.
MRDL	Maximum Residual Disinfectant Level: 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.
MRDLG	Maximum Residual Disinfectant Level Goal: 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.
NA	Not Applicable
ND	Not Detected
ORSG	Office of Research and Standards Guideline - State of Massachusetts
pCi/L	Picocuries per liter
ppb	parts per billion, or micrograms per liter (ug/L)
ppm	parts per million, or milligrams per liter (mg/L)
SMCL	Secondary Maximum Contaminant Level
*	90th percentile value in copper monitoring. Result is representative of customer sampling stagnant water. No locations exceeded the action level for copper.
**	90th percentile value in lead monitoring. Result is representative of customer sampling stagnant water. No locations exceeded the action level for lead.
***	Reported value is the highest measurement for disinfection by-products in the distribution system.
^	Manganese levels in Well #1A ranged from 60 to 1,400 ppb. This well ran intermittently throughout the year and only contributed 1.6% of the total water delivered in the Oxford System. This water gets diluted with water from two other wells that have manganese levels ranging from none detected (< 2 ppb) to 170 ppb. Levels of manganese found in the distribution system ranged from none detected (< 2 ppb) to 110 ppb.

HEALTH EFFECTS

Arsenic: While your drinking water meets the EPA's standard for arsenic, it does contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Manganese: Manganese is a naturally occurring mineral found in rocks, soil, ground water, and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet, but it can have undesirable effects on certain sensitive populations at elevated concentrations. Drinking water may naturally have manganese and, when concentrations are greater than 50 ug/L (parts per billon), the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 300 ug/L and over the short term, it recommends that people limit their consumption of water with levels over 1,000 ug/L, primarily due to concerns about possible neurological effects. Children up to 1 year of age should not be given water with manganese concentrations over 300 ug/L, nor should formula for infants be made with that water for longer than 10 days.

Sodium: Sodium-sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, who drink water containing sodium should be aware of levels where exposures are being carefully controlled.



Your Health Is Our Priority

The Oxford System PWS ID#: MA2226000

Drinking water, including bottled water, may reasonably be 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)**.

Here is some additional information of interest about Aquarion's drinking water.

Where does your water come from?

All the water provided to Oxford customers is collected in four wells, treated, and delivered to homes and businesses through an extensive underground piping system. This system, located within the French River Watershed, serves approximately 6,100 people. The average amount of water delivered during 2015 was 658,000 gallons per day.

How is your water treated?

All water from the four wells is filtered naturally underground. The water then receives chemical treatment for disinfection, fluoridation to prevent tooth decay/cavities and pH adjustment to protect the water supply piping system.

Cryptosporidium

The EPA requires public water systems that use surface water sources to monitor for Cryptosporidium. This is a microbial pathogen found in lakes and rivers throughout the U.S. that can cause gastrointestinal illness if consumed. Aquarion continues to monitor its surface water sources and has not detected Cryptosporidium.

Disinfection By-Products

Disinfection by-products (DBPs) are chemicals formed during the disinfection process, when naturally occurring organic matter reacts with chlorine, which is added to water to eliminate bacteria and other microorganisms. Currently there are limits on two types of DBPs known as Total Trihalomethanes (TTHM) and Total Haloacetic Acids (THAA). Some people who drink water containing DBPs that exceed these limits over many years may experience problems with their livers, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

The state has implemented new DBP regulations that change how compliance with the standards is determined. The intent is to increase protection against the potential health risks associated with DBPs. Aquarion Water Company continues to evaluate its systems to ensure compliance with DBP regulations

Source Water Assessment Report

The Massachusetts Department of Environmental Protection's (DEP) Source Water Assessment Program (SWAP), which evaluates each water source to identify potential contamination, states that the sources that supply drinking water to the Oxford System have a high susceptibility to potential contamination. The SWAP report is available on the DEP website: **mass.gov/dep/water/drinking/2226000.pdf**.

Understanding Your Water Quality Table

Arsenic: Erosion of natural deposits.

Barium: Erosion of natural deposits.

Copper: Corrosion of household plumbing systems.

Fluoride: Water additive that promotes strong teeth; Erosion of natural deposits.

Lead: Corrosion of household plumbing systems.

Nitrate: Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Perchlorate: Rocket propellants, fireworks, munitions, flares, and blasting agents; breakdown product of disinfection additive.

Chlorine: Water additive used to control microbes.

Total Trihalomethanes: By-product of drinking water chlorination.

Total Haloacetic Acids: By-product of drinking water chlorination.

Alpha Emitters: Erosion of natural deposits.

Uranium: Erosion of natural deposits.

Chloride: Naturally present in the environment.

Manganese: Erosion of natural deposits.

Sodium: Water treatment processes; use of road salt; naturally present in the environment.

Your Health Is Our Priority

Copper and Lead

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level* over a relatively short period 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 personal doctor. Major sources of copper in drinking water include corrosion of household plumbing systems and erosion of natural deposits.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. Aquarion Water Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Fortunately, the Lead in Drinking Water Act, which took effect in January 2014, requires a significant reduction of the lead content in new plumbing components that contact drinking water. As a result, the lead content in new pipes, fittings, fixtures and solder must be reduced from 8% to 0.25%.

Customers can minimize the potential for lead exposure when water has been sitting for several hours by running the 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 **epa.gov/safewater/lead.**

*The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Immuno-compromised persons

Some people may be more vulnerable to contaminants 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline **(800-426-4791)**.

More Information You Should Know

Protecting your water at home
Cross-Connection Control Program

Our Cross-Connection Control Program helps ensure that your drinking water is protected from possible contamination. A cross-connection, as defined by the Massachusetts Department of Environmental Protection (DEP), "is any actual or potential connection between a distribution pipe of potable water from a public water system and any waste pipe, sewer, drain, or other unapproved source that has the potential, through back-pressure or back-siphonage, to create a health hazard to the public water supply and the water system within the premises."

Aquarion's DEP-certified, cross-connection surveyors and testers routinely conduct surveys and test backflow prevention devices at our customers' facilities for regulatory compliance. If they find unprotected cross-connections, they will require installation of backflow prevention devices to protect the water distribution system.

The best protection against cross-connection contamination is to eliminate the link. Garden hoses are a leading cause of cross-connection contamination. At your home, you can protect your family and the distribution system from potential contaminants by installing a simple, inexpensive backflow device called a Hose-Bibb Vacuum Breaker (HBVB) that mounts directly to your spigot.

Protecting water at the source

Even small quantities of pollutants may be enough to contaminate a drinking water supply. Examples of pollutants that may wash into surface water or seep into ground water include:

- Microbial contaminants from septic systems, agriculture and livestock operations, and wildlife;
- Inorganic contaminants such as salts and metals that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, or farming;
- Pesticides and herbicides from sources such as agriculture, urban storm water runoff, and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes; and
- Radioactive contaminants that can be naturally occurring.

You can help prevent water contamination

- Ensure that your septic system is working correctly.
- Use chemicals and pesticides wisely.
- Dispose of waste chemicals and used motor oil properly.
- Report illegal dumping, chemical spills, or other polluting activities to the MA DEP's Emergency Response Section at **(888-304-1133)**, Aquarion Water **(781-740-6690)**, or your local police.

Water conservation in your home

Our water supply is sufficient to meet your needs, but we still encourage you to conserve this precious natural resource for the good of our environment. There are plenty of simple steps you can take to reduce your water consumption: fix faucet and toilet leaks; turn off the water while shaving or brushing your teeth; run full loads in your dishwasher and clothes washer; water your lawn in early morning; and use a broom to clean debris from your driveway instead of a hose.

Your 2015 Water Quality Report

Customers who have questions about water quality should call us at **800-832-2373**; send an email to **waterquality@aquarionwater.com**; or visit **aquarionwater.com**.

For other questions, or to report discolored water or other service problems, call the Water Quality Management Department at **800-732-9678**.

Massachusetts Department of Environmental Protection: **mass.gov/dep/water/drinking.htm**

U.S. Environmental Protection Agency's Safe Drinking Water Hotline: **800-426-4791 or epa.gov/safewater**

PWS ID#: MA2226000
The Oxford System

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Water: More Ways To Save It

Though this report focuses on the quality of the water Aquarion provides you, quantity is vitally important, too.

You and more than 700,000 other people depend on us to provide enough water to supply your daily needs. As rainfall patterns appear to be changing, it's time for all of us to be even more careful about the way we use water. Here are some tips on reducing waste that you may not have considered:

Use water-efficient appliances. Older washing machines and dishwashers consume large quantities of water. New ones work more efficiently, using just a fraction of what the earlier models need.

Save with every flush. New model toilets can save three or more gallons every time you flush, and they do the job just as well as the old-fashioned ones.

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Turn off the taps. Whether you're brushing your teeth or getting a glass of water, try to keep good, clean water from going down the drain. Turn off the faucet while tending to your teeth. And keep a jug of water in the refrigerator so a cold glass is instantly available, rather than running the tap until the water is cold.

Shorten shower times. You'll not only use less water; you'll reduce your water-heating costs as well.

Water grass, not pavement. Carefully aim sprinklers and irrigation heads so they're not wetting down driveways, sidewalks and patios. Water either in early morning or early evening – and, of course, only when your lawn is actually starting to wilt.

For most people, conserving water is already second nature. Adding a few more techniques can reduce waste even more – and lower your water bill, too. For many more ways to ensure a healthy supply for decades to come, check out ***aquarionwater.com/conserve***.

Visit Mystic Aquarium's Beluga Whales Live!

Aquarion is the sponsor of three cameras trained on the exciting Beluga whale exhibit at Mystic Aquarion in Connecticut, the only one of its kind in New England. Go to **aquarionwater.com** and click on the cameras at any time during daylight hours to watch the Aquarium's three belugas – Kela, Naku and Naluark – in the 750,000–gallon, arctic marine environment created just for them.

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