

***Caring For Our Environment.***  
***Committed To Our Communities.***



## A Message from the President and CEO



Charles V. Firlotte  
President and CEO

Dear Customer:

I am again proud to present you with this report detailing how the water we supplied to you in 2013 met or surpassed every one of the quality standards established by state and federal agencies.

Each year, Aquarion performs approximately 138,000 tests of the water in our systems, meticulously looking for more than 100 potential pollutants. It's an exhaustive list, but also one we must cover to assure that our water meets rigorous standards of quality and safety for our customers.

Of course, we also are committed to the highest levels of quality in the services we provide, as well as in the other ways we support communities around the state. In 2013, we invested more than \$60 million upgrading our water systems. And, we again achieved the lowest complaint rate of any utility in Connecticut. In addition, our level of community support won us the 2013 Outstanding Corporation Award from the Connecticut and Fairfield County chapters of the Association of Fundraising Professionals.

Also in 2013, we expanded the Aquarion Environmental Champion Awards program to cover both small and large businesses acting voluntarily to preserve the state's natural resources. In June, we honored winners in all five volunteer categories at a special event at Connecticut's Beardsley Zoo. Competition for the 2014 awards has begun, and I urge you to nominate outstanding volunteers who are helping to protect and improve Connecticut's environment. You can find more information and nomination forms at our website, [aquarionwater.com](http://aquarionwater.com).

While you're at our website, be sure to check out the Aquarion Beluga Whale Cams at Mystic Aquarium. We sponsored these webcams so kids and adults across the state and around the world can learn about these fascinating mammals.

To close, I want to thank our employees for their relentless efforts to maintain the quality of our water and underlying services. Above all, I thank you and all our customers for helping us to conserve the precious commodity we supply and to safeguard its sources.

Sincerely,

Charles V. Firlotte  
President and CEO

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### Clean, safe water is just the start!

#### Free admission tickets!

Be sure to take advantage of the special 2-for-1 ticket deals and other offers that Aquarion has arranged for its customers at great Connecticut attractions like Connecticut's Beardsley Zoo, the Stamford Museum & Nature Center, the Mystic Aquarium, the Westport Country Playhouse, the Bridgeport Bluefish baseball team, the Sound Tigers hockey team and the Trumbull Marriott. You'll find full details at [aquarionwater.com](http://aquarionwater.com).



#### Website Redesign

Now it's easier than ever to navigate, and it even has an interactive feature to update you 24/7 on alerts and outages in your community. Check it out at [aquarionwater.com](http://aquarionwater.com)!

#### We've got whales!

Watch Mystic Aquarium's fascinating collection of beluga whales live on the new webcams that Aquarion is sponsoring. Find the fun at [aquarionwater.com](http://aquarionwater.com).



Find us on Facebook  
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# Water Quality Table for Customers in the Greater Bridgeport System

# Understanding Your Water

Your water has been tested for more than 100 compounds that are important to public health. Only 16 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.

Substance (Units of Measure)	Highest Allowed by Law		Compliance	Test Date	Bridgeport System Detected Level	
	MCLG	MCL			Average	Range
<b>Inorganic Compounds</b>						
Barium (ppm)	2	2	YES	2013	0.012	0.009 - 0.053
Copper (ppm)	1.3	AL = 1.3	YES	2012	0.24*	
Fluoride (ppm)	4.0	4.0	YES	2013	1.01	0.80 – 1.59
Lead (ppb)	0	AL = 15	YES	2012	5**	
Nitrate (ppm)	10	10	YES	2013	0.219	0.088 – 1.00
<b>Microbials</b>						
Total Coliform	0 positive samples per month	9 positive samples per month	YES	1/22/13	1^^	0 – 1
			YES	5/13/13	1^^	0 – 1
			YES	6/3/13	1^^	0 – 1
			YES	9/19/13	1^^	0 – 1
Turbidity (NTU)	NA	TT = 1 max	YES	2013	0.15+	0.03 - 0.32
Turbidity (NTU)	NA	TT = 95% of samples < 0.3	YES	2013	100%	
<b>Disinfectant</b>						
Chlorine (ppm)	MRDLG 4	MRDL 4	YES	2013	0.80	0.01 – 1.86
<b>Organic Compounds</b>						
Total Organic Carbon (TOC)	NA	TT Removal Ratio > 1#	YES	2013	1.4	1.0 – 1.5
Total Trihalomethanes (ppb)	NA	80	YES	2013	61***	25 – 74
Total Haloacetic Acids (ppb)	NA	60	YES	2013	43***	ND < 0.5 – 56
<b>State-Required Testing</b>						
<b>Physical Characteristics ^</b>						
Color (CU)	NA	15	YES	2013	1	0 – 8
pH	NA	6.4 – 10.0	YES	2013	7.1	6.7 – 8.0
Turbidity (NTU)	NA	5	YES	2013	0.14	0.05 – 2.0
<b>Inorganic Compounds</b>						
Chloride (ppm)	NA	250	YES	2013	20.2	18.7 – 37.8
Sodium (ppm)	NA	NL = 28	NA	2012	14.7	13.3 – 31.0
Sulfate (ppm)	NA	SMCL = 250	NA	2013	17.9	12.5 – 18.8

## Footnotes, Definitions and Sources

- > Greater than
- < Less than
- AL** Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- CU** Color Units
- 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 contaminants.
- NA** Not Applicable
- NL** State of Connecticut customer notification level
- NTU** Nephelometric Turbidity Units, a measure of the presence of particles. Low turbidity is an indicator of high-quality water.
- 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
- TT** Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
- \*** 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. Two (2) locations out of 51 exceeded the action level for lead.
- \*\*\*** Reported value is the highest locational annual average of quarterly measurements for disinfection by-products in the distribution system. Values in the range are individual measurements.
- +** Reported value is the highest monthly average for turbidity reported from the surface water treatment plant effluents. Values in the range are individual measurements.
- #** The monthly TOC removal ratio is calculated as the ratio between the actual TOC removed and the TOC rule removal requirements. This number should be greater than 1.0.
- ^** Measured at representative locations within the distribution system.
- ^^** Highest level detected. Average is 0/month.
- Health Effects**
- Sodium:** If you have been placed on a sodium-restricted diet, please inform your physician that our water may contain as much as 31.0 ppm of sodium.

## Sources of Contaminants for table on left

- 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.
- Total Coliform:** Naturally present in the environment.
- Turbidity:** Sediment particles; naturally occurring iron and manganese; soil runoff.
- Chlorine:** Water additive used to control microbes.
- Total Organic Carbon:** Naturally present in the environment.
- Total Trihalomethanes:** By-product of drinking water chlorination.
- Total Haloacetic Acids:** By-product of drinking water chlorination.
- Color:** Natural organic matter such as decaying leaves; naturally occurring iron and manganese.
- pH:** Naturally occurring; water treatment processes.
- Chloride:** Naturally present in the environment.
- Sodium:** Water treatment processes; use of road salt; naturally present in the environment.
- Sulfate:** Naturally present in the environment.



### How does Aquarion protect your drinking water?

Aquarion Water Company's commitment to provide the highest quality water is evidenced by our regular inspection of homes, businesses, farms and other sites that can pollute water supplies. We also review new land development projects for impact on water quality. In total, we conduct more than 138,000 water quality tests annually. We use the best water treatment and filtration technology and continue to invest in our water systems' infrastructure to improve the security and quality of your water.

### 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.

### Source Water Assessment Report

Connecticut's Department of Public Health (DPH) states in its Source Water Assessment Report that the public drinking water sources in the Greater Bridgeport System have a low-to-moderate susceptibility to potential contamination. To read the DPH report, visit [ct.gov/dph](http://ct.gov/dph).

### 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 CT DEEP (Department of Energy and Environmental Protection) 24-hour hotline (**860-424-3338**), Aquarion Water (**800-732-9678**), 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.

### Monitoring Unregulated Contaminants

Unregulated contaminants are elements that currently have no health standard for drinking water. In 2013, the EPA began a three-year monitoring program to test for up to 28 unregulated contaminants in various public water systems throughout the U.S. This table shows only the compounds detected in your system. To learn about the full list of unregulated contaminants included in the monitoring program, please call our Water Quality Department at **800-832-2373**.

Substance (Units of Measure)	Test Date	Detected Level		Source of Contaminant
		Average	Range	
<b>Unregulated Contaminants</b>				
Chlorate (ppb)	2013	128	ND < 20 – 260	Chlorate: Disinfection by-product.
Chromium (ppb)	2013	ND < 0.20	ND < 0.20 – 0.23	Chromium: Naturally occurring element.
Hexavalent Chromium (ppb)	2013	0.075	0.034 – 0.140	Hexavalent Chromium: Naturally occurring element.
Strontium (ppb)	2013	57	41 – 100	Strontium: Naturally occurring element.
Vanadium (ppb)	2013	0.34	0.26 – 0.46	Vanadium: Naturally occurring element.

## ***Your Health Is Our Priority***

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?***

Your water is collected in reservoirs and wells, treated, and delivered to you through an extensive underground piping system. The Greater Bridgeport System serves about 357,000 people in Bridgeport and nearby communities, including Easton, Fairfield, Monroe, Newtown, Norwalk, Redding, Shelton, Stratford, Trumbull, Westport, Weston and Wilton. The supply is mostly surface water drawn from a system of eight reservoirs (Aspetuck, Easton Lake, Far Mill, Hemlocks, Means Brook, Saugatuck, Trap Falls and West Pequonnock). The reservoirs supply more than 97% of the 42 million gallons per day that customers use on average. Water also is drawn from Aquarion Water Company's Westport and Coleytown well fields. Company-wide, an average of 16.1% of the demand is water drawn for firefighting, water main cleaning, water main breaks and leaks, and unauthorized use.

### ***How is your water treated?***

The reservoir water is filtered at our Trap Falls water treatment plant in Shelton, at our Easton Lake plant in Easton, and at our Warner plant in Fairfield. Water from the Westport and Coleytown wells is filtered naturally underground. All the water is disinfected, fluoridated, and further treated to protect the distribution system.

### ***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](http://epa.gov/safewater/lead).

### ***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 did not detect Cryptosporidium in the reservoirs that served the Greater Bridgeport System in 2013.

### ***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**).

### ***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.

New DBP regulations that change how compliance with the standards is determined are coming into effect now. 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.

## Your 2013 Water Quality Report

Customers in the Bridgeport area who have questions about water quality should call us at **203-445-7341**, or outside the Bridgeport area, call **800-832-2373**. Customers also may email us at [waterquality@aquarionwater.com](mailto:waterquality@aquarionwater.com), or visit [aquarionwater.com](http://aquarionwater.com).

For other questions, or to report discolored water or other service problems, call **203-445-7310** in the Bridgeport area or **800-732-9678** outside the Bridgeport area.



600 Lindley Street, Bridgeport, CT 06606

Connecticut Department of Public Health Drinking Water Section: **860-509-7333** or [ct.gov/dph](http://ct.gov/dph)  
U.S. Environmental Protection Agency's Safe Drinking Water Hotline: **800-426-4791** or [epa.gov/safewater](http://epa.gov/safewater)



Visit the whales at [aquarionwater.com](http://aquarionwater.com)

PWS ID#: **CT0150011**  
The Greater Bridgeport System



## Reforestation Project Benefits Begin to Sprout

Everyone knows the wisdom of making lemonade from the lemons that life can dole out. But what do you do when a hurricane leaves over 100 acres of storm-shattered trees in its wake, many lying in a jumble on the ground? Especially when that forest had been protecting vital reservoirs for neighboring communities.

This was the question facing Aquarion and state officials in late 2012 after Hurricane Sandy swept through the Centennial Watershed State Forest, which is jointly managed by Aquarion, the state Department of Energy and Environmental Protection, and The Nature Conservancy (TNC).

Working together, forest and wildlife experts from each organization quickly developed a plan for "making lemonade" by enabling the landscape to transition to a richer, more diverse habitat than the one the hurricane destroyed.

The first step was to bring in teams of certified foresters to assess and clean up the devastation. They removed hundreds of fallen and broken trees and cut down some still-standing but storm-damaged white pine trees. This species had dominated the landscape but, as Sandy proved, it had made the forest

notoriously vulnerable to high winds. This made room for the regeneration of a native, mixed hardwood forest that will be much less susceptible not only to major storms, but also to diseases that can quickly wipe out forests made up of a single tree species. As the mixed forest grows, the landscape will naturally transition into wildlife-friendly "shrub habitat" that supports far more bird and animal species than the mature pine forest Hurricane Sandy destroyed.

Just ask the bald eagles. Two mature eagles and one youngster already have been spotted in the restored area. With its new mix of young trees and shrubs providing food and shelter, the regrowing forest will be valuable habitat for many bird species, such as the American Woodcock, Eastern Towhee, and Prairie Warbler, whose populations are in decline across Connecticut. As the forest matures, naturalists from Aquarion and our partner organizations will monitor its progress closely. We'll also continue to manage the entire watershed so it can provide a lot more than the makings of lemonade. It's all part of Aquarion's mission to deliver the highest quality water to customers and help ensure the quality of life for generations to come.



## The 2014 Aquarion Environmental Champion Awards

### Call for entries

Help us find and honor Connecticut's top Environmental Champions in five categories: adults, students (grades 9-12), non-profits, and small and large businesses. Nomination deadline: May 7, 2014. Details: [aquarionwater.com](http://aquarionwater.com) or [facebook.com/aquarionwater](http://facebook.com/aquarionwater).

