

*For Customers in the Hampton,
North Hampton and Rye System*

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



A Message from the Vice President



John Walsh
Vice President, Operations
Aquarion Water Company of NH

Dear Customer:

Aquarion's highest priority is providing you with clean, safe water. So, I am pleased to present your system's water quality report, showing that the water we supplied to you throughout 2013 met or surpassed all the standards established by state and federal health agencies.

Along with high-quality water, Aquarion is committed to providing you with prompt, dependable service. In 2013, we replaced more than 1,900 feet of water mains on Auburn Avenue, Auburn Avenue Extension, Church Street and Perkins Avenue. These main replacements helped reduce the frequency of main breaks, improve flow rates, and eliminate discolored water. We also reduced costs on this installation by partnering with the Town of Hampton's sewer replacement projects.

Other major projects involved improvements to our operating, pumping and control systems, thereby increasing reliability and reducing costs. In addition, we redeveloped two of our wells to restore their original production capacity.

We also enjoy supporting the communities we serve. In particular, we were happy to play a small part in North Hampton Forever's successful effort to secure the conservation of the historic Governor Dale Farm property.

I thank all our employees for their excellent work in providing you with safe, clean water and dependable service. This group of 11 people performed over 64,000 tasks in 2013 involving operations and maintenance activities for our production and distribution systems, and customer service activities.

In closing, I thank you and all our customers for the honor of serving you.

Sincerely,

John Walsh
Vice President, Operations
Aquarion Water Company of NH

In This Report

| | |
|-----------------------------|---|
| Water Quality Table | 3 |
| Digest of Water Quality | 4 |
| Your Health Is Our Priority | 5 |
| Reforestation Project | 6 |

Facts and Figures



Aquarion conducts an extensive quality testing program each year to ensure its 20,000 residents in New Hampshire have safe, clean drinking water.

In 2013, we collected more than 300 water samples, on which we conducted nearly 1,600 quality tests. These tests are designed to detect and measure the presence of at least 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 the Hampton, North Hampton and Rye 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 | | Violation | Test Date | Hampton, North Hampton and Rye System Detected Level | |
|-------------------------------|------------------------------|-----------------------------|-----------|--|--|-----------------|
| | MCLG | MCL | | | Average | Range |
| Inorganic Compounds | | | | | | |
| Arsenic (ppb) | 0 | 10 | NO | 15 wells: 7/11 - 8/2/11, 3 wells: quarterly, 2013 | 2 | ND <1 – 6 |
| Barium (ppm) | 2 | 2 | NO | 7/11 – 8/2/11 | 0.015 | 0.009 – 0.024 |
| Copper (ppm) | 1.3 | AL=1.3 | NO | 4/25 – 5/19/11 | 0.64* | |
| Fluoride (ppm) | 4.0 | 4.0 | NO | 7/11 – 8/2/11 | 0.14 | 0.10 – 0.30 |
| Lead (ppb) | 0 | AL=15 | NO | 4/25 – 5/19/11 | 2** | |
| Nitrate (ppm) | 10 | 10 | NO | 4/2 – 8/6/13 | 1.20 | ND <0.10 – 2.80 |
| Microbials | | | | | | |
| Total Coliform | 0 positive samples per month | 1 positive sample per month | NO | 7/23/13 | 1^ | 0 – 1 |
| Disinfectant | | | | | | |
| Chlorine (ppm) | MRDLG 4 | MRDL 4 | NO | monthly 2013 | 0.55 | 0.10 – 1.34 |
| Organic Compounds | | | | | | |
| Total Trihalomethanes (ppb) | NA | 80 | NO | 8/6/13 | 8*** | 2 – 20 |
| Total Haloacetic Acids (ppb) | NA | 60 | NO | 8/6/13 | 2*** | ND <0.5 – 7 |
| Radiologicals | | | | | | |
| Alpha Emitters (pCi/L) | 0 | 15 | NO | 7/11 – 8/2/11 | ND <1.4 | ND <1.4 – 7.2 |
| Combined Radium (pCi/L) | 0 | 5 | NO | 7/11 – 8/2/11 | ND <1.0 | ND <1.0 – 1.4 |
| Uranium (ppb) | 0 | 30 | NO | 7/11 – 8/2/11 | ND <1.0 | ND <1.0 – 2.1 |
| Secondary Contaminants | | | | | | |
| Chloride (ppm) | NA | SMCL = 250 | NA | 7/11 – 8/2/11 | 58.5 | 37.0 – 110 |
| Sodium (ppm) | NA | SMCL = 250 | NA | 7/15 – 7/16/13 | 36.6 | 21 – 64 |
| Sulfate (ppm) | NA | SMCL = 250 | NA | 7/11 – 8/2/11 | 22.9 | 12.0 – 42.0 |

Footnotes, Definitions and Sources

- < Less than
 - AL** Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
 - 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
 - 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 average measurement for disinfection by-products in the distribution system. Values in the range are individual measurements.
 - ^** Highest level detected. Average is 0/month.
- Health Effects**
- Arsenic:** While your drinking water meets the EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. 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.
 - 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.

Sources of Contaminants for table on left

- Arsenic:** Erosion of natural deposits.
- Barium:** Erosion of natural deposits.
- Copper:** Corrosion of household plumbing systems.
- Fluoride:** 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.
- 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.
- Combined Radium:**
Erosion of natural deposits.
- Uranium:** Erosion of natural deposits.
- 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.



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 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 certified cross-connection personnel routinely conducts surveys and tests 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. A lawn irrigation system is a prime example of a cross-connection needing a backflow-prevention device.

To prevent this backflow contamination, the state Department of Environmental Services (DES) requires that we inspect your irrigation system to ensure that an appropriate backflow prevention device is in place. The state DES also requires that these devices be tested annually to ensure proper performance.

Source Water Assessment Report

The state Department of Environmental Service's Source Water Assessment Report indicates an average of 6 contamination susceptibility factors were rated low, an average of 4 were rated medium, and 2 were rated high for 18 of our water sources. The complete report is available for inspection at our office during normal business hours at Aquarion Water Company, 7 Scott Road, Hampton, NH.

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 New Hampshire Department of Environmental Services (603-271-3503), 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.



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?

Water is pumped from 18 state-approved wells in Hampton, North Hampton, Rye and Stratham. It is delivered to you through an extensive underground piping system.

The water supply serves about 20,000 residents in Hampton, North Hampton, and Rye, plus thousands of visitors and tourists. In 2013, our wells supplied an average of 2.2 million gallons of water per day to the system. An average 25% of the demand is water drawn for firefighting, undetected leaks, and unauthorized use.

How is your water treated?

Water from the wells is naturally filtered ground water that is disinfected and adjusted for corrosion control.

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**.

Arsenic

While your drinking water meets the federal Environmental Protection Agency's (EPA's) standard for arsenic, some of Aquarion's wells do contain low levels of this element. Testing shows that these levels are less than the health standards set by the EPA and the New Hampshire Department of Environmental Services. Dilution in the distribution system with water from other wells further lowers arsenic concentrations at water taps.

Arsenic is a naturally occurring element in the Earth's crust, found in soil and rocks, which can enter ground water that comes in contact with these deposits. The EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The agency continues to research the health effects of arsenic, which is known to cause cancer in humans at higher concentrations and is linked to other health effects such as skin damage and circulatory problems. Additional information can be found at **epa.gov/safewater/arsenic**.

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 will become effective in the next few years. 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 who have questions about water quality can 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**.

New Hampshire Department of Environmental Services:
603-271-3503 or des.state.nh.us
U.S. Environmental Protection Agency's Safe Drinking Water
Hotline: **800-426-4791** or epa.gov/safewater

PWS ID#: 1051010
The Hampton,
North Hampton and Rye System



7 Scott Road, Hampton, NH 03842

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 Water Company in late 2012 after Hurricane Sandy swept through watershed land surrounding one of its major reservoirs.

Working with forest and wildlife experts, Aquarion 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.

These efforts 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 transition naturally 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.

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.



Visit Mystic Aquarium's Beluga Whales Live!

Aquarion is now the sponsor of three cameras trained on the exciting beluga whales exhibit at Mystic Aquarium 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.



aquarionwater.com