



# 2023 WATER QUALITY REPORT

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*Este informe contiene información importante sobre su agua potable. Pida a alguien que lo traduzca para usted, o hable con alguien que lo entienda.*

# Letter from the Vice President



John Walsh  
Vice President, Operations  
Aquarion Water Company of NH

Dear Aquarion Customer:

I am pleased to share that in 2023 Aquarion Water Company continued its commitment in delivering high-quality water to our valued customers. Over 2,400 tests conducted across our water systems confirmed that our water consistently meets or surpasses both state and federal water quality standards.

We continue to invest in our wellfields, treatment facilities, pump stations, and distribution piping to ensure the reliable delivery of high-quality water.

To keep customer rates affordable, Aquarion has sought state funding for several projects, and for those projects related to perfluoroalkyl and polyfluoroalkyl substances (PFAS), we are also pursuing settlements with the companies that manufactured these chemicals.

As part of the Lead and Copper Rule Revisions (LCRR), we are also developing an inventory of Aquarion-owned and customer-owned service lines to identify lead service lines in our service area. This inventory marks the initial phase of our efforts to eliminate any lead service lines in our water systems.

Lastly, thank you for your ongoing commitment to water conservation. Given the unpredictable shifts in precipitation, last year's abnormally wet weather could well be replaced by drier weather this year. For some helpful conservation tips, please check out page 9 in this report or visit [www.aquarionwater.com/conserve](http://www.aquarionwater.com/conserve).

With Appreciation,



John Walsh



## Questions About Your Water Quality Report?

Customers who have questions about water quality should call us at **800-732-9678**. Customers may also email us at [waterquality@aquarionwater.com](mailto:waterquality@aquarionwater.com), or visit [www.aquarionwater.com](http://www.aquarionwater.com).

For discolored water, service problems or after-hours emergencies, call **800-732-9678**.

New Hampshire Department of Environmental Services:  
**603-271-3503** or [www.des.nh.gov](http://www.des.nh.gov).

U.S. Environmental Protection Agency's Safe Drinking Water Hotline: **800-426-4791** or [www.epa.gov/safewater](http://www.epa.gov/safewater).

## What is a Water Quality Report?

Aquarion Water Company's annual Water Quality Report, also known as the Consumer Confidence Report (CCR), details the quality of your drinking water, where it comes from, and how to get more information. This annual report documents all detected primary and secondary drinking water contaminants and their respective standards known as Maximum Contaminant Levels (MCLs).

# Water Quality Table

Your water has been tested for more than 100 compounds that are important to public health. Only those compounds detected, all of which were below the amounts allowed by state and federal law, are reported in this table. 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 U.S. Environmental Protection Agency (EPA) regulation, depending on the parameter. Our testing encompasses the full range of regulated inorganic, organic and radiological compounds and microbiological and physical parameters.

SUBSTANCE (Units of Measure)	ACTION LEVEL (AL)	90TH PERCENTILE SAMPLE VALUE*	TEST DATES	VIOLATION YES/NO	LIKELY SOURCE OF CONTAMINATION
<b>LEAD AND COPPER</b>					
<b>Copper (ppm)</b>	1.3	0.40*	8/4/23 - 8/25/23	<b>NO</b>	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Lead (ppb)</b>	15	ND < 1**	8/4/23 - 8/25/23	<b>NO</b>	Corrosion of household plumbing systems, erosion of natural deposits

## DETECTED WATER QUALITY RESULTS

SUBSTANCE (Units of Measure)	DETECTED LEVEL AVERAGE	DETECTED LEVEL RANGE	TEST DATES	MCLG	MCL	VIOLATION YES/NO	LIKELY SOURCE
<b>INORGANIC SUBSTANCES</b>							
<b>Arsenic (ppb)</b>	1	ND < 1 - 3	4/1/22, 1/13/23, 3/13/23, 4/4/23, 6/6/23, 7/13/23, 8/15/23, 10/2/23, 10/10/23	0	5	<b>NO</b>	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
<b>Barium (ppm)</b>	0.012	0.011 - 0.024	4/1/22, 7/13/23, 8/15/23	2	2	<b>NO</b>	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
<b>Chlorine (ppm)</b>	0.74	0.26 - 1.10	Monthly, 2023	MRDLG = 4	MRDL = 4	<b>NO</b>	Water additive used to control microbes
<b>Chromium (ppb)</b>	4	2 - 6	4/1/22, 7/13/23, 8/15/23	100	100	<b>NO</b>	Discharge from steel and pulp mills; erosion of natural deposits
<b>Nitrate (ppm)</b>	1.48	0.85 - 1.93	4/11/22, 7/13/23, 8/15/23	10	10	<b>NO</b>	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>VOLATILE ORGANIC COMPOUNDS</b>							
<b>Haloacetic Acids 5 [HAA] (ppb)</b>	8+	8	7/20/23	NA	60	<b>NO</b>	By-product of drinking water chlorination
<b>Total Trihalomethanes [TTHM] (ppb)</b>	22+	21 - 23	7/20/23	NA	80	<b>NO</b>	

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SUBSTANCE (Units of Measure)	DETECTED LEVEL AVERAGE	DETECTED LEVEL RANGE	TEST DATES	MCLG	MCL	VIOLATION YES/NO	LIKELY SOURCE
<b>PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)</b>							
<b>Perfluorooctane Sulfonic Acid [PFOS] (ppt)</b>	1	ND < 2 - 4	3/8/21, 4/5/21, 1/13/23, 4/3/23, 7/20/23, 10/10/23	0	15	<b>NO</b>	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
<b>Perfluorooctanoic acid [PFOA] (ppt)</b>	4	3 - 4	3/8/21, 4/5/21, 1/13/23, 4/3/23, 7/20/23, 10/10/23	0	12	<b>NO</b>	
<i>Note: PFHxS and PFNA were not detected.</i>							
<b>UNREGULATED PFAS COMPOUNDS</b>							
<b>Perfluorobutane Sulfonic Acid [PFBS] (ppt)</b>	2	ND < 2 - 3	3/8/21, 4/5/21, 1/13/23, 4/3/23, 7/20/23, 10/10/23	0	NA	<b>NA</b>	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
<b>Perfluorobutanoic Acid [PFBA] (ppt)</b>	2	ND < 2 - 10	3/8/21, 4/5/21, 1/13/23, 4/3/23, 7/20/23, 10/10/23	0	NA	<b>NA</b>	
<b>Perfluorohexanoic Acid [PFHxA] (ppt)</b>	ND < 2	ND < 2 - 4	3/8/21, 4/5/21, 1/13/23, 4/3/23, 7/20/23, 10/10/23	0	NA	<b>NA</b>	
<b>Perfluoropentanoic Acid [PFPeA] (ppt)</b>	2	ND < 2 - 11	3/8/21, 4/5/21, 1/13/23, 4/3/23, 7/20/23, 10/10/23	0	NA	<b>NA</b>	



SUBSTANCE (Units of Measure)	DETECTED LEVEL AVERAGE	DETECTED LEVEL RANGE	TEST DATES	TREATMENT TECHNIQUE (IF ANY)	SMCL	50% AMBIENT GROUNDWATER QUALITY STANDARD	AMBIENT GROUNDWATER QUALITY STANDARD	SPECIFIC CRITERIA AND REASON FOR MONITORING
<b>SECONDARY CONTAMINANTS</b>								
<b>Chloride (ppm)</b>	82	67 - 94	4/1/22, 7/13/23, 8/15/23	NA	250	NA	<b>NA</b>	Wastewater, road salt, water softeners, corrosion
<b>Iron (ppm)</b>	0.04	ND < 0.01 - 0.06	4/1/22, 7/13/23, 8/15/23	NA	0.3	NA	<b>NA</b>	Geological
<b>Manganese (ppm)</b>	0.015	ND < 0.001 - 0.020	4/1/22, 7/13/23, 8/15/23	NA	0.05	0.15	<b>0.3</b>	Geological
<b>Nickel (ppm)</b>	0.004	ND < 0.001 - 0.011	4/1/22, 7/13/23, 8/15/23	NA	Not established; reporting is required for detections	0.005	<b>0.01</b>	Geological; electroplating, battery production, ceramics
<b>pH</b>	7.4	6.8 - 7.9	Monthly, 2023	NA	6.5 - 8.5	NA	<b>NA</b>	Precipitation and geology
<b>Sodium (ppm)</b>	58.0	51.3 - 68.0	4/1/22, 7/13/23, 8/15/23	NA	100 - 250	NA	<b>NA</b>	We are required to regularly sample for sodium
<b>Sulfate (ppm)</b>	22	11 - 32	4/1/22, 7/13/23, 8/15/23	NA	250	250	<b>250</b>	Naturally occurring
<b>Zinc (ppm)</b>	0.023	ND < 0.001 - 0.090	4/1/22, 7/13/23, 8/15/23	NA	5	NA	<b>NA</b>	Galvanized pipes

FOOTNOTES

- ◆ 90th percentile value in copper monitoring. Result is representative of customer sampling stagnant water. No locations exceeded the action level for copper. Highest 90th percentile value shown.
- ◆ 90th percentile value in lead monitoring. Result is representative of customer sampling stagnant water. No locations exceeded the action level for lead. Highest 90th percentile value shown.

+ Value is the highest measurement for disinfection byproducts in the distribution system. Values in the range are individual measurements.

HEALTH EFFECTS

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

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 at 800-426-4791.



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 activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including per- and polyfluoroalkyl substances, synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.



In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount

of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## Where Does Your Water Come From?

Water is pumped from 16 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 22,900 residents in Hampton, North Hampton, and Rye, plus thousands of visitors and tourists. In 2023, our wells supplied an average of 2.1 million gallons of water per day to the system.

## How Is Your Water Treated?

Water from the wells is naturally filtered ground water. Disinfection and corrosion control treatments are in place at all sources. In addition, Well #6 has PFAS removal treatment.

# Your Health Is Our Priority

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## Source Water Assessment Report

The New Hampshire Department of Environmental Services (NHDES) prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared in 2002 and 2005, are noted below.

The 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 16 of our water sources. The complete report is available for inspection during normal business hour at our offices at Aquarion Water Company, 7 Scott Road, Hampton, NH.



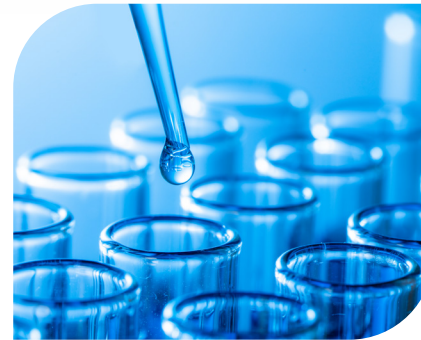
## Copper

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.

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

## Arsenic

While your drinking water meets 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 costs 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.



## Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, people 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.

The Environmental Protection Agency and Centers for Disease Control and Prevention (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 at [800-426-4791](tel:800-426-4791).

# Lead in Drinking Water: The Facts

The EPA and NHDES have established extensive regulations for water utilities to follow regarding lead. If lead is present in drinking water, it can cause numerous harmful effects on a person's health. The EPA has determined there is no safe level of lead.

Aquarion maintains a regular schedule for lead monitoring.

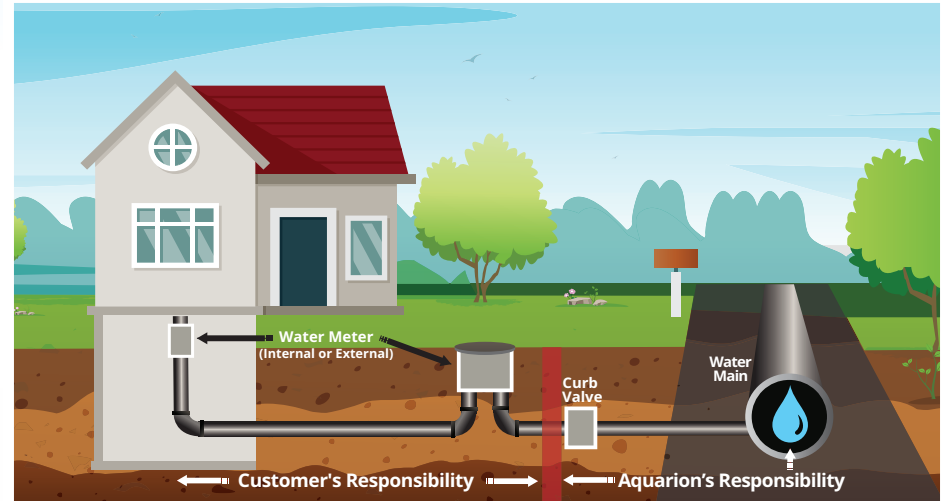
## Learning About Lead

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. This water system is responsible for high quality drinking water but cannot control the variety of materials used in your plumbing components. When your water has been sitting for several hours, NHDES recommends minimizing the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before

using water for drinking or cooking. Given that customers have service lines of varying lengths, Aquarion recommends flushing cold water from your tap for 3 to 5 minutes before using water for drinking or cooking. Do not use hot water for drinking and 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 at [800-426-4791](tel:800-426-4791) or at [www.epa.gov/ground-water-and-drinking-water](http://www.epa.gov/ground-water-and-drinking-water).

## What to do About Lead in a Service Line

A service line is the pipe that connects a customer's premises to Aquarion's water main in the street (see illustration above). Homes built before 1986 may have lead service lines (with a few exceptions, most were installed in homes built before 1930), and those built before 1986 may have lead solder and brass fittings (which may have a lead content).



Customer and Aquarion responsibilities shown are representative for most customers.

A lead service line can be the primary source of lead in your drinking water, because there is a much greater surface area where lead contacts the water, compared to lead-soldered pipe joints and leaded brass fixtures. If your house or other structure was built prior to 1988, you should check the service line where it enters the wall of your basement to see if it is made of lead. If it is a lead line, contact Aquarion at [800-732-9678](tel:800-732-9678) for advice on replacing it. This will help reduce

your potential exposure to lead in drinking water.

Aquarion offers more detailed information on lead in drinking water and how to minimize exposure on our website at [www.aquarionwater.com/learnaboutlead](http://www.aquarionwater.com/learnaboutlead).



# Conservation

By reducing water consumption, Aquarion customers have made outstanding progress in ensuring that our area has enough water, no matter what the skies deliver. Many thanks to all the customers who cut back on outdoor sprinkler irrigation and other uses, helping to save approximately 5 billion gallons of water across our systems over the last six years. There's still more to do, though.

Here are some easy tips on what everyone can do to conserve the supply of this irreplaceable resource:



## Reduce excessive irrigation

Use a WaterSense labeled smart irrigation controller that adjust watering schedules based on weather conditions, soil moisture levels, and plant requirements.

## Rely more on the sky

Put a rain barrel under a down-spout to capture rainwater for your garden.

## Forget fertilizing

Many use salts that make your lawn less drought-resistant.



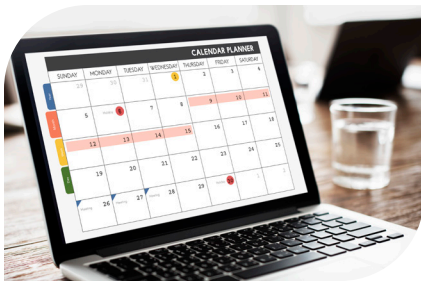
## Apply mulch

Adding a layer of mulch around your plants helps retain moisture, reducing the need to water as often.

## Remedy a leaky toilet

Watch our step-by-step video at [www.aquarionwater.com](http://www.aquarionwater.com) about finding and fixing leaks. Better yet, upgrade to a new, WaterSense labeled model to save three or more gallons with every flush.

For more tips, visit [www.aquarionwater.com/conserve](http://www.aquarionwater.com/conserve).



## How You Can Get Involved

Aquarion Water Company has a customer advisory board comprised of people who are interested in learning first-hand what we are working on in our systems and what we are planning for the future. If you're interested in attending any of these meetings, please call our New Hampshire office at [603-926-3319 ext 116](tel:603-926-3319) and provide your contact information so we can inform you about scheduled meeting dates.

# Glossary

These terms may appear in your report.

## Definitions

< - Less than

> - Greater than

**90th Percentile** - Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the action level to determine lead and copper compliance.

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

**Ambient Groundwater Quality Standards** - The maximum concentration levels for regulated contaminants in groundwater which result from human operations or activities.

**gpg - Grains per gallon**

**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**

**NTU - Nephelometric Turbidity Units,** a measure of the presence of particles. Low turbidity is an indicator of high-quality water.

**pCi/L - picocuries per liter**

**RAA - Running Annual Average.** The average of four consecutive quarters of data.

**SMCL - Secondary Maximum Contaminant Level:** Secondary Maximum Contaminant Level. These standards are developed to protect aesthetic qualities of drinking water and are not health based.

**TT - Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

Equal to a drop of water in a 10 gallon fish tank.

**ppm - parts per million**

**ppb - parts per billion**

Equal to a drop of water in a 10,000 gallon swimming pool.

Equal to a drop of water in 35 Junior Olympic pools.  
*(10 million gallons)*

**ppt - parts per trillion**