



AQUARION
Water Company

Stewards of the Environment™

BARNUM SYSTEM | PWS ID#: CT1189171
(Formerly Turner Hill - Barnum)

2024 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 President



Lucy A. Teixeira
Aquarion President

Dear Aquarion Customer:

Aquarion's greatest commitment is delivering high-quality water to our customers. That's why I am pleased to inform you that in 2024 the more than 177,000 tests we conducted on our water systems confirmed that our water consistently meets or surpasses both state and federal water quality standards.

Our focus also includes per- and polyfluoroalkyl substances (PFAS), which have been detected in drinking water across the country. Last year, the U.S. Environmental Protection Agency (EPA) established new monitoring and management regulations for six PFAS compounds. Although the deadline for compliance isn't until 2029, we are actively working to meet the new national standards for these substances. To keep your rates affordable, we are seeking federal and state funding and pursuing settlements with the companies that manufactured PFAS.

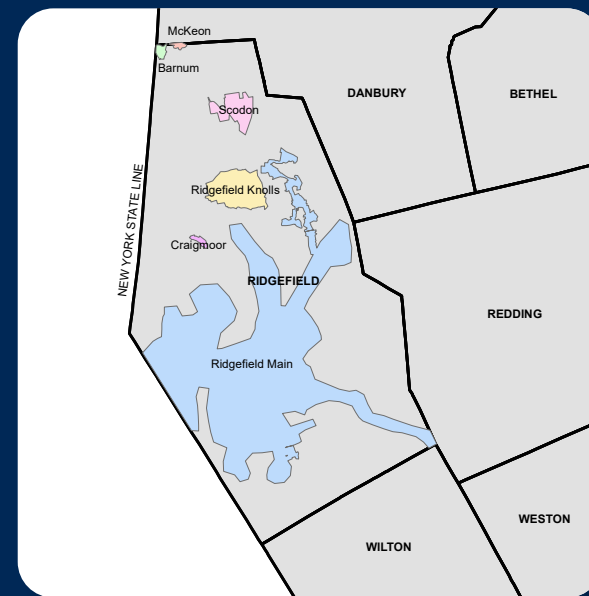
In 2024, we also launched an online customer water service line material survey to help identify customer service line materials in our service area and provide an accurate inventory of Aquarion-owned and customer-owned service lines on our website. Required by the EPA, the goal is to eliminate all lead service lines in our water systems.

With varying levels of drought continuing throughout the state, our water supplies are slowly recovering for the spring and summer months. Please continue your efforts at conserving water. For helpful tips you may not have considered, check out page 8 of this report or visit aquarionwater.com/conserve.

With appreciation,

Lucy A. Teixeira

AREAS SERVED BY Barnum System



Questions About Your Water Quality Report?

Customers with any of following issues should call us at **1-800-732-9678**: Discolored water, service problems, after-hour emergencies, water quality questions, or interest in joining a public meeting.

Customers may also email us at cs@aquarionwater.com, or visit www.aquarionwater.com.

Connecticut Department of Public Health Drinking Water Section: **860-509-7333** or www.ct.gov/dph.

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

Water Quality Table

Your water has been tested for more than 100 compounds that are important to public health. Only the compounds detected are listed in the table, 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 here are for detected compounds only.

SUBSTANCE (Units of Measure)	LIKELY SOURCE	MCLG	MCL	COMPLIANCE	TEST DATE	AVERAGE	RANGE
INORGANIC COMPOUNDS							
Barium (ppm)	Erosion of natural deposits	2	2	✓ YES	2024	0.015 ⁺	0.011 - 0.015
Copper (ppm)	Corrosion of household plumbing systems	1.3	AL = 1.3	✓ YES	2024	0.45 [♦]	0.19 - 0.48
Fluoride (ppm)	Water additive that promotes strong teeth; erosion of natural deposits	4.0	4.0	✓ YES	2024	0.74 ⁺	0.60 - 0.74
Lead (ppb)	Corrosion of household plumbing systems	0	AL = 15	✓ YES	2024	ND < 1 ^{♦♦}	ND < 1
Nitrate (ppm)	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	10	10	✓ YES	2024	0.09 ⁺	ND < 0.004 - 0.09
MICROBIALS							
Turbidity (NTU)	Sediment particles; naturally occurring iron and manganese; soil runoff	NA	TT = 1 max	✓ YES	2024	0.41 ⁺	0.11 - 0.41
Turbidity (NTU)		NA	TT = 95% of samples < 0.3	✓ YES	2024	99%	
DISINFECTANT							
Chlorine (ppm)	Water additive used to control microbes	MRDLG = 4	MRDL = 4	✓ YES	2024	0.21	ND < 0.05 - 0.55

SUBSTANCE (Units of Measure)	LIKELY SOURCE	MCLG	MCL	COMPLIANCE	TEST DATE	AVERAGE	RANGE
ORGANIC COMPOUNDS							
Haloacetic Acids 5 (ppb)	By-product of drinking water chlorination	NA	60	✓ YES	2024	8	8
Total Organic Carbon [TOC]	Naturally present in the environment.	NA	TT Removal Ratio > 1 [§]	✓ YES	2024	1.29	1.29 - 1.63
Total Trihalomethanes (ppb)	By-product of drinking water chlorination	NA	80	✓ YES	2024	58	58

STATE-REQUIRED TESTING — PHYSICAL CHARACTERISTICS [^]							
Color (CU)	Natural organic matter such as decaying leaves; naturally occurring iron and manganese	NA	15	✓ YES	2024	3	1 - 7
pH	Naturally occurring; water treatment processes	NA	6.4 - 10.0	✓ YES	2024	7.3	6.9 - 7.8
Turbidity (NTU)	Sediment particles; naturally occurring iron and manganese; soil runoff	NA	5	✓ YES	2024	0.18	0.10 - 0.25

STATE-REQUIRED TESTING — INORGANIC COMPOUNDS							
Chloride (ppm)	Naturally present in the environment	NA	250	✓ YES	2024	44 ⁺	34 - 44
Sodium (ppm)	Water treatment processes; use of road salt; naturally present in the environment	NA	NL = 100	NA	2024	32 ⁺	24 - 32
Sulfate (ppm)	Naturally present in the environment	NA	SMCL = 250	NA	2024	29 ⁺	26 - 29

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.

+

Highest level detected by the Danbury Water Department.

§

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.

^

Measured at representative locations within the distribution system.

Other Monitored Substances

Hardness in Your System

Hardness is a measure of naturally-occurring minerals, like calcium and magnesium, dissolved in the water. Hardness does not have any negative health effects, so it is not regulated by the EPA or the Connecticut Department of Public Health (CTDPH). These minerals can create a buildup on fixtures and appliances. Please refer to fixture and appliance manufacturer recommendations on addressing buildup.

HARDNESS (gpg)	
TEST DATE	2024
AVERAGE	5
RANGE	5
SOURCE	Erosion of natural deposits



Monitoring Unregulated Contaminants

Unregulated contaminants are elements that currently have no health standards assigned for drinking water. 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 visit www.epa.gov/dwucmr.

SUBSTANCE (Units of Measure)		DETECTED LEVEL		
UNREGULATED CONTAMINANTS	TEST DATE	AVERAGE	RANGE	SOURCE OF CONTAMINANT
PFOA (ppt)	2024	5 ⁺	5	Discharges and emissions from industrial sources; manufacturing and use of consumer products
PFOS (ppt)	2024	3 ⁺	3	
GenX Chemicals (ppt)	2024	4 ⁺	4	
PFPeA (ppt)	2024	3 ⁺	3	
PFHxA (ppt)	2024	3 ⁺	3	
PFBA (ppt)	2024	4 ⁺	4	

+ Highest level detected by the Danbury Water Department.

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 the 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](tel: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, treated, and delivered to you through an underground piping system. The Barnum System serves about 130 people in Ridgefield with water purchased from the City of Danbury. The average customer demand for the system is 8,900 gallons of water per day.

How Is Your Water Treated?

The reservoir water is filtered at Danbury's West Lake treatment facility, then disinfected, fluoridated, and further treated to protect the distribution 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. The City of Danbury has reported that it has not detected Cryptosporidium in its most recent tests.

Source Water Assessment Report

CTDPH states in its Source Water Assessment Report that the Danbury reservoirs, which serve the Barnum System, have a moderate susceptibility to potential contamination. To read the CTDPH report, visit ct.gov/dph.

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 doctor.

Major sources of copper in drinking water include corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives.

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

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. EPA/Centers for Disease Control and Protection 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](tel:800-426-4791).

Lead in Drinking Water: The Facts

The major sources of lead in drinking water are corrosion of household plumbing and erosion of natural deposits. Aquarion maintains a regular schedule for lead monitoring in your water system. Please read the following information to learn more about lead.

Health Effects

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

The EPA's Advice

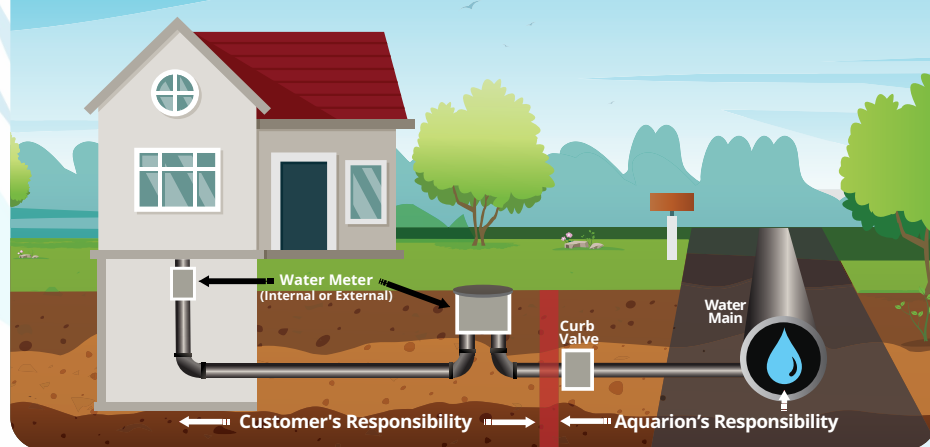
Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Aquarion is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used

in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Aquarion and [1-866-728-5023](tel:1-866-728-5023). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

Precautions You Can Take

Follow these steps to reduce your risk of lead exposure from your water pipes:

- Always use water from your cold water faucet for drinking, cooking, and preparing baby formula.
- Remove and clean faucet aerators/screens at least twice per year. While doing so, run the tap to remove debris.



Customer and Aquarion responsibilities shown are representative for most customers.

Learn About Your Service Line

A service line is the pipe that connects a customer's home or building to Aquarion's water main in the street (see diagram on this page). Homes built before 1986 may have lead service lines, but most were installed in homes built before 1930. Homes built before 1986 may also have lead solder and brass fittings, which may have a lead content. Aquarion treats its water to minimize the risk of lead leaching out of lead pipes, but it is important to know that the presence of a lead or galvanized requiring replacement service line may increase the risk of exposure to lead in drinking water.

Aquarion has prepared a service line inventory where you may view the material of the service line at your home or building. To find out if your service line is lead, visit www.aquarionwater.com/lead, click on "Lead Service Line Inventory",

type in your address, and refer to the legend icons to view the material of your service line. If it is lead, call us at [1-866-728-5023](tel:1-866-728-5023) or email us at lead@aquarionwater.com for information on replacing it.

If your service line is classified as "unknown" on our "Lead Service Line Inventory", this means that we do not have a record of what the service line material is and we are working to gather more information in the coming years. Help us update our records by scanning the QR code below or visiting www.aquarionwater.com/leadsurvey to take our service line survey.



Aquarion offers more detailed information on lead in drinking water and how to minimize exposure on our website at www.aquarionwater.com/lead. You can also call the EPA's Safe Drinking Water Hotline at [800-426-4791](tel:800-426-4791) or go to www.epa.gov/lead.

Water Protection and Conservation



How Aquarion Protects Your Drinking Water

Aquarion Water Company is committed to providing the highest quality water to our customers. Toward that end, we conducted 177,415 water quality tests in 2024 across all our Connecticut systems, and we regularly inspect businesses, farms, homes and other sites that could affect our water supply.



Here are some examples of pollutants that may wash into surface water or seep into groundwater:

- 💧 Microbial contaminants from septic systems
- 💧 Inorganic contaminants such as road salt or metals
- 💧 Pesticides and herbicides from residential uses
- 💧 Organic chemical contaminants, including synthetic and volatile organic chemicals

You Can Protect Water Too:

- 💧 Ensure that your septic system works correctly
- 💧 Use chemicals and pesticides sparingly
- 💧 Dispose of waste chemicals and used motor oil properly
- 💧 Report illegal dumping, chemical spills or other polluting activities to the state Department of Energy and Environmental Protection's 24-hour hotline at [860-424-3338](tel:860-424-3338), call Aquarion at [800-732-9678](tel:800-732-9678), or call your local police



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 adjusts 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 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.

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.

CU - Color Units

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

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.

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)

ppt - parts per trillion, or nanograms per liter (ng/L)

SMCL - 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



**MYSTIC
AQUARIUM**

**MYSTIC
SEAPORT
MUSEUM**



Stamford **Museum
& Nature Center**



Aquarion Global
Voices Series

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. Learn more at www.aquarionwater.com/freetickets.