2024 Consumer Confidence Report

Your Annual Drinking Water Quality Information

Cheshire Water Department

80 Church Street, Box S, Cheshire, MA 01225

Massachusetts Department of Environmental Protection Public Water Supply ID #1058000

This report provides a snapshot of the drinking water quality that was achieved last year. Included are details about where your water comes from, what it contains and how its quality compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies.

PUBLIC WATER SYSTEM INFORMATION

The Town of Cheshire Water System provides water to 565 homes and businesses. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator who oversees the routine and day-to-day operations of our system. Our water system is also routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP) for its technical, financial, and managerial capacity to provide safe drinking water to you. Routine inspections by both us and MassDEP help to determine the effectiveness of existing water treatment and to determine if any additional treatment is required. The process of treating moderately hard water is currently used to prevent build-up in the water distribution system. All chemical coagulation is approved for drinking water by the American Water Works Association. Disinfection treatment is not required due to the high quality of your water. Due to the chemical makeup of the water, Cheshire Water Department utilizes a sequestering agent for the control of hardness. The material known as Calciquest is a concentrated liquid phosphate that controls corrosion. Calciquest conforms to ANSI/NSF Standard 60, is EPA approved for potable water, reduces lead leaching and acts as a corrosion inhibitor by forming a microscopic film on all metal surfaces. It sequesters iron, calcium, and manganese to prevent taste and stain problems. The most recent MassDEP Sanitary Survey Inspection was conducted on October 17th, 2024. All identified concerns have been or are currently being addressed. As a part of our commitment to you, we make regular repairs and improvements to our water system on an ongoing basis. Major repairs were made to the screens located in Well 02G in 2017, a Master Plan was completed for our water system in 2018, and in 2019 we began a project to replace water mains throughout the town. In 2024, Cheshire Water Department had a new 8" water main installed from Crest Drive to Eastview Drive, replacing a 4" main. Additionally, 5 new fire hydrants were added and a fire hydrant was relocated to the corner of Rt. 8 and Eastview Dr. All homes on that water main received new curb-stops. The booster station that was originally located on Rt 8 was removed. Four water main breaks were located and repaired over the course of the past year.

OPPORTUNITIES FOR PUBLIC PARTICIPATION

The Water Commission currently meets biweekly to discuss water related issues or concerns. Please visit the Town of Cheshire website at: http://cheshire-ma.com, or contact the Water Superintendent with any questions.

YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Cheshire's water comes from manifolded groundwater wells located east of Route 8 on Pump Station Road. The sources are designated by MassDEP as Source Name and ID Source Number 1058000-02G [New Well] and 1058000-03G [Well 2]. The two wells are gravel packed, with an output capacity of 410,000 gallons per day. Water is stored in a 450,000-gallon storage tank located on West Mountain Road prior to distribution. The town's former water source, Kitchen Brook Reservoir, has been disconnected from the system and is available only in the event of a water emergency.

How are These Sources Protected?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply sources serving this water system. The SWAP Report assesses the susceptibility of public water supplies. A susceptibility ranking of "high" was assigned to this system using the information collected during the assessment by MassDEP, which included the absence of hydrogeological barriers that can prevent potential contaminant migration from the surface. Typical agricultural, commercial, industrial, and residential land uses can contribute to contamination. The complete SWAP report is available by contacting the water Department, or online at https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program . For more information you may also contact the MassDEP Western Region Office at (413) 755-2215.

Residents can help protect sources by:

- *practicing good septic system maintenance,*
- *supporting water supply protection initiatives at the next town meeting*
- *taking hazardous household chemicals to hazardous materials collection days,*
- *contacting the water department or Board of Health to volunteer for monitoring or education outreach to schools,*
- *Limiting pesticide and fertilizer use, etc.*

SUBSTANCES FOUND IN TAP WATER

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 stormwater 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 synthetic and volatile organic 17 chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

COMPLIANCE WITH REGULATIONS

Does Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. However, some contaminants that were tested last year did not meet all applicable health standards regulated by the state and federal government. Due to a total coliform bacteria contaminant violation in June of 2024, our system performed a Level 1 Assessment, which determined issues with the storage tank overfilling. Please find more information on the detection and remedial actions in the "Bacterial Detections" table below. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

IMPORTANT DEFINITIONS

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known expected risk to health. MCLG's allow for a margin of safety.

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

90th Percentile - Out of every 10 homes sampled, 9 were at or below this level.

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

Secondary Maximum Contaminant Level (SMCL) – These standards are developed to protect aesthetic qualities of drinking water and are not health based.

Unregulated Contaminants – Contaminants for which EPA has not established drinking water standards. The purpose is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Method of Detection Limit (MDL) - The minimum concentration of a substance that can be measured and reported with 99% confidence the analyte concentration is greater than zero and determined from analysis of a sample in a given matrix containing the

analyte.

Level 1 Assessment – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in a water system.

Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E.Coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Massachusetts Office of Research and Standards Guidelines (ORSG) - This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure.

WATER QUALITY TESTING RESULTS

The water quality tables show the most recent water quality testing results where levels were detected and compares those levels to standards set by the Environmental Protection Agency and Massachusetts Environmental Protection Agency.

MassDEP has reduced the monitoring requirements for perchlorate, Volatile Organic Contaminants (VOCs), inorganic contaminants (IOCs), and synthetic organic contaminants (SOCs), because the source is not at risk of contamination. The last sample was collected on 7/17/2023 VOCs, 07/25/2024 for Radioactive Contaminants, 5/12/2020 for IOCs, 7/17/2023 for Perchlorate, 04/11/2024 for PFAS and 04/11/2024 for Nitrate. All were found to meet all applicable US EPA and MassDEP standards.

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table. With the exception of those compounds noted on the tables below, all other compounds reported undetectable levels.

Regulated Contaminant	Date(s) Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Yes/No)	Possible Source(s) of Contamination
INORGANIC CONTAMINANTS							
Nitrate (ppm)	*04/11/2024*	*1.2*	*N/A*	*10*	*10*	*No*	*Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits*
Perchlorate (ppm)	*7/17/2023*	*0.22*	*N/A*	*2*	*N/A*	*No*	*Rocket propellants, fireworks, munitions, flares, blasting agents*
Barium (ppm)	*05/12/2020*	*0.0142*	*N/A*	*2*	*2*	*No*	*Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits*

UNREGULATED AND SECONDARY CONTAMINANTS						
Contaminant (units)	**Dates Collected**	**Result or Range Detected**	**Average Detected**	**SMCL**	**ORSG**	**Possible Source(s) of Contamination**
Calcium (ppm)	*04/11/2024*	*52.7*	*N/A*	*N/A*	*NA*	*Natural and industrial sources, as well as aging and corroding distribution systems and household pipes.*
Chloride (ppm)	*04/11/2024*	*83.9*	*N/A*	*250*	*NA*	*Runoff and leaching from natural deposits; seawater influence*
Sulfate (ppm)	*04/11/2024*	*8.38*	*N/A*	*250*	*NA*	*Runoff and leaching from natural deposits; industrial wastes*
Sodium (ppm)	*04/19/2023*	*50.3*	*N/A*	*20*	*NA*	*Natural Sources, runoff from use of salt on roadways, byproduct of water treatment process.*
Zinc (ppm)	*04/19/2023*	*0.0141*	*N/A*	*5*	*NA*	*Corrosion of household plumbing systems; erosion of natural deposits*

**Some people who drink water containing sodium at high concentrations for many years could experience an increase in blood pressure.*

LEAD AND COPPER – 8/30/2023						
Contaminant (units)	**Action Level**	**90th Percentile**	**Number of Sites Sampled**	**Number of sites above the Action Level**	**Possible Sources of Contamination**	**Violation (Yes/No)**
Lead (ppb)	*15*	*0*	*10*	*0*	*Corrosion of household plumbing*	*No*
Copper (ppm)	*1.3*	*0.436*	*10*	*0*	*Corrosion of household plumbing*	*No*

ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
N/A = Not Applicable
ND = Not Detected

BACTERIAL DETECTIONS						
BACTERIA	**MCL/TT**	**MCLG**	**VALUE**	**DATE**	**VIOLATION (Y/N)**	**POSSIBLE SOURCE**
Total Coliform	*MCL*	*0*	*Present*	*06/26/24, 06/27/24*	*Yes*	*Human and animal fecal waste*
Cheshire Water Department triggered a level 1 assessment on 06/27/2024. The assessment was completed, and the affiliated corrective actions were carried out. See more info below:						

What Happened?
As part of our routine water quality monitoring, we collect six bacteria samples per month. In June, one of the six routine samples tested positive for Total Coliform (TC). Follow-up testing was conducted, and of the three repeat samples collected, one also tested positive for TC. In response, an investigation was conducted to determine the potential source of contamination.

What We Found and How We Responded?
The most likely cause of contamination was an instance in which the storage tank located on West Mountain Rd. was overfilled. While this did not result in the tank overflowing, the tank overfilled past the intended threshold, which allowed for coliforms to grow in the idle water.

- In response to this detection, we sanitized the holding tank using a low intensity dose of chlorine. The issue has since subsided.

Is the Water Safe?
Total coliform bacteria are generally not harmful themselves but serve as an indicator that conditions could allow for the presence of other potentially harmful microorganisms. Follow-up testing confirmed that no E. coli or other harmful bacteria were present. We continue to monitor and maintain the system to ensure the safety of your drinking water.

HEALTH NOTES

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MA DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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 (1-800-426-4791).

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 (1-800-426-4791).

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed),and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. Cheshire Water Department is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water, and wish to have your water tested, contact Cheshire Water Department at 413-743-1690 x105. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

Service Line Inventory and Lead Awareness

In 2024, the U.S. Environmental Protection Agency (EPA) mandated that all Non-Transient Non-Community (NTNC) and Community (COM) water systems conduct a service line inventory to identify and document the materials of all service connections. This requirement is part of the Lead and Copper Rule Improvements (LCRI) and supports the Infrastructure Investment and Jobs Act (IIJA), which provides federal funding to assist with the replacement of lead service lines nationwide.

As part of this effort, the Cheshire Water Department was required to catalogue and report all service connections within its water system. These results have been submitted to the state and are publicly accessible.

To review the Service Line Inventory (2024) for Cheshire Water Department, visit the State of Massachusetts Public Water Supplier Document Search webpage:
https://www.mass.gov/info-details/public-water-supplier-document-search

1. Select the name of the water supply (Cheshire Water Department).
2. Navigate to the "Documents for Download" section.
3. Open the file titled "Service Line Inventory (2024)."

For more information on EPA's regulations on lead in drinking water and ways to minimize exposure, visit: https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.Cross connections are potentially hazardous situations for public or private potable water supply and a source of potable water contamination. A cross connection is any potential or actual physical connection between potable water supply and any source through which it is possible to introduce any substance other than potable water into the water supply. Common Cross connection scenarios are a garden hose whose spout is submerged in a bucket of soapy water or connected to a spray bottle of weed killer.

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Cross connections between a potable water line and a non-potable water system or equipment have long been a concern of the Department of Environmental Protection (MassDEP). MassDEP established regulations to protect the public health of water consumers from contaminants due to back-flow events. The installation of back-flow prevention devices, such as a low-cost hose bib vacuum breaker, for all inside and outside hose connections is recommended. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your community. For additional information on cross connections and on the status of your water system's cross connection program, please contact:

Cheshire Water Department
191 Church Street / Cheshire, MA 01225
Phone: (413) 743-1690 x105

For more information regarding our system,
you may also visit the EPA website at: http://www.epa.gov/enviro/facts/sdwis/search.htm

This report is a compilation of best available data sources including: licensed operators' reports, water supply owner's coordination. MassDEP public records and EPA online records. The report represents an accurate account of your water quality to the best of our knowledge. Prepared by Housatonic Basin Sampling & Testing on behalf of your water supplier.