ANNUAL WATER QUALITY REPORT

Reporting Year 2025

Presented By

CITY OF KEENE
NEW HAMPSHIRE

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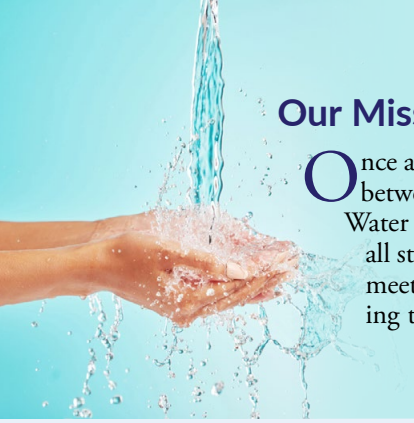

Our Mission Continues

Once again, the City of Keene is proud to present its annual water quality report, covering all testing performed between January 1 and December 31, 2025. The Public Works Operations, Laboratory, Maintenance, and Water and Sewer Divisions are dedicated to producing and delivering high-quality drinking water that meets all state and federal standards. As new challenges for drinking water safety emerge, the city remains vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all users 24 hours a day, seven days a week.

Where Does My Water Come From?

The City of Keene delivers both surface and groundwater to its customers. The majority of the water comes from two surface water reservoirs located in the Town of Roxbury and four gravel-packed wells located within the city on Court and West Streets. Water from the reservoir flows to the water treatment facility, where it is filtered, disinfected, and made less acidic before it enters the distribution system. Well water is pumped from the Court Street and West Street aquifers. It is not filtered, but it is disinfected and made less acidic before it is distributed to your home. Although your water comes from more than one source, it all goes into the same distribution system, so you may receive different blends of water on different days.

Source Water Assessment

In October 2002, the New Hampshire Department of Environmental Services (NHDES) prepared source water assessment reports for our source water, assessing the sources' vulnerability to contamination. The results of the assessments are as follows:

- Babbidge Reservoir received zero high, one medium, and eleven low susceptibility ratings.
- The Court Street wellfield received two high, five medium, and five low susceptibility ratings.
- The West Street well site received six high, three medium, and three low susceptibility ratings.

The complete assessment report is available for review at the Keene Public Works Department. For more information, contact Public Works at (603) 352-6550. The report is also available at the NHDES Drinking Water Source Water Assessment Program website at des.nh.gov/sites/g/files/ehbemt341/files/documents/keene.pdf.

Why Save Water?

Although 80% of the Earth's surface is water, only 1% is suitable for drinking. The rest is either salt water or is permanently frozen, and we can't drink it, wash with it, or use it to water plants.

Community Participation

The city council's Municipal Services, Facilities, and Infrastructure Committee is designated to address water-related issues. This committee has regular meetings at 6:00 p.m. on the fourth Wednesday of each month in the City Council Chambers at City Hall, Three Washington Street. If you wish to speak with the committee about an issue concerning your drinking water, contact the City of Keene Clerk's Office at (603) 352-0133 to attend the next scheduled meeting.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 or epa.gov/safewater.

Questions?

The city encourages and welcomes participation and feedback from the public. Come see how the water treatment facility works - city staff invites individuals, groups, schools, and college classes to schedule a tour. For more information about this report, to schedule a tour, or for any questions relating to your drinking water, please contact Ben Crowder, Water and Sewer Operations Manager, at (603)-352-6550.

Lead in Home Plumbing

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breast-fed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Keene 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 it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling 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, or 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 it tested, contact the City of Keene at (603) 352-6550. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Health Effects of Lead

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, or kidney or nervous system problems.

Lead In Schools

Per RSA 485:17-a, all New Hampshire schools and licensed childcare facilities must test for lead at all drinking water outlets where children can drink the water and remediate any outlets testing at or above 5 parts per billion (ppb). Three rounds of testing at least six months apart are required. A comprehensive list of facilities and results are available at gettheleadoutnh.org or des.nh.gov/water/drinking-water/lead/schools-and-child-care-programs/view-results.

On January 15, 2021, the U.S. EPA released the revised Lead and Copper Rule (LCR) to better protect communities from exposure to lead in drinking water. The LCR requires water systems to develop and maintain an inventory of water service lines and prioritize lead service line replacement programs, with a draft inventory due date of October 16, 2024.

The city received grant funds through the NHDES and worked with Weston & Sampson to develop a detailed water service line inventory for the city's 6,176 services. The service line inventory contains data collected from tie-cards, a recently completed water meter replacement project, and physical inspection of individual service lines. Service line investigations started in fall 2023 and were completed in spring 2024. Through these investigations, the City of Keene is happy to report that there are no lead water service lines requiring replacement and two galvanized water service lines requiring replacement within the water distribution system.

For more information about your water service line material, contact Ben Crowder, Water and Sewer Operations Manager, at (603)-352-6550.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2025	[4]	[4]	0.97	0.28–1.59	No	Water additive used to control microbes
Haloacetic Acids [HAA5] (ppb)	2025	60	NA	35	14.2–41.9	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	1.03	0.76–1.20	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2025	15	0	1.3	NA	No	Discharge from industrial processes; Wastewater treatment; Residuals from firefighting foam; Runoff/leachate from landfills and septic systems
Perfluorooctanoic Acid [PFOA] (ppt)	2025	12	0	ND	NA	No	Discharge from industrial processes; Wastewater treatment; Residuals from firefighting foam; Runoff/leachate from landfills and septic systems
Total Organic Carbon [TOC] (ppm)	2025	TT	NA	1.5	1.3–1.7	No	Naturally present in the environment
Total Trihalomethanes [TTHMs] (ppb)	2025	80[1]	NA	63	10.6–81.9	No	By-product of drinking water disinfection
Turbidity[2] (NTU)	2025	TT	NA	1.08	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2025	TT = 95% of samples meet the limit	NA	99.87	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2025	1.3	1.3	0.11	ND–0.23	0/57	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2025	15	0	ND	ND–3.3	0/57	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2024	250	NA	6.9	NA	No	Runoff/leaching from natural deposits
Copper (ppm)	2024	1.0	NA	0.013	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits
Manganese (ppb)	2024	50	NA	0.0032	NA	No	Leaching from natural deposits
pH (units)	2025	6.5–8.5	NA	7.8	6.6–9.5	No	Naturally occurring
Sodium (ppm)	2024	100–250	NA	17	NA	No	Naturally occurring
Sulfate (ppm)	2024	250	NA	4.0	NA	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED SUBSTANCES				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2025	ND	NA	NA
Perfluorobutanoic Acid [PFBA] (ppt)	2025	1.7	NA	NA
Hardness, Total [as CaCO3] (ppm)	2025	56.0	7.0–56.0	NA

[1] Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

[2] Turbidity is a measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus helps measure the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.

Substances That Could Be in Water

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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791 or visiting epa.gov/safewater.

The sources of drinking water (both tap water and bottled water) come from 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. The water can also pick up and transport substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Contaminant, any physical, chemical, biological, or radiological substance or matter in water.
- 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 occur naturally in the soil or groundwater or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides, generally any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.
- Herbicides, any chemical(s) used to control undesirable vegetation.
- Organic Chemical Contaminants, including per- and polyfluoroalkyl substances (PFAS) and synthetic and volatile organic chemicals, which are by-products 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 the result of oil and gas production and mining activities.

To protect public health, the U.S. EPA and the State of New Hampshire prescribe regulations that limit the amount of certain contaminants in tap 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.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

Herbicide: Any chemical(s) used to control undesirable vegetation.

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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

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.