

2026 Annual Water Quality Report

Reporting Year
2025



Concord Water System

PWS ID# 0501010



INTRODUCTION

What is a Consumer Confidence Report?

The City of Concord's Water Department is pleased to present the 2026 Annual Water Quality Report. This report summarizes the results of drinking water tests conducted between January 1, 2025, and December 31, 2025, and is intended to keep you informed about the quality of the water you rely on every day. The report contains a comprehensive amount of information. Please feel free to contact us if you have questions, need assistance understanding the information provided, or have suggestions for future reports.

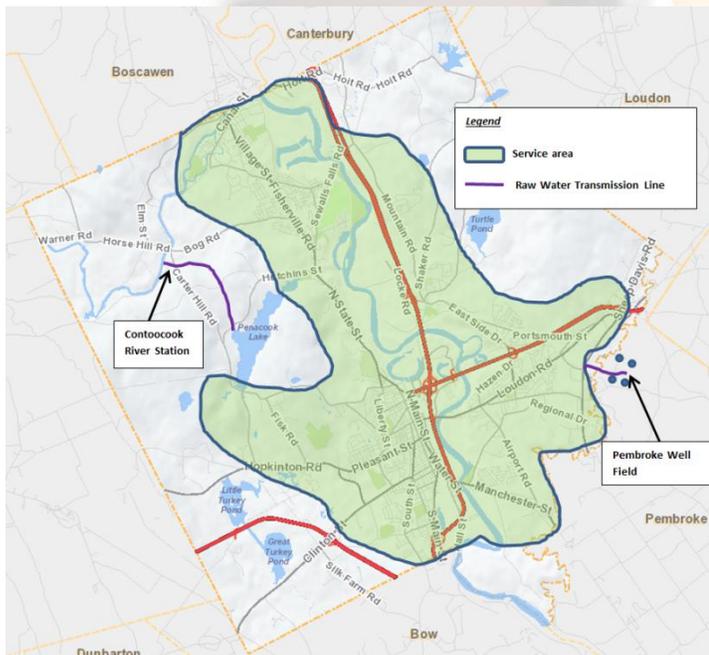
Our mission is to provide the Concord community with drinking water that exceeds all current State and Federal drinking water quality standards. To support this commitment, we participate in the American Water Works Association (AWWA) Partnership for Safe Water. This voluntary program is designed for water systems that strive to go beyond minimum Federal requirements. Through this partnership, we help ensure that the water delivered to our residents and businesses is of the highest possible quality.

The Concord Water Department continuously monitors its finished water to ensure safety and consistency. We are committed not only to meeting water quality standards, but also to advancing additional goals, including source water protection, water efficiency, system improvements, fire service capability, and community education. One example of this commitment is our participation in the EPA WaterSense® Partner Program, a voluntary program that supports water systems in promoting water conservation throughout their communities.

Source & Treatment

Where does my water come from?

Water supplied to customers of the Concord water system is treated at the Hutchins Street Water Treatment Plant, located on the shores of Penacook Lake in West Concord. Penacook Lake is a surface water source that has served as the City's primary water supply since 1872. The current water treatment facility was constructed in 1974 following the passage of the Safe Drinking Water Act.



Source Water Assessment Summary

In 2003, the New Hampshire Department of Environmental Services (NHDES) conducted an assessment of Concord's three drinking water sources to identify potential factors that could affect water quality. The evaluation reviewed 14 types of risks, such as nearby roads, known contamination sites, and surrounding land use.

- ❖ **Penacook Lake:** 11 low-risk factors and 1 medium-risk factor
- ❖ **Contoocook River:** 3 low-risk factors, 6 medium-risk factors, and 2 high-risk factors
- ❖ **Sanders Wells:** 8 low-risk factors, 2 medium-risk factors, and 2 high-risk factors

The full Source Water Assessment Report is available for public review at the Department of General Services. To learn more, please call (603) 228-2737 or visit the NHDES Drinking Water Source Assessment website at:

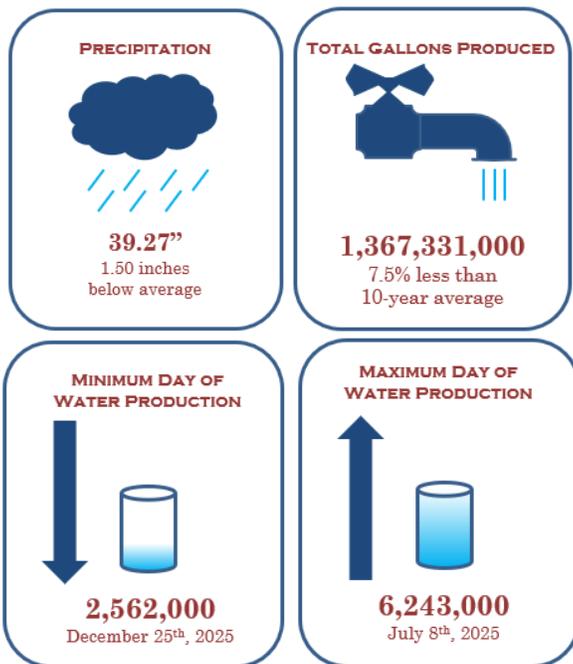
<https://www.des.nh.gov/organization/divisions/water/dwgb/dwsp/reports/documents/concord.pdf>

filtration, and disinfection. The filtration system uses a combination of granular activated carbon and silica sand. Following filtration, the water is disinfected with sodium hypochlorite, and fluoride (hydrofluorosilicic acid) is added before the water enters the clearwell.

After leaving the clearwell, pH is adjusted using sodium hydroxide and carbon dioxide (CO₂) to help control corrosion and balance alkalinity. Ammonium sulfate is then added to form a long-lasting secondary disinfectant, known as monochloramines, which protects the water from microbial recontamination as it travels to homes and businesses.

Treated water is distributed through 200 miles of water mains and stored in five water storage tanks with a combined capacity of 7.5 million gallons. This treatment and distribution process is continuously monitored and maintained 24 hours a day, 365 days a year, reflecting the Water Department’s ongoing commitment to providing safe, reliable drinking water to our customers.

2025 BY THE NUMBERS



How do CIP projects affect water quality?

The City of Concord is committed to long-term sustainability through strategic reinvestment in its Capital Improvement Plan (CIP). These forward-looking investments are designed to strengthen the resiliency, reliability, and overall quality of the water system, ensuring it continues to meet the needs of the community now and in the future.

Penacook Lake Raw Water Quality Results 2025

Contaminant (Unit of Measure)	Violation	Level Measured	Range
Alkalinity (ppm)	No	Average: 7	6 - 8
Aluminum (ppm)	No	Average: 0.012	0.009 - 0.019
Ammonia (ppm)	No	Average: 0.065	0.042 - 0.094
Calcium (ppm)	No	Average: 3.8	3.6 - 4.0
Chloride (ppm)	No	Average: 23	22 - 24
Color	No	Average: 14.4	4 - 57
Conductivity (umhos/cm)	No	Average: 109	102 - 118
Copper (ppm)	No	Average: 0.001	<0.001 - 0.002
DOC (ppm)	No	Average: 2.62	2.13 - 3.11
Dissolved Oxygen - 5ft from surface (ppm)	No	Average: 8.55	6.68 - 11.84
Hardness (ppm)	No	Average: 9.4	9.0 - 10.0
Iron (ppm)	No	Average: 0.07	<0.01 - 0.43
Lead (ppm)	No	Average: <0.001	<0.001 - 0.001
Manganese (ppm)	No	Average: 0.019	0.012 - 0.031
pH	No	Average: 6.87	6.54 - 7.94
Secchi Disk (ft)	No	Average: 17.9	10.8 - 23.3
Sodium (ppm)	No	Average: 14.4	13.3 - 15.4
Sulfate (ppm)	No	Average: 6	5 - 6
TOC (ppm)	No	Average: 2.69	2.25 - 3.21
Turbidity (NTU)	No	Average: 0.57	0.34 - 1.15
UV Absorption (cm-1)	No	Average: 0.055	0.044 - 0.086
Zinc (ppm)	No	Average: 0.005	0.003 - 0.008

The following projects represent key CIP initiatives that have been recently completed or are currently underway:

- ❖ Distribution system replacement projects coordinated with the City of Concord’s pavement replacement program.
- ❖ Upgrades to the Penacook Lake Dam spillway to ensure continued dam safety.
- ❖ Installation of upgraded water meters throughout the City to improve reading efficiency and provide accurate measurements for years to come.

Through continued reinvestment and thoughtful planning, Concord is building a resilient, modern water system that will support a thriving community for generations to come.

About Drinking Water

Sources of drinking water, including both Tap water and Bottled water, include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water moves across the land or through the ground, it naturally dissolves minerals and, in some cases, radioactive materials, and may also collect substances resulting from human or animal activities.

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 storm water 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, synthetic and volatile organic chemicals, which are by-products 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.

To protect public health, EPA and the State of New Hampshire prescribe regulations which limit the quantity 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.

Why are there contaminants in my 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

Water Quality Parameters 2025

	Parameter	Average Level	Results Range	Secondary Drinking Water Standard SMCL
Secondary Contaminants	Chloride (ppm)	29	27 - 30	250
	Manganese (ppm)	0.012	0.005 - 0.026	0.05
	pH	9.22	8.62 - 9.60	6.5 - 8.5
	Sodium (ppm)	28.6	26.2 - 30.3	250
	Sulfate (ppm)	6.8	6.0 - 7.0	250
	Zinc (ppm)	0.002	<0.050 - 0.003	5
Additional Testing	Alkalinity as calcium carbonate (ppm)	31	28 - 33	
	Ammonia (ppm)	0.37	0.32 - 0.40	
	Calcium (ppm)	3.8	3.6 - 4.0	
	Conductivity (ppm)	175	164 - 186	
	Copper (ppm)	0.003	0.002 - 0.004	
	Hardness (ppm)	9.4	9 - 10	

Definitions

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

Maximum Contaminant Level or MCL: 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.

Maximum Contaminant Level Goal or MCLG: 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.

Maximum Residual Disinfectant Level or MRDL: 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.

Maximum Residual Disinfectant Level Goal or MRDLG: 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.

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

Abbreviations

HAA5: Haloacetic Acids.

TTHM: Total Trihalomethanes.

ppm: parts per million OR mg/L: milligrams per Liter.

ppb: parts per billion OR ug/L: micrograms per Liter

ppt: parts per trillion OR ng/L: nanogram per Liter

ppq: parts per quadrillion

n/a: not applicable.

NTU: Nephelometric Turbidity Unit.

pCi/L: picoCurie per Liter.

effects can be obtained by contacting the Environmental Protection Agency by calling the Safe Drinking Water Hotline (800-426-4791) or visiting the website epa.gov/safewater

Do I need to take special precautions?

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) or on EPA's website epa.gov/safewater.

UCMR5 Results 2023

	Contaminant (Unit of Measure)	Violation	Highest Measurement
EPA method 533	11Cl-PF3OUdS (ppt)	No	<5
	4:2FTS (ppt)	No	<3
	6:2FTS (ppt)	No	<5
	8:2FTS (ppt)	No	<5
	9Cl-PF3ONS (ppt)	No	<2
	ADONA (ppt)	No	<3
	HFPO DA (ppt)	No	<5
	NFDHA (ppt)	No	<19
	PFBA (ppt)	No	<5
	PFBS (ppt)	No	<3
	PFDA (ppt)	No	<3
	PFDoA (ppt)	No	<3
	PFEESA (ppt)	No	<3
	PFHpA (ppt)	No	<3
	PFHpS (ppt)	No	<3
	PFHxA (ppt)	No	<3
	PFHxS (ppt)	No	<3
	PFMBA (ppt)	No	<3
	PFMPA (ppt)	No	<3
	PFNA (ppt)	No	<3
	PFOA (ppt)	No	<4
	PFOS (ppt)	No	<4
	PFPeA (ppt)	No	<3
PFPeS (ppt)	No	<4	
PFUnA (ppt)	No	<2	
EPA method 537.1	NEtFOSAA (ppt)	No	<6
	NMeFOSAA (ppt)	No	<5
	PFTA (ppt)	No	<7
	PFTrDA (ppt)	No	<8
EPA method 200.7	Lithium (ppb)	No	<9

Does my water have PFC's?

The Concord Water System has tested both the raw and finished water at the treatment plant, and all results were below detectable limits. Laboratory analyses are required to detect contaminants at

Water Quality Monitoring

What is the Unregulated Contaminant Monitoring Rule?

The EPA is required to monitor for new substances that could potentially pose a concern in drinking water. Under the Unregulated Contaminant Monitoring Rule (UCMR), public water systems across the country test for these potential contaminants every five years. The results help the EPA determine whether new drinking water regulations are needed. Concord completed UCMR5 testing in 2023–2024. The substances of concern included lithium and PFC-related compounds. The EPA will review all water system data to decide whether further action or regulation for these substances is necessary.

What are PFC's?

Per- and polyfluoroalkyl substances (PFAS), sometimes called PFCs, are a group of chemicals that resist heat, water, and oil. The U.S. Environmental Protection Agency (EPA) has identified PFAS as an emerging contaminant of national concern. For decades, these chemicals have been used in a wide range of industrial applications and consumer products, including carpeting, waterproof clothing, upholstery, food packaging, firefighting foams, and metal plating. PFAS are still in use today. These substances have been detected at low levels in the environment and in blood samples from the general U.S. population. PFAS are highly persistent, meaning they do not easily break down in the environment.

PFC Water Quality Results 2023

	Contaminant (Unit of Measure)	Violation	Level Measured	MCL	MCLG
Hutchins St Finished	PFHxS (ppt)	No	Highest Measurement: <2	18	0
	PFNA (ppt)	No	Highest Measurement: <2	11	0
	PFOA (ppt)	No	Highest Measurement: <2	12	0
	PFOS (ppt)	No	Highest Measurement: <2	15	0
Sanders Station Wells	PFHxS (ppt)	No	Highest Measurement: <2	18	0
	PFNA (ppt)	No	Highest Measurement: <2	11	0
	PFOA (ppt)	No	Highest Measurement: 4.82	12	0
	PFOS (ppt)	No	Highest Measurement: <2	15	0

levels as low as 2 parts per trillion (ppt). The emergency backup water supply at the Pembroke wellfield consisting of four separate wells has also been regularly tested. You can be confident that the water delivered to your home is safe and carefully monitored.

Is there fluoride in my water?

Your public water supply is fluoridated. According to the Centers for Disease Control and Prevention, if your child under the age of 6 months is exclusively consuming infant formula reconstituted with fluoridated water, there may be an increased chance of dental fluorosis. Consult your child's health care provider for more information.

What is Turbidity? Why do we measure it?

Turbidity measures the clarity of water. Surface water systems monitor turbidity as an indicator of how well the treatment process is working.

Sanders Station Wells (Emergency Backup) Water Quality Results 2025

Contaminant (Unit of Measure)	Violation	Level Measured	Range	MCL	MCLG	Likely Source
Barium (ppb) (2024)	No	Highest Measurement: 0.010	0.010	2000	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chloride (ppm) (2024)	No	Highest Measurement: 52	52.0	250	n/a	Wastewater, road salt, water softeners, corrosion
Copper (ppm) (2024)	No	Highest Measurement: 0.016	0.016	1	n/a	Corrosion of household plumbing; erosion of natural deposits
Iron (ppm) (2024)	No	Highest Measurement: 0.77	0.77	0.3	n/a	Geological
Lead (ppb)	No	Average: 1.1	<0.1 - 2.7	AL: 15	AL: 15	Corrosion of household plumbing; erosion of natural deposits
Manganese (ppm) (2024)	No	Highest Measurement: 0.006	0.006	0.05	---	Geological
Nickel (ppm) (2024)	No	Highest Measurement: 0.003	0.003	---	---	Geological; electroplating, battery production, ceramics
Nitrate as Nitrogen (ppm)	No	Average: 3.40	0.39 - 5.38	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
pH (2024)	No	Average: 5.97	5.74 - 6.11	6.5-8.5	n/a	Precipitation and geology
Sodium (ppm) (2024)	No	Highest Measurement: 33	33	250	n/a	Road salt, septic systems (salt from water softeners)
Sulfate (ppm) (2024)	No	Highest Measurement: 8.0	8.0	250	n/a	Naturally occurring
Zinc (ppm) (2024)	No	Highest Measurement: 0.033	0.033	5	n/a	Naturally occurring

What is water system efficiency?

Water system efficiency measures how much of the water produced by the treatment plant actually reaches customer meters or other approved sources. Concord takes efficiency seriously, in fact, we are the only water utility in New Hampshire with a conservation technician on staff.

The national average for water system efficiency is 85%, meaning, on average, 15% of water produced nationwide is unaccounted for. Losses can result from small leaks that don't surface, aging or inaccurate meters, or even unauthorized use.

In 2025, Concord's system efficiency was 85.6%, leaving only 14.4% unaccounted for. The same year, Concord received a NHDES Leak Detection Grant to help identify and repair leaks. The City is committed to continuously improving system efficiency and will be replacing many older meters in 2025 and beyond to further enhance water conservation and system performance.

Hutchins Street Water Treatment Plant Water Quality Results 2025

Contaminant (Unit of Measure)		Violation	Level Measured	Range	MCL	MCLG	Likely Source
Microbiological Contaminants	Total Coliform Bacteria	No	Of the 600 distribution system samples that were collected and analyzed in 2023, NO total coliform bacteria were detected.				Naturally present in the environment
	Total Organic Carbon (% removal)	No	Average % Removal: 48%	43% - 54%	TT: Minimum removal 26%	n/a	Naturally present in the environment
	Turbidity (NTU)	No	Average: 0.06	0.03 - 0.09	1	n/a	Soil runoff
	Turbidity (Lowest monthly percent of samples meeting limit)	No	100%	n/a	TT: 95% of samples ≤ 0.3 NTU	n/a	Soil runoff
Inorganic Contaminants	Aluminum (ppb)	No	Average: 13	9 - 18	50	n/a	Naturally present in the environment
	Barium (ppb)	No	Highest Measurement: 5.2	5.2	2000	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
	Chloramines (mg/L)	No	Average: 2.00	1.84 - 2.13	MRDL: 4	MRDLG: 4	Water additive used to control microbes.
	Fluoride (ppm)	No	Average: 0.70	0.62 - 0.80	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead and Copper	Copper (ppm) 2023	No	90th Percentile: 0.041 (0 of 46 sites were above AL)	n/a	n/a	n/a	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
		No	Average: 0.024	0.003 - 0.068	AL: 1.3	AL: 1.3	
	Lead (ppb) 2023	No	90th Percentile: 2 (1 of 46 sites were above AL)	n/a	n/a	n/a	Corrosion of household plumbing systems, erosion of natural deposits
		No	Average: 1	<1 - 31	AL: 15	AL: 15	
Disinfection Byproducts	Haloacetic Acids (HAA) (ppb)	No	Highest Annual Average: 23.3	13 - 36	60	n/a	By-product of drinking water disinfection
	Total Trihalomethanes (TTHM) (ppb)	No	Highest Annual Average: 27.75	18 - 40	80	n/a	By-product of drinking water chlorination

What do I need to know about Lead?

Elevated levels of lead can cause serious health effects for people of all ages, particularly for pregnant individuals, infants (both formula-fed and breastfed), and young children. In drinking water, lead usually comes from materials used in service lines and in-home plumbing. The City of Concord is committed to providing high-quality drinking water and replacing lead service lines. However, we cannot control the plumbing materials inside your home. Because lead levels can vary over time, exposure is possible even if a recent water test shows no detectable lead.

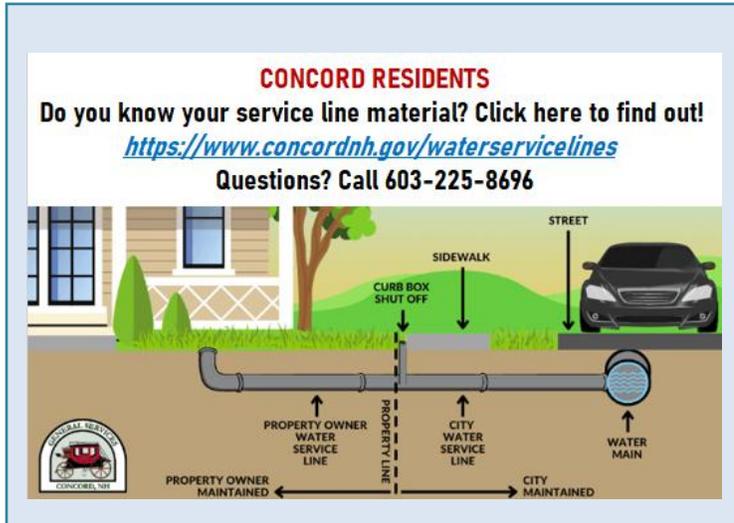
You can take steps to protect yourself and your family:

- Identify and remove lead-containing plumbing materials in your home.
- Use a water filter certified by an American National Standards Institute (ANSI)-accredited organization to reduce lead. Follow the filter instructions carefully.
- Always use cold water for drinking, cooking, or making baby formula. Boiling water does not remove lead.
- Before using tap water for drinking or cooking, flush your pipes for several minutes by running the tap, taking a shower, or doing laundry or dishes. If you have a lead service line or galvanized pipes that require replacement, you may need to flush longer.

If you are concerned about lead in your water or want to have your water tested, contact the Concord Water Department at 603-225-8696. More information about lead in drinking water, testing methods, and ways to reduce exposure is available at [epa.gov/safewater/lead](https://www.epa.gov/safewater/lead)

Are there health effects if lead is consumed?

Exposure to lead in drinking water can seriously affect people of all ages. In infants and children, it can reduce IQ and attention span and may cause new learning or behavioral problems—or worsen existing ones. Children born to women exposed to lead before or during pregnancy may also face a higher risk of these health effects. In adults, lead exposure can increase the risk of heart disease, high blood pressure, and problems with the kidneys or nervous system.



Lead in Schools

Under New Hampshire law (RSA 485:17-a), all public and private schools and licensed child care facilities are required to test their drinking water for lead. Testing is conducted at all water outlets used for drinking or food preparation.

If lead levels are found at or above 5 parts per billion (ppb), the outlet must be fixed or taken out of service to protect children's health. Facilities are required to complete three rounds of testing, with each round at least six months apart.

A full list of participating facilities and their test results is available to the public at www.gettheleadoutnh.org



Concord General Services
Water Treatment Division
311 North State Street
Concord, NH 03301

Lead Service Line Inventory

The City of Concord has prepared a service line inventory, which can be viewed online at www.concordnh.gov/waterservicelines

Of the 12,200 water services in Concord, only 480 property owner water service lines remain unidentified, see picture to the left for description. Property owners have been notified by letter about the service line inventory project and to schedule an appointment for City staff to inspect their lines.

For more information, visit www.concordnh.gov/waterservicelines or to schedule a **free inspection**, call 603-225-8693.

Concord Wins Again!

Our water was voted Best Tasting Water by 4th graders at the 2025 NH Drinking Water Science Fair & Festival! Over 30 years of inspiring kids to protect our water—and Concord continues to shine. Check out the article below

<https://www.concordmonitor.com/2025/05/13/concord-nh-best-tasting-drinking-water-festival-61154182/>



How To Get Involved...

We value your feedback! Concord works hard to provide safe, clean drinking water, and we are always looking for ways to improve our processes and Water Quality Report. If you have questions or would like more information about your drinking water, please contact:

- ❖ Jackson Keane, Water Treatment Plant Superintendent – 603-225-8696
- ❖ Marco Philippon, Deputy Director, General Services – 603-225-2737
- ❖ Jeff Hoadley, General Services Director – 603-228-2737

City Council meetings are held on the second Monday of every month. You are welcome to attend in person or join virtually. More information, including past meeting minutes, is available at concordnh.gov/282/City-Council