



COMMITMENT TO CONSERVATION

SDG Sustainability

★

ALBANY WATER QUALITY REPORT 2024

BETTER THAN BOTTLED

SI HUDSON RIVER IS ESSENTIAL

DEPARTMENT OF

WATER

THE CITY OF ALBANY, NEW YORK



May 1, 2025

Nature's Best, Locally Delivered.

Water from our watershed is treated to state & federal standards.



Introduction

The Albany Water Board issues an annual report describing the quality of your drinking water to comply with state regulations. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. We are proud to report that in 2024 your water met all state drinking water health standards and our system had no violations of maximum contaminant levels. This report provides an overview of last year's water quality, and includes details about where your water comes from, what it contains, and how it compares to State standards. We are pleased to provide you with this information because informed customers are our best customers.

If you have any questions about this report or concerning your drinking water, please contact the City of Albany, Department of Water and Water Supply at 518-434-5300. If you want to learn more, please attend any of our regularly scheduled Albany Water Board meetings. The meetings are normally held the fourth Friday of each month at 9:00 A.M. at the 10 North Enterprise Drive offices of the Albany Water Department. The schedule of Water Board meetings may be found at our website; <https://albanyny.gov/561/Albany-Water-Board>



The Feura Bush filtration plant



Loudonville Reservoir

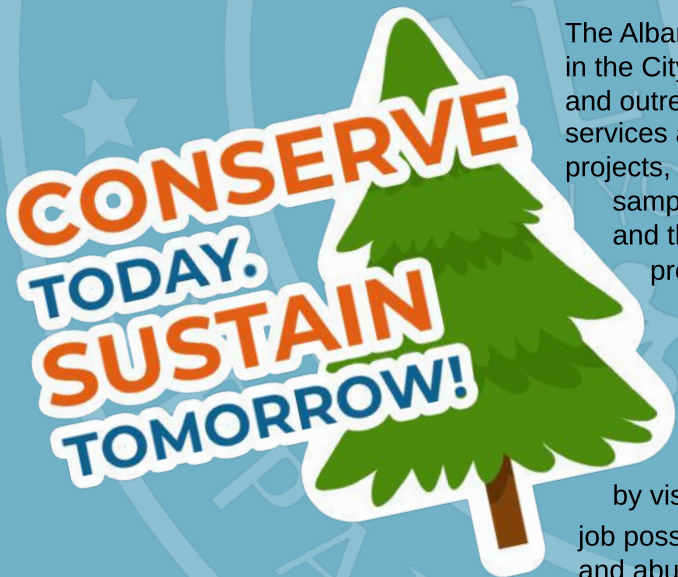
Message from the Commissioner

We are pleased to provide you with our 2024 Annual Drinking Water Quality Report. We are proud to report that Albany water continues to meet all State and Federal water quality standards. The City of Albany has one of the finest and most reliable water supply sources in the nation.

Sustainability is a Core Value of the Albany Water Board and the Department of Water & Water Supply, *and* we take our responsibility as stewards of the City's water resources very seriously. In 2024, we continued to benefit from a permanent Conservation Easement with The Mohawk Hudson Land Conservancy to ensure long-term conservation of our valuable watershed properties. Our "Working Woodlands" and Carbon Development and Marketing programs has \$983,261.00 in revenue to date that we place in a dedicated fund to reinvest in watershed management and protection programs.

An element of Sustainability is the wise use of our water. While our system is fortunate to have an adequate amount of water to meet our present and future demands, it is prudent for all of us to lead by example and practice water conservation. You can play a role in conserving water by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Our annual report includes tips and recommendations for water conservation practices.

Since 2014, we have invested over \$154 million in improvements to our infrastructure. In 2024, the Albany Water Board made over \$11 million in capital improvements in all facets of our water and sewer systems. Projects completed in 2024 are discussed later in this report.



The Albany Water Board is committed to replacing every lead water service in the City of Albany by 2034. We continue to expand our public education and outreach to customers emphasizing lead in drinking water. Lead services are replaced as part of water main and sewer main replacement projects, city paving projects and our annual lead and copper compliance sampling program. In 2024, 373 full lead water services were replaced, and the Albany Water Board provided 200 grants totaling \$319,000 to property owners replacing their lead water services. We continue our inventory of lead water services and publish on our website an interactive map of all properties in the city noting the materials of the water service from the main to the shut off to the meter.

We are fortunate to have a water system planned and designed by visionary predecessors, and we remain committed to doing the best job possible so that future generations will be able to rely upon the pure and abundant waters of Albany's Alcove Reservoir.

Thank you for your trust and partnership. On behalf of all the employees of the Albany Water Department, it is our privilege to serve you.

Joseph E. Coffey Jr. P.E.
Commissioner

City of Albany Department of Water & Water Supply

View This Report Online

albanyny.gov/765/Water-Quality-Report

Sharing This Report

Please share this report with all people who drink our city's water, especially those who may not have received this report directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this link in a public place or distributing copies by hand and mail.

To receive a printed copy of this report, please email us: water@albanyny.gov

People with Special Health Concerns

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, and some elderly people 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 (EPA)/Centers for Disease Control CDC guidelines on appropriate means to lessen the risk of drinking water contaminants are available from the Safe Drinking Water Hotline (800) 426-4791

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How this document is organized

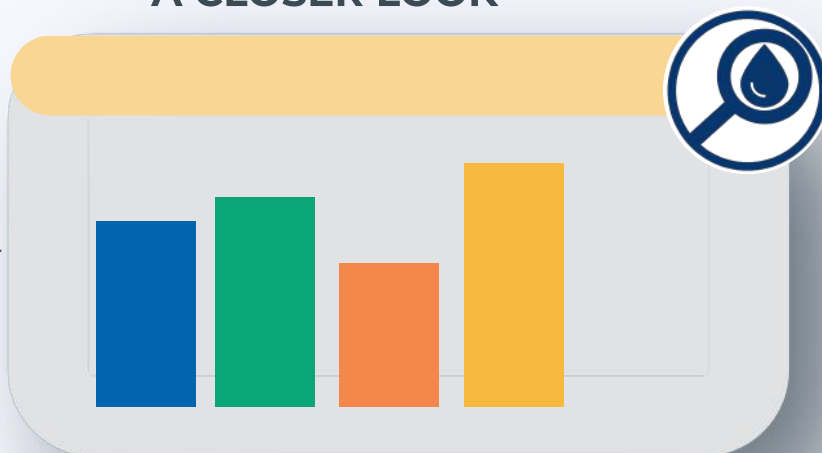
This story follows our water quality work from **source** and **treatment** through **delivery** to your **home**.



Look for these quick guides throughout the report

A CLOSER LOOK

Charts and graphs let you see the data in a new way.



Here's the story of why we do this test

Handwritten notes explain how and why we do these tests.



Source & Treatment



Where does our water come from?

In general, 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 can pick up substances resulting from the presence of animals or from human activities. Atmospheric sources of contamination enter our water sources through rain and snowfall. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Health Department and FDA regulations also establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is the Alcove Reservoir, which is surface water and is located on the Hannacroix Creek in the Town of Coeymans. This reservoir has a capacity of 13.5 billion gallons, an average depth of 25 feet and a maximum depth of 75 feet. The Basic Creek Reservoir, in the town of Westerlo, is a secondary source that may be used to augment flow into the Alcove Reservoir to maintain the Alcove elevation. During 2024, our system did not experience any restriction of your water usage due to lack of source water or any other reason.

The water source receives treatment including pre-oxidation, disinfection, coagulation, sedimentation, filtration and pH and alkalinity adjustment for corrosion control at the Feura Bush Filtration Facility. Chlorine is added as a residual disinfectant to maintain microbiological quality throughout the distribution system. Ultraviolet light disinfection is a supplemental disinfectant used at the Loudonville Reservoir.

Protection starts @ the source

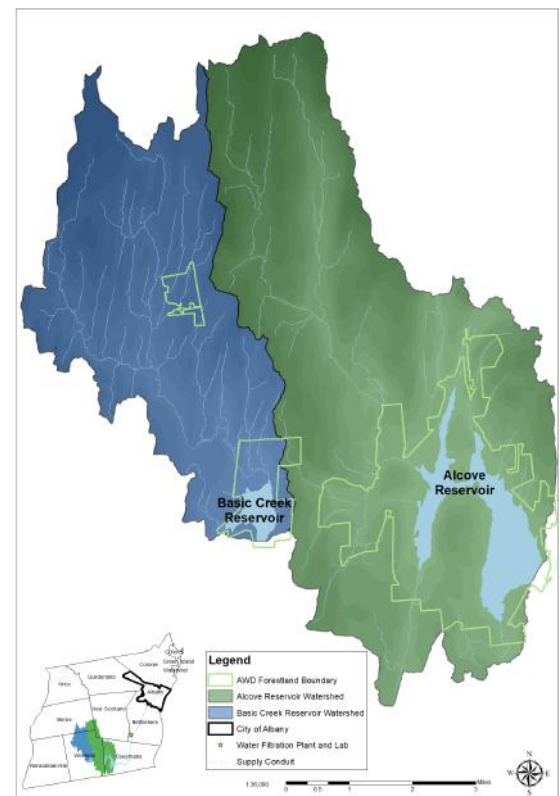
We take a holistic approach, beginning with Albany's water supply. We monitor our waterways across the watershed and look for potential sources of contamination. We keep track of water availability and flow.



A. Ashby - Watershed Forester

Albany Source Watershed

Basic Creek Watershed.....
Alcove Reservoir Watershed.....



Our wide range of tools for protecting your water source includes:

Monitoring:

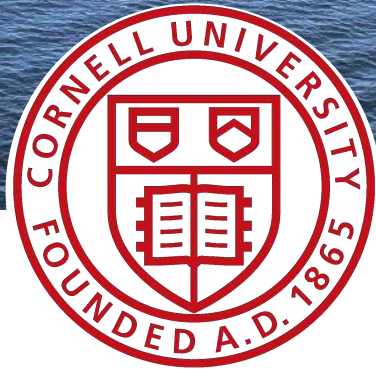
- Water quality sampling to understand current and long-term trends.
- Phytoplankton identification and counts to help predict taste and odor issues & potential harmful algae blooms.
- Routine watershed sanitation inspections to identify sources of contamination.

Field Projects:

- Annual stream macroinvertebrate surveys
- Watershed culvert assessments & replacements
- Invasive species monitoring & management
- Native tree planting

Partnerships:

- Sustainable forest management
- release of bio-control agents to combat the hemlock woolly adelgid invasion with Cornell University



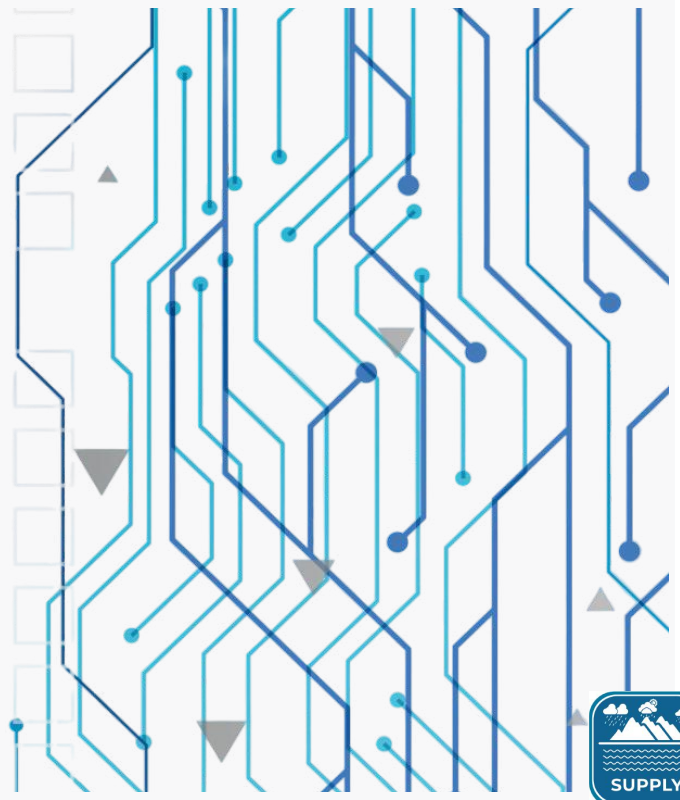
Did You Know?

Our reservoir is over 1,600 acres? 2x the size of Central Park in NYC!



Security Spotlight:

The Albany Water Department deploys a robust security staff to monitor and patrol our water source and supply system. This includes 17 miles of shoreline of the Alcove Reservoir which contains 13.5 billion gallons of raw drinking water and 4,316 acres of watershed forest land. Security staff also protect the filtration plant and the finished water reservoir in Loudonville, along with 20 miles of transmission pipeline right of way.



Feura Bush Water Treatment Plant:

An important early step in water's journey.



Plant Operations Staff (L to R)

J. Rysedorph (Chief Operator), J. DeGiovine (Facilities Manager),
R. Hussain (Lab Director), E. Hurley (Sr. Operator), T. Shaver (Maintenance Supervisor), R. Smith (Asst. Chief Operator)

Water from the Alcove Reservoir is delivered to the City of Albany via the 48-inch diameter cast iron pipe known as the Supply Conduit. The water travels about eight miles to a filtration plant located between the villages of Feura Bush and South Bethlehem. The treatment process includes aeration, chemical treatment with Sodium Permanganate and Polyaluminum chloride, settling basins, chlorine addition, and filtration through eight rapid sand filters, ultimately ensuring the delivery of pure water to the city.

Our treatment process:

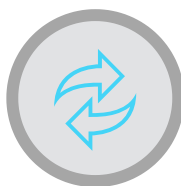
These are some of the stages water goes through during normal operating conditions.

How long does it take for the water to get from the reservoir to the city?



Aeration

225 aeration nozzles to break apart contaminants coming from the reservoir.



Mixing

Mixing basins to distribute PCH-180 to form floc so heavy organic & inorganic matter settles.



Settling

Settling Basins to allow H₂O to rest and allow floc to settle for 4-5 hours.



Filtration

Filtration through 8 rapid sand filters, with the capacity to filter 32 million gallons per day.



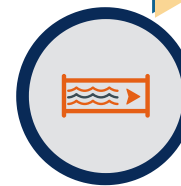
Additives

Chlorine, hydrated lime & other additives to ensure disinfection & corrosion control through passage to & throughout the system.



Storage

Two-million gallon clearwell to release water to the 48 inch water main that supplies the city.



Delivery

382 miles of pipeline delivering H₂O to your homes, businesses, schools and everything in-between.



8- 10 N. Enterprise Dr. Albany NY 12204



Testing, Testing, Testing

The City of Albany's Department of Water and Water supply consistently meets regulatory standards by conducting over 100 total coliform samples each month. Each sample accompanied tests for chlorine residuals, turbidity and pH at various locations in distribution system. On average, we collect between 110 to 140 samples per month. We also monitor 4 days a week water samples from our Loudonville Reservoir.

Additionally we collect City Tap samples from 1-2 locations daily for other chemical parameters like Alkalinity, Chloride, hardness and organic carbons etc. to ensure best water quality for our customers.

Final Touches

Chlorine

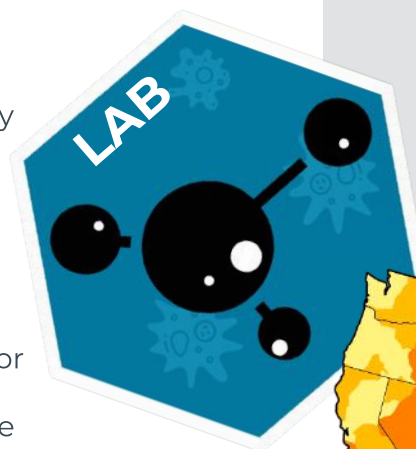
Added to filtered water to kill any bacteria, especially of the "coliform type" which may have passed through the filters.

Corrosion Control

Added to prevent pipes from corroding and releasing metals or chemicals into the water, which can affect water quality and pose health risks. This is especially important for lead water service pipes.

Ultraviolet Disinfection

Added at our Loudonville Reservoir to kill or inactivate harmful microorganisms, like bacteria and viruses, in water by exposing it to UV light.



A closer look



Hardness

The hardness of water is determined by the minerals naturally dissolved in it.

Hardness can vary based on natural conditions - for example, a drought can impact hardness.

Hardness matters if you use your water for an activity, such as brewing beer or keeping a home aquarium. Customers often ask about hardness when researching appliances like dishwashers.

Water Hardness Level

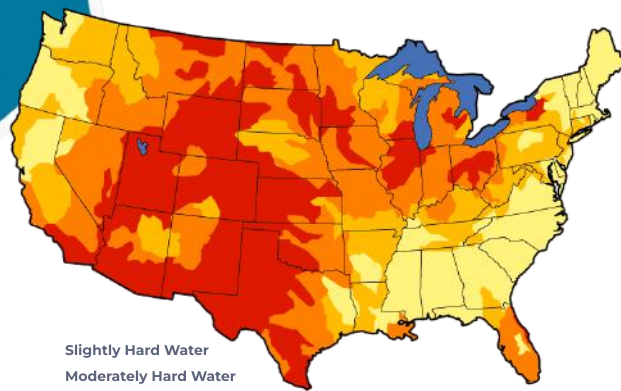
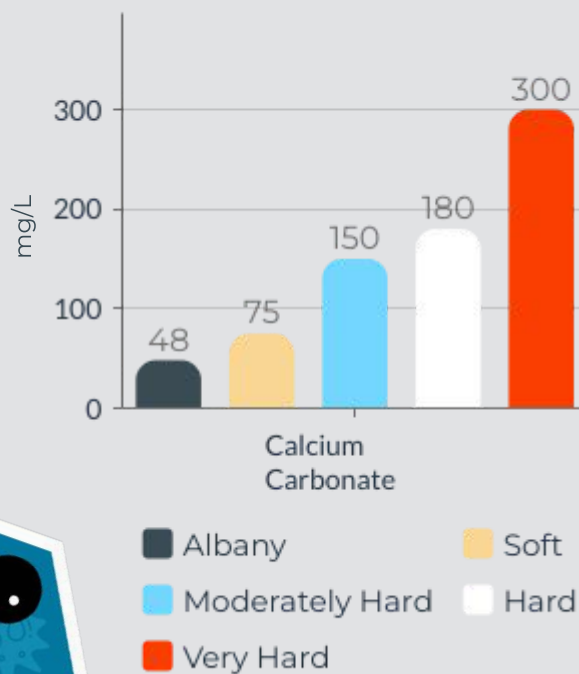


Table adapted from and prepared by the United States Geological Survey



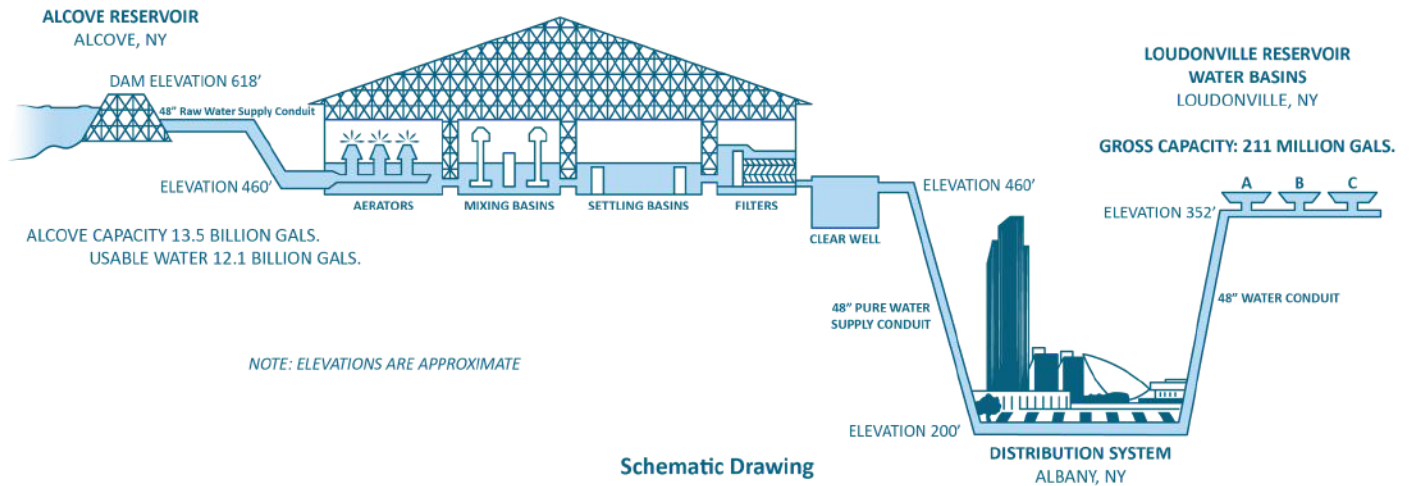


Aeration Room

CITY of ALBANY Department of Water and Water Supply System

WATER PURIFICATION PLANT
FEURA BUSH, NY

PLANT CAPACITY: 32 MILLION GALS. DAILY



Schematic Drawing

A Total of 362 Miles of Pipeline

1926:

The Board of Water Supply was established which recommended a gravity supply system utilizing Hannacrois, Basic, and Catskill Creeks. Reservoirs on Hannacrois Creek (Alcove Reservoir) and Basic Creek (Basic Creek Reservoir) were built with a Filtration Plant in Feura Bush.

1932:

The present system of supply was completed, and on November 10, 1932, the new gravity fed water supply was placed in service. The filter plant and its functions have essentially remained unchanged to this day with upgrades in facilities improvements and technology monitoring.



If you would like info on School Field Trips and Adult Tours please visit:
<http://albanyny.gov/2264/Tours-Field-Trips>



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A safe path through the system

Upon completion of the treatment process, the water is now ready for the trip to your home.

From the Water Filtration Plant, traveling roughly 22 miles, the water supply conduit travels to the Town of Bethlehem through the Normanskill Creek eventually entering the city just south of Whitehall Road. The conduit next travels northerly across the City of Albany through Tivoli Hollow to Loudonville Reservoir.

Other large water mains are fed from the supply conduit before it reaches Loudonville. These mains are known as feeder mains, and in the City of Albany system, are 16", 20", 24" and 30" in diameter. The purpose of the feeder mains is to carry large quantities of water to various parts of the city.

The feeder system then branches into a smaller system of watermains known as distribution mains. It's these smaller mains, 6", 8" and 12" in diameter, which actually carry the water to the individual homes and businesses.



A closer look

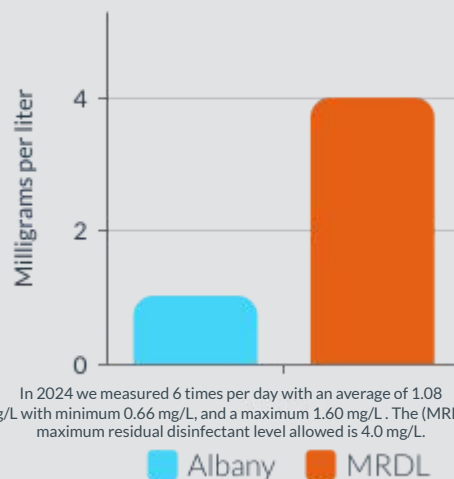


Residual Chlorine

This test is done throughout the system. It checks that the chlorine added at the Feura Bush Filtration Plant remains at levels that keep water fresh and safe while staying within regulations.

Avg. Chlorine in H2O

*according to the water quality association



In 2024 we measured 6 times per day with an average of 1.08 mg/L with minimum 0.66 mg/L, and a maximum 1.60 mg/L. The (MRDL) maximum residual disinfectant level allowed is 4.0 mg/L.

what this means for you



We travel the city to collect samples of drinking water from fire and police stations, pumping stations and more.

We do between 100 - 150 of these tests every month!

ALB



Meet your service line

You & your property's plumbing play a role in keeping water safe.

The service line is a pipe that carries clean water from the city's water mains into your home. It's a part of your property's plumbing.

The service line is the property owner's responsibility



Your Service Line

Supply side
Homeowner

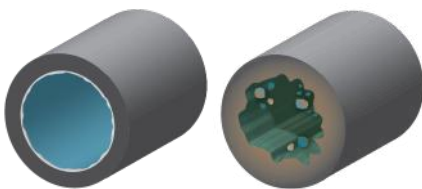
Service side
City

← City's
water
mains

Corrosion Control

Reducing risks from lead in a property's plumbing

We use special treatment methods to stop lead from seeping into our water through old pipes, a technique known as **corrosion control**. Testing in homes with lead plumbing confirms that this method effectively keeps lead levels within safe limits set by state and federal guidelines.



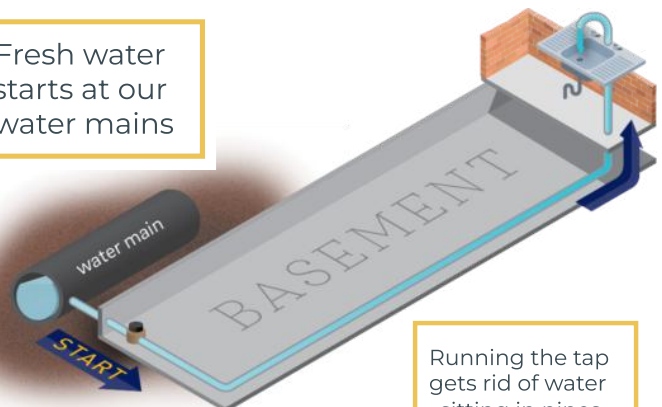
With corrosion
control

Without corrosion
control

What do we mean by "Flushing your pipes?"

Flushing pushes the water that is sitting in pipes out and down your drain until fresh water comes through the tap. When pipes are disturbed during construction or repairs, they might require flushing.

Fresh water
starts at our
water mains



Running the tap
gets rid of water
sitting in pipes



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ALB



Healthy home habits

If you haven't used water for 6 hours or more:
Run your cold water for 2-3 minutes. This will
flush out water that's been sitting in your pipes
ensuring that any sediment flushes out.

It only costs a penny or two to ensure top-quality
and can really improve the quality and taste.

A Water Household Can Conserve Water By:

- Fix leaky faucets and running toilets
- Turn off faucets when brushing teeth
- Store water in clean and covered containers
- Install water-saving devices such as low-flow showerheads and aerators on faucets
- Insulate hot water pipes to reduce heat loss from the hot water heater.
- Use a timer on sprinklers
- Upgrade to water-efficient appliances, such as toilets with dual flush options and EnergyStar rated washing machines

Talking about tap water

Albany's tap water, is a source of pride for the Albany Water Department. Renowned for quality and cost-effectiveness, using tap water curbs plastic pollution. In Albany neighborhoods, safe drinking water is a priority. Residents, surprised by its affordability, turn on the tap and say no to plastic. Albany's tap water is superior in quality and we pride ourselves on being eco-friendly, and fostering a greener, healthier community.



If lead is detected in drinking water, it comes from a property's plumbing.

A home's older fixtures & valves:

It could be in fixtures, valves, and solder.
Lead was prohibited from plumbing materials in 1986

Service Line:

This pipe connects a property's plumbing to the water main in the street. Homes built from 1960 or earlier may still have lead in sections of the service line.

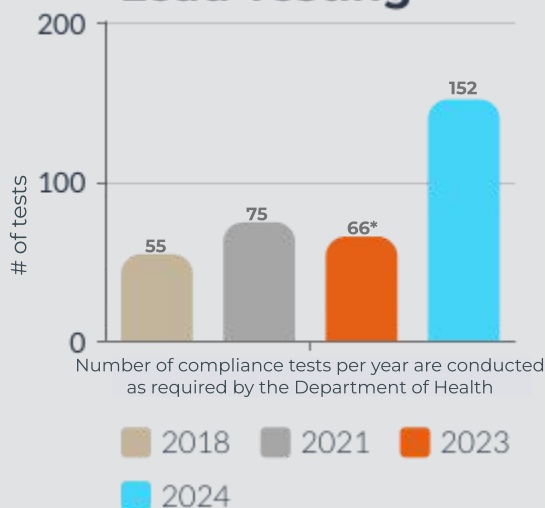
LET'S TAKE A PEEK



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, kidney or nervous system problems.

Lead Testing



*tested in 2023 from July-Dec. due to rule changes

What does this mean for you?

The EPA is updating guidelines for sampling. This will impact future results. We support this effort to make sure sampling is accurate, and to help identify homes with lead plumbing issues.

Lead Line Replacement Grants Available

Grant funding available up to \$2000, to learn more go to albany.ny.gov/lead

US EPA Guidelines

The EPA requires public water providers like the City of Albany Department of Water & Water Supply to monitor drinking water for lead at customer taps. If lead levels are higher than 15 parts per billion (ppb) in more than 10% of taps sampled, water providers must inform customers and take steps to reduce lead in water.

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 material and components with service lines and home plumbing.

The City of Albany Water Department and Water Supply is responsible for providing safe drinking water but cannot control the variety of material used in plumbing components. If you haven't turned on your tap for several hours, you can minimize the potential for lead exposure by flushing your tap before using 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 at: <https://albany.ny.gov/444/Lead-Drinking-Water>



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What we test for and how

Public drinking water systems monitor their treated drinking water for over 80 contaminants. These regulatory parameters are defined within federal rules such as the Revised Total Coliform Rule, Surface Water Treatment Rule, Disinfectants and Disinfection Byproducts Rules, Lead and Copper Rule, and the Radionuclides Rule.

We monitor for the regulated parameters listed below.

Any contaminants found are noted in the tables on the following pages: 17 - 23

Microbiological Contaminants:

Total Coliform / E.Coli
Combined Filter - Effluent Turbidity
Distribution Turbidity

Inorganic Contaminants:

Alkalinity	Copper
Total Hardness	Iron
Calcium Hardness as	Lead
CaCO ₃	Manganese
Chloride	Total Organic Carbon*
Sodium	Chlorine Residual*
Sulfate	

**precursors for disinfection by-products*

Disinfection Byproducts:

Total Trihalomethane
Haloacetic Acids

PFAS Per - and Polyfluoroalkyl Substances

Radionuclides

Alpha particles
Beta particles

Other factors that can impact drinking water
Appealing



We work to ensure your water **looks**, tastes and smells the way it should.



To meet all water quality **taste and odor** guidelines, we test for the following: alkalinity, chloride, color, hardness, iron, manganese, odor, pH, sulfate, total dissolved solids, and turbidity.



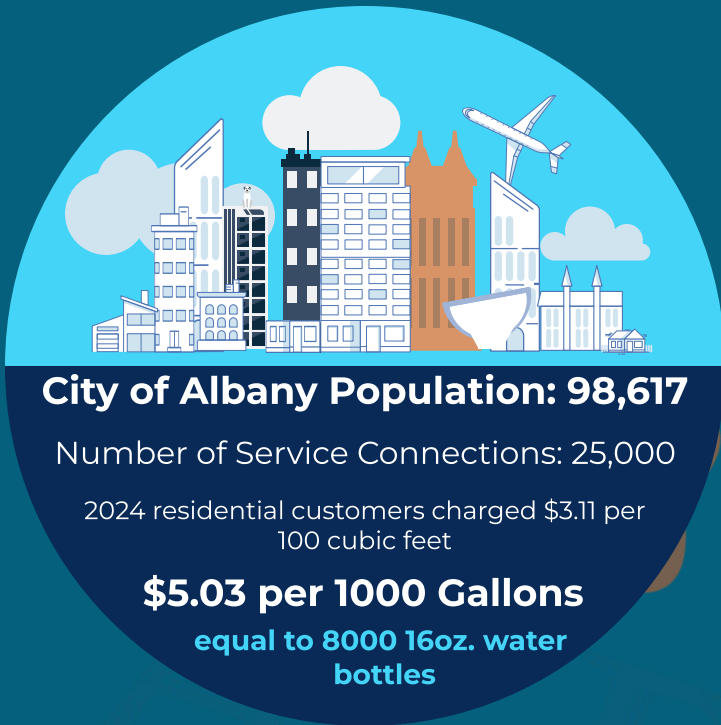
Temperature and Cloudiness

The temperature of the Alcove Reservoir varied seasonally in 2024 from approximately 36.3°F – 67.3°F at the water supply intake, and reservoir surface had a range of 36.5°F - 80.2°F. AWD does not treat the water for temperature.


Cloudiness in tap water most commonly happens when the cold water **from the water main is warmed up quickly in household plumbing**. Cold water and water under pressure can hold more air than warmer water and water open to the atmosphere.

When cold water comes out of your tap, it's simultaneously warming up and being relieved of the pressure it was under inside the water main and your plumbing. The milky white color is actually just tiny air bubbles. If you allow the glass to sit undisturbed for a short period, you will see it clear up.

Facts & Figures

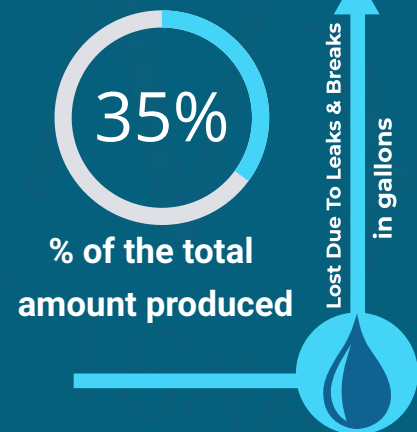


6,171,456,135 
Billion Gallons Produced in 2024

3,950,175,805 
Billion Gallons Metered in 2024

2,138,634,429 
Billion gallons unaccounted for

2,138,634,429



Are there contaminants in our drinking water?

As State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, metals including lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, synthetic organic compounds and radioactive materials like Uranium and Radium. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently, though most of our data represented here is from 2024 analysis.

It should be noted that all drinking water, including bottled drinking water, should be reasonably 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 Safe Drinking Water Hotline at 800-426-4791 or the Albany County Health Department at 518-447-4620.



Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg.) (Range)	Unit of Measure	MCLG /MRD LG	Regulatory Limit (MCL, MRDL,TT or AL)	Likely Source of Contamination
Microbiological Contaminants:							
Total Coliform ₁	No	10/16/2024 & 10/31/2024	Two Positive sample	N/A	0	MCL 5% or more Positive of sites sampled per month	Naturally present in the environment.
Combined Filter Effluent Turbidity ₂	No	Five days per week	0.07 (0.03 – 0.22)	Yearly Avg. (Min-Max) NTU	N/A	TT < 1.0 NTU	Soil runoff.
	No	Six times daily	100 % <0.3	NTU	N/A	TT 95% of samples <0.30	Soil runoff.
Distribution Turbidity ₃	No	4/2/2024	0.52 (0.08 - 9.28)	Yearly Avg. (Min-Max) NTU	NA	MCL 5 NTU	Soil run off
Inorganic Contaminants:							
Color	No	Five days per week	3.82 (1.0-8.0)	Color units	N/A	15.0 Color units	Natural metallic ions, humic and fulvic acids, dissolved plant components and treatment chemicals.
Odor	No	Five days per week	1.83 (1-3)	Threshold units	N/A	3 Threshold units	Decaying vegetation and metabolites of microbiota and disinfectants.
Alkalinity	No	Five days per week	45.6 (41.2-50.8)	mg/L of CaCO ₃	N/A	N/A	Naturally occurring
*Total Hardness	No	Five days per week	48.1 (42.9-57.8)	mg/L of CaCO ₃	N/A	N/A	Sedimentary rocks (lime stone) seepage, runoff from soil and treatment process.
Chloride	No	Five days per week	23.3 (21.4-27.6)	mg/L	N/A	MCL 250 mg/L	Soils, road salt.
Sodium	No	06/18/20 24	14.0	mg/L	NA	see Health Effects ₄	Occurs naturally in almost all waters.
Sulfate	No	Monthly	5.97 (4.77-7.13)	mg/L	N/A	MCL 250 mg/L	Occurs naturally in almost all waters.
Barium	No	06/18/20 24	0.0036	mg/L	2	2 mg/L	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Calcium	No	06/18/20 24	17.0	mg/L	N/A	N/A	

Coppers ₅	No	Jan-June 2024 July-Dec 2024	38.0 (0.81-69.5) 28.8 (2.62-95.7)	µg/L	1300	AL 1300 µg/L	Corrosion of household plumbing systems; Erosion of natural deposits
Lead ₆	No	Jan-June 2024 July-Dec 2024	10.6 (0.42-31.8) 16.1 (0.49-27.6)	µg/L	0	AL 15 µg/L	Corrosion of household plumbing systems; Erosion of natural deposits
Iron	No	Monthly	14.9 (3.07-50.8)	µg/L	NA	300 µg/L ¹¹	Naturally Occurring
Manganese	No	Monthly	20.9 (ND-129.2)	µg/L	NA	300 µg/L ¹¹	Naturally Occurring, may indicate landfill contamination
Perfluorooctanesulfonic - acid	No	6/18/2024	2.0	ng/L	NA	4 ng/L	Released into the environment from widespread use in commercial and industrial applications.
Disinfection Byproducts:							
Total Trihalomethane	No	Quarterly	47.85 (35.9-60.6)	µg/L	N/A	MCL 80 µg/L LRAA ₇	By-product of drinking water chlorination.
Total Haloacetic Acids	No	Quarterly	23.2 (13.323.9)	µg/L	N/A	MCL 60 µg/L LRAA	By-product of drinking water chlorination
Haloacetic Acids HAA5	No	2019-2020	19.5 (13.9-34.0)	µg/L	N/A	Not Regulated	UCMR ₄ ⁹ Disinfection byproducts,
Haloacetic Acids HAA6	No	2019-2020	2.20 (1.15-34.0)	µg/L	N/A	Not Regulated	UCMR ₄ Disinfection byproducts,
Haloacetic Acids HAA9	No	2019-2020	21.7 (15.4-37.1)	µg/L	N/A	Not Regulated	UCMR ₄ Disinfection byproducts,
Total Organic Carbon	No	2-3 days per week	1.73 (1.48-1.99)	mg/L	N/A	TT	Naturally present in the environment
Chlorine Residual Entry Point	No	Six times daily	1.08 ¹⁰ (0.66-1.60)	mg/L	N/A	4.0 (MRDL)	Added to drinking water to inhibit microbial growth.
Radionuclides:							
Alpha particles	No	Weekly	0.47 (ND-1.2)	pCi/L	NA	15 pCi/L	Erosion of natural deposits.
Beta particles	No	Weekly	0.88 (ND-1.80)	pCi/L	NA	50 pCi/L ₈	Erosion of natural deposits.

NOTES:

¹ Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Total coliforms were detected only in two samples in 2024, one sample on October 16th and the second sample on October 31st 2 out of 134 routine samples, less than 1.5% of the total samples for that month. Additional samples were subsequently collected and total coliforms were not detected in any of those repeat samples. Since total coliforms were detected in less than 5% of the samples collected during the month, the system did not have a MCL violation. It should be noted that E. coli, associated with human and animal fecal waste, was not detected in any of the samples collected.

- ² Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest turbidity measurement 0.20 NTU occurred on 1/10/2024 with annual average 0.08NTU (min 0.03 – max 0.20NTU). State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.30 NTU.
- ³ Distribution turbidity is a measure of the cloudiness of the water found in the distribution system. We monitor it as high turbidity can hinder the effectiveness of disinfectants and it is a good indicator of water quality. A distribution system turbidity violation occurs when the monthly average of the results of all distribution samples collected in any calendar month exceeds the MCL. Our single highest distribution turbidity measurement detected was 9.28NTU on April 2nd 2024 with monthly average 0.69 NTU, which was far below the state maximum contaminant level.
- ⁴ Water containing more than 20 mg/L of sodium should not be used for drinking water by people on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.
- ⁵ The level presented represents the 90th percentile of the 73 & 79 sites tested in Jan-June 2024 & July-Dec.2024 respectively. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, the 90th percentile values were 38.0 & 28.8 µg/L with the highest detected values of 69.5 and 62.4 µg /L. The action level (1300µg/L) for copper was not exceeded at any of the sites tested.
- ⁶ The levels presented 10.6 and 16.1µg /L represents the 90th percentile of the 73 and 79 samples collected in Jan-June 2024 and July-Dec. in 2024 respectively. The action level (15µg/L) for lead was exceeded at four (4) of the 73 sites with highest level detected 31.8 µg/L and thirteen (13) of the 79 sites tested with highest level detected was 27.8 µg/L.
- ⁷ Locational Running Annual Averages for total Trihalomethane and Haloacetic acid
- ⁸ The State considers 50 pCi/L to be the level of concern for beta particles.
- ⁹ Unregulated contaminants Monitoring Rule 4
- ¹⁰ Compliance is based on a running arithmetic average, computed quarterly, of monthly averages of all samples collected by the system. If the running annual average exceeds the MRDL, the system is in violation and must notify the public.
- ¹¹ If Iron and manganese are present, the total concentration of both should not exceed 500µg/l
* Not certified

DEFINITIONS:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible.

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

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

Maximum Residual Disinfectant Level (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 (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants for control of microbial contaminants.

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

Non-Detects (ND): Laboratory analysis indicates that the constituent is below detection level or not present.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Milligrams per Liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million (ppm)).

Micrograms per Liter (µg/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion (ppb)).

Nanograms per liter (ng/l): corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picocuries per Liter (pCi/L): A measure of radioactivity in water.

NON-DETECTED CONTAMINANTS

According to State regulations, the Albany Water Board routinely monitors your drinking water for various contaminants. Contaminants that were analyzed for but were found to be below detection limits are not included in this report, however, all required testing was completed according to Local, State, and Federal laws. {A list of non-detected contaminants can be found on City of Albany, Department of Water and Water Supply Website.} The contaminants that were detected in your drinking water are included in the Table of Detected Contaminants. Additionally, your water is tested from various locations in the distribution system for coliform bacteria four days per week along with free chlorine residuals and turbidities.

WHAT DOES THIS INFORMATION MEAN?

As you can see from the table, our system had no violations in the reporting year 2024. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level for lead, 15.0 µg/L, was exceeded in 2024 for standard sampling conducted in July-Dec.

The water department conducted lead and copper standard testing twice in 2024 on select 73 residences in Jan-June and 79 in July-Dec. Most of the residences for 2024 testing were included from the 2023 lead and copper compliance list and remainder locations were picked after a survey to include single family residences from all wards in the City of Albany and were confirmed with Lead present at their meters. The 90th percentile of the samples collected in Jan-June was 10.6 µg/L for lead, below the action level of (15µg/L) with total four (4) locations above action level of the 73 sites tested. The highest level detected was 31.8 µg/L at one location. The 90th percentile of the samples collected in July-Dec. was 16.13 µg/L for lead, exceeded the action level of (15µg/L) with total thirteen (13) locations above action level of the 79 sites tested. The highest level detected was 27.6 µg/L at one location.

The City of Albany Water Department has implemented a program to minimize lead levels in your drinking water. This program includes: 1) the adjustment of pH and alkalinity levels to minimize corrosion; 2) the replacement of lead service lines as distribution lines are replaced; and, 3) public education.

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 in home plumbing. City of Albany 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 Department of Water and Water Supply @ 518 434 5300. 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>.

According to EPA and NYS Regulations, the City of Albany, being a large water system, requires standard monitoring of lead and copper from 60 single family homes with LSLs twice a year starting in July 2023. This effort will provide the Water Department with information to help us direct our lead service replacement program in the most effective manner and to determine the optimum corrosion control treatment, so that the State can designate the minimum/range of WQPs (Water Quality Parameters).

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We are required to continually monitor your drinking water daily, monthly, quarterly, annually or after multiple years for different contaminants and report to Local, State and Federal authorities. During 2024, our system had one reporting violation related to an action level exceedance on December 19, 2024, which was calculated at 12:36 PM. Our system failed to notify the public of the lead action level exceedance in an approved manner within 24 hours of learning of the exceedance, which is a violation of the public notification requirements. This violation was resolved when we notified the public of the exceedance on Friday, December 20, 2024 at 3:07 PM. We are now in compliance with the requirements.

In 2020 NYS adopted new Maximum Contaminant levels (MCLs) for Perfluorooctanoic acid (PFOA), Perfluorooctane Sulfonate (PFOS) and 1, 4-Dioxane. Initially we were required to monitor your drinking water for these contaminants on quarterly basis for one year. All the results of this initial monitoring were below detection limits for all three contaminants and are an indicator that your drinking water meets all health standards. Now we monitor these PFAs and 1, 4 Dioxane every 18th months along with other synthetic organic compounds.

INFORMATION ON LEAD SERVICE LINE INVENTORY

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by visiting our website at:

<https://lead-service-line-inventory-3-albanynwater.hub.arcgis.com/>

In 2024, 373 full lead water services were replaced. The Albany Water Board provided 200 grants totaling \$319,000 to property owners replacing lead water services and replaced several full blocks of lead services before street paving took place. A citywide inventory of water service lines and current replacement projects can be found through albanynny.gov/lead.

INFORMATION ON UNREGULATED CONTAMINANTS

The Safe Drinking Water Act (SDWA) establishes periodic monitoring (almost every 5 years) through the Unregulated Contaminants Monitoring Rule (UCMR) to assess occurrence of select constituents from the Contaminant Candidate list for potential regulatory consideration. UCMR4, the 4th cycle of UCMR monitoring in 2019-2020, we were required to collect and analyze drinking water samples for 30 unregulated contaminants. Most of the contaminants were below detection level except for some of the new Brominated Haloacetic acids which were monitored for 4 quarters from 8 different distribution locations. The averages with Minimum and Maximum values are listed in the detected contaminants table. If you are interested and want to learn more you may contact Laboratory Director, Dr. Rifat Hussain at 518-635-4408.

In 2022 our system also performed additional monitoring (outside of EPA's UCMR program) for unregulated Perfluoroalkyl and Polyfluoroalkyl Substances requested by the State. Unregulated perfluoroalkyl substances that were detected as part of PFOA/PFAS sampling are reported in the table below.

Unregulated Perfluoroalkyl Substances

Contaminants	Violation Yes/No	Date of Sample	Level Detected (Avg.) (Range)	Unit Measurement	MCLG /MRDLG	Regulatory Limit (MCL, MRDL,TT or AL)	Likely Source of Contamination
Perfluorohexanoic acid	No	12/08/2022	0.46 J ₁	ng/L	NA	Not Regulated	Released into the environment from widespread use in Commercial and industrial applications.
Perfluorobutanoic acid	No	12/08/2022	0.68 J	ng/L	NA	Not Regulated	
Perfluoropentanoic acid	No	12/08/2022	0.32 J	ng/L	NA	Not Regulated	
Perfluorooctanoic acid	No	12/08/2022	0.68 J	ng/L	NA	Not Regulated	

J₁. Notifies estimated concentration above the method detection limit but below the reporting limit.

The City of Albany water system also monitored in 2023-2024 a set of unregulated 29 PFAs and one metal, lithium under UCMR5 for four (4) quarters and none of the unregulated PFAs or Lithium was detected in your drinking water.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded State and Federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WHY SAVE WATER TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life.
- Saving water lessens the strain on the water system during a dry spell or drought helping to avoid severe water use restrictions so that essential firefighting needs are met.
- You can play a role in conserving water by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:
 - Run only full loads in dishwashers and washing machines.
 - Turn off the tap when brushing your teeth.

- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you may save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons per year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

2024 SYSTEM IMPROVEMENTS

- Feura Bush Filtration Plant Valves and Actuators Replacement construction completed.
- Feura Bush Lime Feed System Replacement design phase completed.
- Feura Bush Filtration Plant Aeration Building Rehabilitation construction proceeded.
- Feura Bush Filtration Plant Lime Feed Building and Maintenance Building design completed.
- Basic Creek Reservoir Dam Safety Improvements detailed design proceeded.
- Rensselaer Lake Dam Safety Improvements detailed design proceeded.
- Lead Service Line Replacement grants and financing awarded.
- Lead Service Line (LSL) inventory Grant awarded.
- Fluoridation preliminary design and grant application completed.

REFERENCES

- Water Hardness Map: Table adapted from [h2odistributors.com](https://www.h2odistributors.com) Water Treatment Fundamentals, prepared and distributed by the <https://www.h2odistributors.com/info/hardwater-map/>
- - <https://www.usgs.gov/special-topics/water-science-school/science/hardness-water> | <https://wqa.org/learn-about-water/#What%20is%20hard%20water?>
- - Average Residual Chlorine Levels: Water Quality Association; https://wqa.org/wpcontent/uploads/2022/09/2014_Chloramine.pdf
- - Front Cover Photo of Alcove Reservoir Courtesy of LightHawk

CLOSING

Thank you for allowing us to continue to provide you and your family with quality drinking water with no water quality violation in 2024. We continually undertaking measures to maintain and improve our water quality through our treatment and monitoring processes. We ask that all of our customers help us protect our water sources, which are the heart of our community. Please call our office at 518-434-5300 if you have questions concerning your drinking water.

WATER IS LIFE



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