

ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By
New Britain
Water Department

PWS ID#: CT0890011

”هذا التقرير يحتوي على معلومات مهمة تتعلق بمياه الشفة (أو الشرب).
ترجم التقرير , أو تكلم مع شخص يستطيع أن يفهم التقرير.“

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

此份有关你的食水报告,
内有重要资料和讯息,请找
他人为你翻译及解释清楚。

Ta broszura zawiera wazne informacje dotyczace jakosci wody do picia. Przetlumacz zawartosc tej broszury lub skontaktuj sie z osoba ktora pomoze ci w zrozumieniu zawartych informacji.

Questo rapporto contiene informazioni inportanti che riguardano la vostra aqua potabile. Traducetelo, o parlate con una persona qualificata in grado di spiegarvelo.

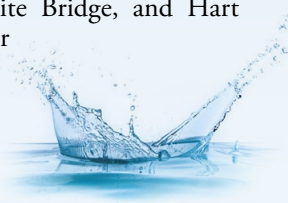


We Are Committed

Our Honorable Mayor Erin E. Stewart and the New Britain Board of Water Commissioners are proud to present this year's annual water quality report. The report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our goal is to continue to provide our customers with a safe and dependable supply of drinking water. We are always working on improving the water treatment process and protecting our water resources. We are committed to ensuring the quality of your water.

Where Does My Water Come From?

The customers of New Britain Water Department are fortunate to receive water from many reservoirs and wells located throughout western-central Connecticut. The Shuttle Meadow Water Treatment Plant is supplied by the Shuttle Meadow and Wassel Reservoirs. These reservoirs are replenished by the Whigville, Wolcott, White Bridge, and Hart Ponds Reservoirs as well as the upper and lower White Bridge well fields. In times of drought, the New Britain Water Department can withdraw water from the Metropolitan District's (MDC) Nepaug Reservoir.



Important Health Information

Sources of lead in drinking water include corrosion of household plumbing systems and erosion of natural deposits. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Sources of copper in drinking water include corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

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, may be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. The 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.



Water Treatment Process

Our treatment processes consist of a series of steps. First, raw water is drawn from our sources and disinfected by ozone gas, which is used to protect against bacteria, viruses, and cysts such as *Giardia* and *Cryptosporidium*. Ozone has the added benefit of oxidizing metals and removing taste and odor compounds from the water. The second step in the process is clarification. A coagulant is added and slowly mixed into the water, allowing solids to settle, which removes most of the impurities. After settling, the water is filtered through granular activated carbon, which removes organic compounds. Finally, the water flows through a layer of fine sand to remove smaller suspended particles.

The water is disinfected and adjusted to control corrosion, and fluoride is added to promote dental health. The water is then sent to a large tank to allow the required chemical reactions to take place prior to being sent out to you, our customers.

White Bridge Well Field Project

Access to clean potable water is essential for our daily lives, and so we have placed a strong emphasis on fortifying our systems and developing a reliable backup plan, especially in light of the recurring droughts we have been experiencing almost every decade. Recently, the Common Council passed a resolution approving a \$40 million investment that will guarantee we will never again face the threat of a water shortage. It will provide us with the means to manage our own water supply in emergencies, ensuring that we are not at the mercy of MDC, which never misses a chance to take advantage of desperate times by hiking up its charges. This project is a crucial step in securing a stable and independent water supply for our community.

This project will rehabilitate the White Bridge Waterworks Facility, 303 acres of pristine watershed in Bristol that our city has owned for over 100 years. This critical investment will bring the facility up to modern standards and regulations and create a new, reliable drinking water source for the New Britain Water Department and our surrounding community. Once completed, this well field will be able to supply over eight million gallons of water per day to our city.

QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Water and Sewer Chief of Operations Patrick Kearney at (860) 826-3546.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:



Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Turbidity has no health effects; however, it can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms, including bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Source Water Protection

The staff of the New Britain Water Department perform the necessary operational and maintenance activities for the facilities and the distribution system. We also complete all required water quality sampling. Crews patrol and inspect the watersheds daily and periodically test the water quality of the reservoirs to identify any potential contamination, making sure we provide a safe and adequate water supply to our customers.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council (NRDC), bottled water is not necessarily cleaner or safer than most tap water. In fact, about 40 percent of bottled water is actually just tap water, according to government estimates.

The Food and Drug Administration (FDA) is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.



People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water. For a detailed discussion of the NRDC study results, go to goo.gl/Jxb6xG.

Community Participation

You are invited to participate in our public forum and voice any concerns or questions you may have about your drinking water. The Board of Water Commissioners meets on the third Wednesday of every month. Meetings begin at 6:30 p.m. at 50 Caretaker Road.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through them.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water to prevent sediment accumulation in your hot water tank. Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

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.

REGULATED SUBSTANCES									
SUBSTANCE (UNIT OF MEASURE)		YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Barium (ppm)		2024	2	2	0.012	NA	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Chloride (ppm)		2024	250	250	20.45	ND–20.45	No	Road salt; fertilizers; sewage; water softener discharge; saltwater intrusion in coastal environments	
Chlorine (ppm)		2024	[4]	[4]	1.08	0.75–1.08	No	Water additive used to control microbes	
Fluoride (ppm)		2024	4	4	0.78	0.44–0.78	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
Haloacetic Acids [HAAs] (ppb)		2024	60	NA	20.85	7.17–20.85	No	By-product of drinking water disinfection	
Nitrate (ppm)		2024	10	10	0.025	ND–0.025	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Nitrite (ppm)		2024	1	1	0.0038	ND–0.0038	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Total Organic Carbon [TOC] (removal ratio)		2024	TT ¹	NA	1.53	1.2–1.53	No	Naturally present in the environment	
TTHMs [total trihalomethanes] (ppb)		2024	80	NA	53.17	26.1–53.17	No	By-product of drinking water disinfection	
Turbidity ² (NTU)		2024	TT	NA	0.56	NA	No	Soil runoff	
Turbidity (lowest monthly percent of samples meeting limit)		2024	TT = 95% of samples meet the limit	NA	100	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)		2023	1.3	1.3	0.01	ND-0.01	0/32	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)		2023	15	0	4	ND–4	1/32	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	20.45	ND–20.45	No	Runoff/leaching from natural deposits	
Copper (ppm)		2023	1.0	NA	0.03	ND–0.03	No	Corrosion of household plumbing systems; erosion of natural deposits	
Fluoride (ppm)		2024	2.0	NA	0.78	0.44–0.78	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
pH (units)		2024	6.5-8.5 ³	NA	9.51	9.16–9.51	No	Naturally occurring	
Sulfate (ppm)		2024	250	NA	4.7	ND–4.7	No	Runoff/leaching from natural deposits; industrial wastes	

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2024	10.6	ND–10.6	Chemicals used for treatment

¹ The value reported under Amount Detected for TOC is the lowest ratio of percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

² Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

³ The New Britain Water Department is required to maintain a pH level in the range of 9.3 to 9.7 for corrosion control.

Lead in Home Plumbing

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 materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead, 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 from the Safe Drinking Water Hotline at (800) 426-4791 or epa.gov/safewater/lead.

The U.S. EPA has required the New Britain Water Department to prepare a complete inventory of all water service lines that bring drinking water to our customers' homes. The goal of the program is to identify lead service lines that may be in the system. The department is asking all customers to help us identify the materials of their lines. Please contact us at (860) 826-3532 for more information and to learn how you can help.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be found at newbritainct.gov/services/water-department/servicelineinventory. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

New Britain Flush

The New Britain Fresh Line Upgrades for Sanitary Health (NB FLUSH) program is a massive investment in repairing and replacing the city's 100-year-old stormwater and sewer line system. This program aims to reduce municipal and taxpayer costs associated with stormwater infiltration into sewer lines, protect public health by reducing sewage backups, protect the environment by eliminating wastewater runoff, and promote community growth by increasing sewer capacity for expanded housing and economic development.

NB FLUSH is a three-part program that deals with the underground infrastructure of the water utilities of the city: drinking water, sewage wastewater, and stormwater. The program includes a long-term plan to rehabilitate the existing sanitary sewer system by reducing the amount of inflow and infiltration of groundwater and stormwater into the sanitary sewers so the city can maintain rates and reduce costs. The U.S. EPA has mandated that New Britain reduce flows to the Matabassett wastewater treatment facility; processing this water is expensive and puts a strain on the local water environment.

The third part of NB FLUSH is related to the stormwater sewer, which is a separate system. Our stormwater system is old and too small to deal with the large storms that have occurred in the past few years. The stormwater system needs to be evaluated, and a long-term plan must be developed. To date, one of the projects identified in the pipeline for stormwater system improvements is in construction to address flooding concerns in the area of Overlook Avenue.

NB FLUSH is a long-term program, and a nearly \$90 million investment is being made by the City of New Britain to improve the lives of its residents for many years to come.



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 which a water system must follow.

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.

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

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams 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.

New Britain's New Water Consumer Portal

The City of New Britain is excited to offer a consumer water portal to empower you to monitor and manage your water consumption from any device with internet access 24/7. The Neptune My360 consumer portal provides utility customers with a convenient tool to proactively monitor their water consumption. Direct access to water consumption data gives utility customers the ability to track their account activity and better manage usage to reduce expenses and aid conservation efforts. Customers are empowered to set a usage threshold for budgeting and conservation purposes, create out-of-town alerts for greater peace of mind, receive real-time notifications about possible leaks and anomalies, and add and manage additional meters and properties. You can easily access the My360 consumer portal through a desktop, tablet, or smartphone with internet capabilities. The user-friendly design displays important consumption information in graphs and charts that can be viewed and understood at a glance.

The City of New Britain Consumer Water Portal offers the following benefits:

- Easily view and manage your properties' water usage 24/7.
- Access information from any desktop, laptop, tablet, or mobile device.
- Monitor multiple properties from one account.
- Manage multiple meters to get a better understanding of your water usage.
- Set out-of-town alerts to monitor consumption and detect potential leaks.
- Create threshold alerts to set a water budget, help save water, and eliminate bill surprises.

You can sign up at <https://newbritainct.my360-app.com> or by scanning the QR code below.

Activate your City of New Britain portal account today, or update your existing account. You will need your account number and either your full name or street address. If you need assistance setting up an account, please contact our Water Billing Department at (860) 826-3540.



Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use three to six gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- 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 can 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 an invisible toilet leak. Fix it and you save more than 30,000 gallons a 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.

Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit bit.ly/3leRyXy.

Source Water Assessment

An assessment of New Britain's source water was completed by the Department of Public Health, Drinking Water Section. The updated assessment report can be found on the Department of Public Health's website at dir.ct.gov/dph/Water/SWAP/Community/CT0890011.PDF. The assessment found that one of our water sources has a high susceptibility to potential sources of contamination because it is located in an urban setting. Even though no contaminants have ever been detected there, the department is required to make this information public.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.



The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit bit.ly/3Z5AMm8.