



ANNUAL WATER QUALITY REPORT

Reporting Year 2023

“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 ważne informacje dotyczące jakości wody do picia. Przetłumacz zawartość tej broszury lub skontaktuj się z osobą która pomoże ci w zrozumieniu zawartych informacji.

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



**Presented By
New Britain
Water Department**



PWS ID#: CT0890011

We Are Committed

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, 2023. 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.



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 perfluorooctane sulfonic 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

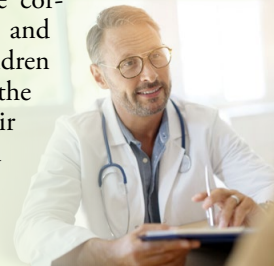
Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please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

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.

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 (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.

Source Water Protection

The staff of the New Britain Water Department patrols and inspects its watersheds daily and periodically tests the water quality of its reservoirs to identify any potential contamination.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Water Director Ramon Esponda, P.E., M.E., at (860) 826-3546.

What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water is needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water is used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water is required to produce one quart of milk, and 4,200 gallons of water is required to produce two pounds of beef.

According to the U.S. EPA, the average American uses over 180 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet, twice the global per capita average. With water use increasing sixfold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish. To check out your own water footprint, go to www.watercalculator.org.

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 four 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.

Water Treatment Process

Our treatment process consists of a series of steps. First, raw water is drawn from our water sources and disinfected by ozone gas, which is used to protect against *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, where a coagulant is added and slowly mixed into the water, allowing solids to settle to remove most impurities. After settling, the water is filtered through granular activated carbon, which removes organic compounds. Next, the water flows through a layer of fine sand to remove smaller suspended particles. The water is then disinfected and adjusted to control corrosion within the distribution system, and fluoride is added to promote dental health. Finally, the water is sent to a large tank to allow the required chemical reactions to take place prior to being sent out to you, our customers.

NB 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 main 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, sewer water, and stormwater. It 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 that the city can maintain rates and contain costs. The U.S. EPA has mandated that New Britain reduce flows to the Mattabassett wastewater treatment facility. The processing of this water is expensive and puts a strain on the local environment.

The U.S. EPA has also required New Britain Water Department to complete an inventory of all water service lines that carry 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 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.

The third part of NB FLUSH is related to the stormwater sewer system, which is separate. Our stormwater system is old and too undersized to deal with the large storms that have occurred in the past few years. It needs to be evaluated, and long-term planning must be performed. To date, two projects are in the pipeline for stormwater system improvements in the Overlook and Allan Street areas, which have problems with flooding.

NB FLUSH is a long-term program and a nearly \$90-million investment that the city of New Britain is making to improve the lives of residents for many years into the future.

Lead in Home Plumbing

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 and removing lead pipes, but we cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk.

Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. Contact us if you are concerned about lead in your water and 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 epa.gov/safewater/lead.

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.



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.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

About Our Violation

During summer 2023, we did not monitor for the presence of synthetic organic chemicals (IOCs) in our reservoirs. We were notified of this violation by the Connecticut Department of Public Health.

We do not believe that missing this monitoring requirement had any impact on public health and safety since the finished water leaving the treatment plant was tested and no IOCs were detected. In the history of our testing, none of these compounds have ever been detected. We have already taken the steps to ensure that adequate monitoring and reporting will be performed in the future so that this oversight will not be repeated.

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 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 nothing has ever been detected there, the department is required to make this information public.

At present there are no known vulnerabilities to source water contamination in any of our reservoirs. The water department inspects and monitors the water sheds and surrounding areas for any potential sources of pollution, additionally the water quality is tested periodically for compliance with water quality standards.

Information on the Internet

The U.S. EPA (<https://goo.gl/TFAMKc>) and CDC (cdc.gov) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. The Connecticut Department of Public Health website (portal.ct.gov/DPH) provides complete and current information on water issues in Connecticut, including valuable information about our watershed.

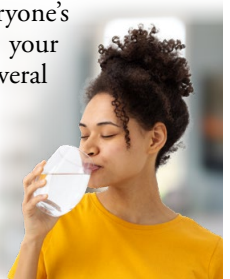
Where Does My Water Come From?

The customers of New Britain Water Department are fortunate to receive water from many reservoirs and wells located throughout 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 and reservoirs as well as the upper and lower White Bridge well fields. In times of drought, the New Britain Water Department withdraws water from the Metropolitan District's Nepaug Reservoir.

Safeguard Your Drinking Water

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

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



Test Results

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



The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are 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)	2023	2	2	0.02	ND–0.02	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2023	[4]	[4]	1.07	0.69–1.07	No	Water additive used to control microbes
Fluoride (ppm)	2023	4	4	0.75	ND–0.75	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2023	60	NA	17	4–17	No	By-product of drinking water disinfection
Nitrate (ppm)	2023	10	10	0.49	ND–0.49	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Organic Carbon [TOC] (ppm)	2023	TT ¹	NA	1.52	1.2–1.52	No	Naturally present in the environment
TTHMs [total trihalomethanes]– Stage 2 (ppb)	2023	80 ²	NA	85 ³	11–85	No	By-product of drinking water disinfection
Turbidity ⁴ (NTU)	2023	TT	NA	0.12	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	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–0.03	0/34	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2023	15	0	4	ND–20	1/31	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

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

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

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.

SECONDARY SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2022	250	NA	23	ND-23	No	Runoff/leaching from natural deposits
pH (units)	2023	6.5-8.5	NA	9.7 ⁵	9.2-9.7	No	Naturally occurring
Sulfate (ppm)	2023	250	NA	6	ND-6	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)	2023	15	NA	Chemicals used for treatment

¹ The result of 85 PPB was taken at a location near the end of our distribution system during the month of August when water temperatures are high, the longtime running average was acceptable and is used for compliance with this requirement. (DPBS)

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 in the range of 9.3 to 9.7 for corrosion control. (pH)

⁴ 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.

⁵ New Britain Water Department is required to maintain a pH in the range of 9.3 to 9.7 for corrosion control.

Public Notification

Important Information About Your Drinking Water

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Date: 5/1/2024 PWSID: CT0890011

To: The Customers/Residents of New Britain Water Department

From: Ray Esponda PE, ME Deputy Director of New Britain Public Works

Our public water system recently violated drinking water monitoring and/or reporting requirements. As a supplier of public drinking water, we are required to monitor the water quality of our water supply to ensure that it meets the current drinking water standards. Failure to conduct monitoring and/or report results of such monitoring to the State Department of Public Health Drinking Water Section constitutes a violation. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. We did not complete the monitoring or did not report the results for the requirement(s) listed below:

Surface Water Inorganic Chemicals (WSF ID: 2151(Shuttle Meadow Reservoir); Monitoring Period: January 1, 2023 - December 31, 2023)

Surface Water Inorganic Chemicals (WSF ID: 2153(Whigville Reservoir); Monitoring Period: January 1, 2023 - December 31, 2023)

Surface Water Inorganic Chemicals (WSF ID: 2156(White Bridge Brook Diversion); Monitoring Period: January 1, 2023 - December 31, 2023)

Surface Water Inorganic Chemicals (WSF ID: 2155 (Wasel Reservoir); Monitoring Period: January 1, 2023 - December 31, 2023)

What is being done?

The following areas have been affected:

The reservoirs were the only areas affected.

The following steps are being taken to correct this violation:

The water from these reservoirs was tested in April 2024 and met all mandated standards.

We expect to return to compliance or resolve the situation by 4/27/2024.

If you have any questions please contact Ray Esponda at 860-826 -3546 or by mail at 1000 Shuttle Meadow Avenue, New Britain, CT, 061052

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