

New Brunswick, New Jersey Water Quality Report 2024 For Calendar Year 2023

Regarding This Report

Landlords must distribute this information to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section 3 of P.L. 2021, c. 82 (C.58:12A-12.4 et seq.).

Sources of Drinking Water

Both tap water and bottled water may come from groundwater (springs, wells) or surface waters (rivers, lakes, ponds, streams, and reservoirs). 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 activity.

Surface waters are the source of the supply for the City of New Brunswick. Water is pumped to the New Brunswick Water Treatment Plant from the following two locations: Weston's Mill Pond, which is fed by the Lawrence Brook, and the Delaware and Raritan Canal. The City will utilize the two different sources at various times of the year depending on raw water quality in order to provide the highest quality water delivered to New Brunswick customers. The water is filtered and disinfected before distribution.

The New Jersey Department of Environmental Protection (NJDEP) completed and issued the Source Water Assessment Report and Summary for this public water system in 2004. It is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609.292.5550.

The assessment found medium to high susceptibility to contamination by pathogens, nutrients, pesticides, inorganics and disinfection by-products; and low susceptibility to radionuclide and radon contamination. This is typical for surface water sources in developed areas.

If a system is rated highly susceptible for a contamination category, it does not mean a customer is or will be consuming contaminated drinking water. **The rating reflects the potential for contamination of source water, not the existence of contamination.** Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels.

Susceptibility Ratings for New Brunswick Water Department Sources

The Source Susceptibility Ratings table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

Source Susceptibility Ratings Table

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors					
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L			
Wells - 0																											
GUDI (Ground Water Under the Direct Influence of surface water) - 0																											
Surface water intakes -2	2			1	1		2			2			2			2			2			2	2				

- Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
- Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.
- Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.
- Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to <http://www.nj.gov/dep/rpp/radon/index.htm> or call (800) 648-0394.
- Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Water System Improvements

The City of New Brunswick is committed to providing water that meets or exceeds all Federal and state requirements for drinking water. In general, the water system is in good condition as a result of rehabilitation and improvements to the water system.

Concerning decisions that may affect the quality of water, the opportunity for public participation is provided during the regularly scheduled council meetings held on the first and third Wednesday of every month at 6:30 pm and 5:30 pm during the summer.

Compliance with Drinking Water Standards

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA), and the NJDEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems and require water suppliers to monitor and treat for potentially harmful contaminants. Bottled water is similarly regulated by the Food and Drug Administration and must provide the same protection for public health as tap water. Our water, which is treated according to the EPA's and NJDEP's regulations, continually surpasses the quality standards set by those agencies.

Cryptosporidium

Cryptosporidium is a protozoan found in untreated surface waters throughout the United States (the organism is generally not present in a ground water source). Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, people with severely weakened immune systems have a risk of developing life-threatening illness. We encourage such people to consult their doctors regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it is spread through means other than drinking water.

USEPA issued a new rule in 2006 that requires systems with higher Cryptosporidium levels in their source water to provide additional treatment. In 2023, New Brunswick monitored for Cryptosporidium, a microbial parasite commonly found in surface water, and found some evidence of these microbes in the raw, untreated source water. Levels ranged from non-detect to 0.45 oocysts per liter. Although this organism is present, it is at levels low enough that no supplemental treatment is required by the New Brunswick water treatment facility, per USEPA standards. Current test methods do not enable us to determine if these organisms are capable of causing disease. We are not aware of a specific source of Cryptosporidium

Water Quality Data Table

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Contaminant	Unit	MCL	MCLG	Maximum Detected Level	Range	Compliance Achieved	Violation	Major Sources in Drinking Water
Turbidity ⁽¹⁾	NTU	TT:1 NTU; 95% samples/month below 0.3 NTU	N/A	0.78	99% <0.3 Average = 0.09	Yes	No	Soil Runoff
Disinfectants and Disinfection By-products								
Chlorine ⁽²⁾	ppm	MRDL & MRDLG = 4.0		Highest RAA: 1.2	0.03 - 2.02	Yes	No	Water additive used to control microbes
Total Trihalomethanes (TTHM) ⁽²⁾	ppb	80	N/A	Highest LRAA: 60	22 - 103	Yes	No	By-product of drinking water disinfection
Five Halo acetic Acids (HAA5) ⁽²⁾	ppb	60	N/A	Highest LRAA: 45	21 - 58	Yes	No	By-product of drinking water disinfection
Inorganic Contaminants								
Antimony	ppb	6	6	0.3	N/A	Yes	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	ppm	2	2	0.03	N/A	Yes	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nickel	ppb	N/A	N/A	0.69	N/A	Yes	No	Erosion of natural deposits
Nitrate	ppm	10	10	0.13	N/A	Yes	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Lead and Copper								
Lead	ppb	AL=15	0	90th percentile	Jan-Jun: 1.7 Jul-Dec: 1.4 No sites > AL	Yes	No	Corrosion of household plumbing systems
Copper	ppm	AL=1.3	1.3	90th percentile	Jan-Jun: 0.06 Jul-Dec: 0.03 No sites > AL	Yes	No	Corrosion of household plumbing systems; erosion of natural deposits
TOC Removal								
TOC Removal Ratio ⁽²⁾	N/A	RAA>1.0	N/A	Lowest Ratio (RAA) = 1.01	Range of Ratios: 1.01 - 1.57	Yes	No	Naturally present in the environment. The removal ratio is a measure of organic material removal, which can serve as precursors to disinfection by products
Organic Contaminants (See Violation Information in Footnote #4)								
Perfluoro nonanoic acid (PFNA) ⁽²⁾	ppt	13	N/A	Highest RAA: ND	ND - 2.2 (ND = less than 2ppt)	Yes	No	Used as a processing aid in the manufacturing of high-performance plastics that are resistant to harsh chemicals and high temperatures.
Perfluoro octanoic acid (PFOA) ⁽²⁾	ppt	14	N/A	Highest RAA: 8.9	4.5 - 16.0	Yes	No	Used in the manufacture of non-stick cookware, firefighting foam, stain-resistant coatings for upholstery and carpets, water-resistant clothing, and greaseproof food packaging.
Perfluoro octane sulfonic acid (PFOS) ⁽²⁾	ppt	13	N/A	Highest RAA: 4.4	3.0 - 5.9	Yes	No	Used in firefighting foam, metal plating, stain-resistant coatings for upholstery and carpets, water-resistant clothing, and greaseproof food packaging.
Unregulated Contaminants ⁽³⁾								
Bromide	ppb	N/A	N/A	58.2	22.9 - 58.2	Yes	No	Naturally present in the environment; road salts. Source water data presented.
Chlorate	ppb	N/A	N/A	180	84 - 180	Yes	No	By-product of drinking water disinfection
Perfluoro butanoic acid (PFBA)	ppt	N/A	N/A	11	1.9 - 11	Yes	No	Used in products to make them stain, grease, heat and water resistant
Perfluoro heptanoic acid (PFHpA)	ppt	N/A	N/A	5.0	1.9 - 5.0	Yes	No	Used in products to make them stain, grease, heat and water resistant
Perfluoro hexanoic acid (PFHxA)	ppt	N/A	N/A	6.3	2.3 - 6.3	Yes	No	Used in products to make them stain, grease, heat and water resistant
Strontium	ppb	N/A	N/A	95	84 - 95	Yes	No	Erosion of natural deposits
Vanadium	ppb	N/A	N/A	0.7	ND - 0.7	Yes	No	Erosion of natural deposits

Bromochloroacetic acid (BCAA)	ppb	N/A	N/A	4.2	1.1 - 4.2	Yes	No	By-product of drinking water disinfection
Bromodichloroacetic acid (BDCAA)	ppb	N/A	N/A	6.8	2.3 - 6.8	Yes	No	By-product of drinking water disinfection
Chlorodibromoacetic acid (CDBAA)	ppb	N/A	N/A	0.8	ND - 0.8	Yes	No	By-product of drinking water disinfection
Dibromoacetic acid (DBAA)	ppb	N/A	N/A	0.5	ND - 0.5	Yes	No	By-product of drinking water disinfection
Dichloroacetic acid (DCAA)	ppb	N/A	N/A	23.3	5.2 - 23.3	Yes	No	By-product of drinking water disinfection
Trichloroacetic acid (TCAA)	ppb	N/A	N/A	40	10.1 - 40	Yes	No	By-product of drinking water disinfection
Total Organic Carbon (TOC)	ppm	N/A	N/A	7.8	2.7 - 7.8	Yes	No	Naturally present in the environment. Organic material, which can serve as precursors to disinfection by products. Source water data presented.

Secondary Contaminants	Unit	Secondary MCL	MCLG	Maximum Detected Level	Range	Compliance Achieved	Violation	Major Sources in Drinking Water
Aluminum	ppb	200	200	130	N/A	Yes	No	Treatment Process
Manganese	ppb	50	50	10.8	1.3 - 10.8	Yes	No	Erosion of natural deposits.
Sodium	ppm	50	50	24	N/A	Yes	No	Naturally present in the environment; road salts
Zinc	ppb	5000	5000	3	N/A	Yes	No	Erosion of natural deposits; industrial discharge

Note: Secondary standards are non-mandatory guidelines to assist public water systems in managing their drinking water for aesthetic considerations such as taste, color and odor.

SOURCE WATER DATA (LT2ESWTR)

In 2023, New Brunswick continued to monitor for Cryptosporidium, a microbial parasite commonly found in surface water, and found some evidence of these microbes in the raw, untreated source water. Although this organism is present, it is at levels low enough that no supplemental treatment is required by the New Brunswick water treatment facility, per USEPA standards. Current test methods do not enable us to determine if these organisms are capable of causing disease. We are not aware of a specific source of Cryptosporidium. Please contact your water supplier for additional information.

Water Quality Data Tables

The tables list all drinking water contaminants detected during the 2023 calendar year. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data shown in the tables represent the highest result found from testing performed on samples of water taken from Jan.1 through Dec.31, 2023. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

Footnotes for Water Quality Data Tables

1. Turbidity is a measure of the cloudiness in the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
2. "Maximum Detected Level" indicated is the maximum running annual average (RAA) or Locational running annual average (LRAA). "Range" indicates the range of individual sample results.
3. Unregulated contaminants are those which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Perfluorinated compounds are widely found in the environment. EPA has identified a guidance level of 0.070 ppb for PFOA/PFOS (combined), and the New Jersey Department of Environmental Protection (NJDEP) has issued drinking water Maximum Contaminant Level (MCL) standards for PFOA, PFOS and PFNA of 14 ppt, 13 ppt, and 13 ppt, respectively. New Brunswick's results for unregulated contaminants are from data collected from 2019 through 2022, with the most recent data being posted.

Violations Information for 2023

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 your drinking water meets health standards. Please see the following violations information below for details on any non-compliance events that occurred in 2023. If you would like to receive more information regarding any of these violations, please contact New Brunswick Water Utility at (732) 418-5687 x110

- New Brunswick experienced reporting violations in 2023 for the following Organic contaminants: Ethylene Dibromide, Dibromochloropropane, 2,4-D (herbicide), Trichloropropane and Regulated PFAS contaminants. These contaminants are regulated by the New Jersey Department of Environmental Protection (NJDEP). During the 2nd quarter of 2023 and the 3rd quarter of 2023, results for these contaminants were submitted late due to collection and processing delays. Going forward, samples will be collected earlier in the quarter to ensure that results are reported to NJDEP on time. The system returned to compliance in May 2023 and again in September 2023 as a result of submitting the results at that time. In order to avoid these types of violations in the future, a dedicated person will be assigned to the task of tracking and reporting sample results.

New Brunswick received a Notice of Non-compliance from the New Jersey Department of Environmental Protection (NJDEP) in January 2024 for failure to submit their Lead Service Line Replacement (LSLR) Plan to the Bureau. New Brunswick submitted the LSLR Plan to NJDEP on May 29, 2024. In order to avoid these types of violations in the future, a dedicated person will be assigned to the task of tracking and reporting required documents.

Terms and Abbreviations

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 the control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant 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 contamination.

N/A: Not applicable.

ND: Below a reportable detected level (Non Detect)

NTU: Nephelometric Turbidity Unit

ppb (parts per billion): Comparable to one minute in two thousand years or 1 cent in \$10,000,000.00. ppt

(parts per trillion): Comparable to one minute in two million years or 1 cent in \$10,000,000,000.00. ppm

(parts per million): Comparable to one minute in two years or 1 cent in \$10,000.00.

RAA: Running Annual Average.

RUL (Recommended Upper Limit): A non-enforceable recommendation limit.

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

Health/Educational Information All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Special Consideration Regarding Children, Pregnant Women, Nursing Mothers, and Others: Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In cases of lead and nitrate, effects on infants and children are the health endpoints upon which standards are based.

Lead: 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. The City of New Brunswick is responsible for providing high quality drinking water, but 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 in your water, you may wish to have your water tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Call us at (732) 418-5687 Ext. 110 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water.

Please share this information with all the 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.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien. Para obtener una copia en Español favor llamar a La Alcaldía al 732-745-5004.