



Quality on Tap 2011

East Brunswick Consumer Confidence Report

English

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

Arabic

المعلومات في هذا التقرير تحتوي على معلومات مهمة عن مياه الشرب التي تشربها. من فضلك اذا لم تفهم هذه المعلومات اطلب من مترجمها لك.

Mandarin

這份報告是有關您飲水的重要資料。請找人翻譯，或請懂的人解釋給您聽。

Township of East Brunswick-East Brunswick Water Utility

The Water Utility is operated as a subset of your municipal government. The Mayor and the Municipal Council serve as the Board of Directors for the Water Utility and in accordance with State Law, the Utility is able to share cooperatively with other municipal services to provide economies. The Utility is to operate on a self-sufficient basis which means revenues received from the sale of water to our more than 17,600 customers will cover the operating cost, debt service and required reserves. Because the Water Utility is a public purveyor of potable water, we must comply with the Federal Safe Drinking Water Act (SDWA) requirements. Those requirements delineate certain tests which must be performed and reported each year through a Consumer Confidence Report released to the general public. East Brunswick refers to their report as “Quality on Tap,” and the information contained within is designed to help you understand where the water originates, how it is processed and delivered to East Brunswick. “Quality on Tap” is a report on the water delivered to your home. Besides the how, when and why, we report testing data, which at a minimum must be conducted. East Brunswick goes beyond the minimum data, as this report reflects testing through April 2011. The position held by the Mayor, Municipal Council and the members of the citizen’s Water Policy Advisory Committee, in conjunction with the water utility staff, is to provide you with the safest and most reliable water supply available. We hold to the precept that informed customers are our best allies in maintaining safe drinking water.



Quality Assurance

We assure our public that East Brunswick’s drinking water meets or surpasses all Federal and State Drinking Water Standards. The treatment system is designed and operated to produce water which complies with all Federal and State Primary Drinking Water Standards. The State established Maximum Contaminant Levels (MCL) which are permitted in potable drinking water. Also, the Federal EPA has established certain guidelines which are used to determine public health risk. To insure compliance with all of these standards, East Brunswick relies upon a State Certified Laboratory to conduct testing. These test results, as well as all customer complaints, are reviewed on a monthly basis by a citizen’s committee appointed by the Mayor and Municipal Council. The committee is known as the Water Policy Advisory Committee and they hold monthly meetings on the 1st Thursday of each month at the municipal building. The meetings commence at 8:00 p.m. and the general public is always invited to participate in any discussion on water quality, service, delivery or pricing. Further information can be obtained by calling for information at 732-257-8313.

East Brunswick Water Utility

25 Harts Lane
East Brunswick, N.J. 08816



Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for East Brunswick Water which is available at www.state.nj.us/dep/swap or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550. The goal of the assessment was to measure each system's susceptibility to influences by potential sources of contamination.

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 the appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 1-800-232-4636.

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can naturally pick up contaminants from animals or human activity. Contaminants which may be present in source water include:

Water Source

East Brunswick is located in what is referred to as the Raritan River Water Basin, although our raw water does not originate within the Raritan River. East Brunswick receives its water from the New Jersey Water Supply Authority which operates the Spruce Run/Round Valley Reservoir System in Hunterdon County and the Delaware and Raritan Canal Systems. The headwaters for the

Delaware and Raritan Canal System actually come from the Delaware River Basin. The Delaware River Basin is a 13,500 square mile watershed comprising portions of Delaware, New Jersey, New York and Pennsylvania. The Delaware River and its tributaries provide the water supply needs for approximately 18,000,000

people including over half of New York City which is located outside the Delaware River Basin. The Delaware River Basin receives, on average, over 40 inches of rain per year and much of this water supply is held in reservoir storage in conjunction with

Microbiological Contaminants: Microscopic living organisms such as bacteria, viruses, and parasites that, if not removed from the water supply or killed by disinfection with chlorine, may be harmful. They may come from wildlife, septic tanks, agricultural livestock, etc.

Inorganic contaminants, such as salt and metals, which can be naturally occurring or result from urban storm 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 storm water runoff, and residential uses.

Organic contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Trihalomethanes: Members of a group of organic chemicals that contain one carbon atom and three halogen atoms (chlorine, bromine, or iodine). They occur in chlorinated drinking water. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Radionuclides: Unstable atoms of elements that emit radiation. They can be naturally occurring or as a result of man's activities.

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

Secondary Maximum Contaminant Level (SMCL's): Secondary levels represent reasonable goals for drinking water quality but

a daily flow through the Delaware Raritan Canal. The flows of the tributaries and main stem of the Delaware River are regulated by the Delaware River Basin Commission (DRBC), a Federal/ Interstate Compact Agency with regulatory authority over water resources in the Basin. The water flows are guided by the framework of a 1961 Compact which was developed after a 1954 U.S. Supreme Court Decree. The Decree granted water allocations to various states and mandated certain releases from New York reservoirs to maintain flow targets in the Delaware River. The water which comes from upstate New York and the mountains of Pennsylvania flows through the many tributaries down the Delaware River and a portion of up to 100 million gallons a day, is transferred from the Delaware river through the D & R Canal to the Raritan River. It is at this point East Brunswick takes its water supply.

The two reservoirs, Spruce Run Reservoir and Round Valley Reservoir are operated in conjunction with the D & R Canal and are under the control of the New Jersey Water Supply Authority. The New Jersey Water Supply Authority contracts with various water companies to provide a guaranteed water supply. The Spruce Run Reservoir was constructed in 1963 and holds 11 billion gallons of water. The Round Valley Reservoir constructed in 1965 holds 55

are not enforceable, rather, they are intended as guidelines. Odor, color, taste and other aesthetic qualities are important factors in the public's acceptance and confidence in the public water system. States have encouraged the implementation of these SMCL's so the public will not be driven to obtain drinking water from potentially lower quality, higher risk sources.

Fluoride: Since the 1960's, by voter referendum, East Brunswick has added hydrofluosilic acid to its drinking water to maintain an optimum level of 1.0 ppm all year round.

When fluorides are supplied in a child's drinking water or diet through vitamin or other supplements, the developing primary and permanent teeth absorb protecting fluorides from the blood. This brings about a permanent strengthening of the tooth enamel's chemical structure. Fluoride added to drinking water is reported by various research to produce up to a 67% decrease in tooth decay. Once teeth have erupted, fluoridation offers less benefit. For this reason, it is important for you to know our water is fluoridated.

In order to ensure that tap water is safe to drink, EPA prescribed regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

***Haloacetic Acids (HAA5):** A group of chemicals that are formed along with other disinfection byproducts when chlorine and other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water.

billion gallons of water and daily the D & R Canal is permitted to transfer 100 million gallons a day from the Delaware River through the Canal to the Raritan River.

Engineering studies determining the minimum amount of water that can be released on a daily basis during the time of the most severe drought have been calculated. The Spruce Run/Round Valley Reservoir System in conjunction with the Delaware and Raritan Canal Supply has a safe yield of 225 million gallons per day (mgd) available to its water customers during the most severe time of drought. These customers have a guaranteed agreement with the New Jersey Water Supply Authority for an amount of 155 million gallons a day, thereby making available or holding in reserve a surplus of 70 million gallons a day. As growth occurs in the area, the capacity of the Round Valley Reservoir could increase from its current 55 billion gallons to 75 billion gallons by raising the height of the dams and dikes. Therefore, East Brunswick customers are guaranteed a continuous and high quality supply of water for the foreseeable future.

East Brunswick's raw water supply is treated and delivered to East Brunswick under contract with Middlesex Water Company. Several years ago, Middlesex Water Company invested more than \$40,000,000 to upgrade their water treatment plant to insure high

Capital Expansion

To ensure adequate fire flow and water quality, each year capital improvements are added to the system. In 2007, a new pump and natural gas engine was installed to increase water flow and lower cost of operation. This will give residents a three-day supply of water in case of any disruption of service. We will continue replacing smaller, older water lines with new ductile iron. All of these programs are financed by the Utility through its rate structure which continues to be the lowest water rate based system in the Raritan Basin.

For Your Information

Residents have called questioning a white substance clogging shower heads and sink screens. This is caused by hot water settings that are too high causing the mineral and calcium to come out of solution in your hot water tank and clog screens and shower heads. Lower the setting to mid-range, and save money and aggravation.

The pink stuff in my bathroom, what is it? Answer: It is a bacteria that produces a pinkish film on moist surfaces. Solution: Continual cleaning with a chlorine compound is best.



Water Quality Summary East Brunswick 2011/2012 Quality on Tap Report

PRIMARY STANDARDS	MCL	RESULT	VIOLATION
MICROBIOLOGICAL CONTAMINANTS - Testing conducted weekly in 2011-2012			
Total Coliform Bacteria	0 Colonies/100mL	0 Colonies/100 mL	NO
INORGANIC CHEMICALS			
*Antimony	6 ppb	<0.5 ppb	NO
*Arsenic	5 ppb	<0.5 ppb	NO
*Barium	2 ppm	.056 ppm	NO
*Beryllium	4 ppb	<0.5 ppb	NO
*Cadmium	5 ppb	<0.5 ppb	NO
*Cyanide	200 ppb	<20 ppb	NO
*Copper	1.3 ppm	.3 ppm	NO
Fluoride	4 ppm	.06 ppm	NO
*Lead	15 ppb	3.2 ppb	NO
*Mercury	2 ppb	<0.2 ppb	NO
*Selenium	50 ppb	<0.5 ppb	NO
*Nickel	No MCL	01.3 ppb	NO
*Sodium	50 ppm	35 mg/l	NO
*Thallium	2 ppb	<0.5 ppb	NO
*Nitrate	10 ppm	1.4 ppm	NO
*LEAD AND COPPER - Tested in 2010 and met all state standards. Again in 2013.			
VOLATILE ORGANIC COMPOUNDS			
*Benzene	1 ppb	<0.3 ppb	NO
*Carbon Tetrachloride	2 ppb	<0.3 ppb	NO
*Chlorobenzene	50 ppb	<0.3 ppb	NO
* 1,2-Dichloropropane	5 ppb	<0.3 ppb	NO
* Ethylbenzene	700 ppb	<0.3 ppb	NO
*Styrene	100 ppb	<0.3 ppb	NO
*1,2,4-Trichlorobenzene	9 ppb	<0.3 ppb	NO
*1,1,2-Trichloroethane	3 ppb	<0.3 ppb	NO
*Toluene	1 ppm	<0.003 ppm	NO
*Vinyl Chloride	2 ppb	<0.3 ppb	NO
*1,2 Dichloroethane	2 ppb	<0.3 ppb	NO
*Xylenes	1 ppm	<0.003 ppm	NO
*1,1 Dichloroethane	50 ppb	<0.3 ppb	NO
*Methyl tertiary-butyl ether	70 ppb	<0.3 ppb	NO
*Naphthalene	300 ppb	<0.3 ppb	NO
*1,1,2,2-Tetrachloroethane	1 ppb	<0.3 ppb	NO
TRihalomethane	.080 MCL	.061 MCL	NO
HAA5's	.060 MCL	.025 MCL	NO
*RADIUM 226-228	5 pci/l	<1 ND pci/l	NO
SECONDARY STANDARDS			
*Chloride	250 mg/l	70.1 mg/l	NO
*Hardness (as CaCO ₃)	250 mg/l	98 mg/l	NO
Iron	0.3 mg/l	<0.1 mg/l	NO
*Total Dissolved Solids	500 mg/l	225 mg/l	NO
*Manganese	0.05 mg/l	<0.5 ug/l	NO

*Values used for compliance are averages of samples taken five times over the course of the 2010-2011 calendar year.

UNREGULATED CONTAMINANTS

East Brunswick Water Utility's bulk water supplier, Middlesex Water Company, tested for and did not detect Cryptosporidium. East Brunswick as a surface water supplier is not required to test for Radon.

HOW TO READ THIS TABLE

This report is based upon tests conducted in the year 2010-2011. Terms used in the "Quality on Tap" report and in other parts of this report are defined here.

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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

Action level: The concentration of a contaminant which, if exceeded, is a trigger point requiring a water system to take remedial action.

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

KEY TO ABBREVIATIONS

- MCL = Maximum Contaminant Level
- MCLG = Maximum Contaminant Level Goal
- MFL = million fibers per liter
- NTU = Nephelometric Turbidity Units
- pci/l = picocuries per liter (a measure of radioactivity)
- ppm = parts per million, or milligrams per liter (mg/l) this corresponds to 1 penny in \$10 thousand
- ppb = parts per billion, or micrograms per liter (ug/l) this corresponds to 1 penny in \$10 million
- TON = Threshold Odor Number
- mg/l = milligrams per liter
- ND = non-detected
- < = less than symbol

CUSTOMER COMMENT LOG

A customers' comment log is kept by the Water Utility to record all consumer calls with a record of action taken to solve the issues.

Local Water Utility Testing + Sampling Schedule

Weekly	13 samples are collected weekly for Total Coliform (Bac-t). The New Jersey Department of Environmental Protection requires 50 samples per month.
January	1st quarter samples are collected for TTHMs and HAA5's
April	2nd quarter samples are collected for TTHMs and HAA5's.
July	3rd quarter samples are collected for TTHMs and HAA5's
October	4th quarter samples are collected for TTHMs and HAA5's

Other Sampling Schedules

Iron & Manganese	Samples are collected yearly.
Lead and Copper	Samples are collected every 3 years on a reduced monitoring schedule as per the New Jersey Department of Environmental Protection. Our next sampling year is 2013.

Assuring a Safe and Dependable Water Supply

Additional information on the East Brunswick Water Utility is available for customers who seek information beyond that which is contained in this report. Annually, the budget is filed with the East Brunswick Public Library and full disclosure is available. Each year the Utility is audited by an independent firm and filed with the State of New Jersey. A copy of the audit is on file with the East Brunswick Public Library. Certain financial information is developed in what is referred to as a Generic Official Statement upon which investors in our bonds and capital financing rely. This document is available in the East Brunswick Public Library or upon request at the Finance Department. East Brunswick's staff participate in a broad range of water related activities. The staff serves on the State of New

Jersey's Clean Water Council, participates with the American Water Works Association (AWWA), the system operation is under a licensed operator licensed by the State of Department Environmental Protection. Each year staff spends many hours in training.

Twice each year the full distribution system inclusive of hydrants are flushed for the primary purpose of dislodging or removing any small particles of rust and sediment minerals that may deposit in the lines. The sediment minerals do not affect water purity, but during times of flushing they can cause some discoloration as they travel through the mains at high velocity. We undertake a biannual hydrant flushing program and testing of hydrants for fire protection.

Consumer Confidence Report Information on Five Additional Chemicals Regulated in New Jersey					
Contaminant	New Jersey MCL (ppb)	MCL in CCR Units	MCLG*	Major Sources in Drinking Water	Health Effects Language
meta-Dichlorobenzene	600	600	600	Discharge from industrial chemical factories.	Some people who drink water containing meta-dichlorobenzene in excess of the MCL over many years could experience problems with their liver, kidneys or circulatory system.
1,1-Dichloroethane	50	50	N/A	Discharge from metal degreasing sites and other factories.	Some people who drink water containing 1,1-dichloroethane in excess of the MCL over many years could experience problems with their kidneys.
Methyl tertiary-butyl ether (MTBE)	70	70	70	Leaking underground gasoline & fuel oil tanks, gasoline and fuel oil spills.	Some people who drink water containing MTBE in excess of the MCL for many years could experience problems with their kidneys.
Naphthalene	300	300	N/A	Discharge from industrial chemical factories, exposure to mothballs	Some people who drink water containing naphthalene in excess of the MCL over many years could experience problems with cataracts and hemolytic anemia.
1,1,2,2-Tetrachloroethane	1	1	N/A	Discharge from industrial chemical factories.	Some people who drink water containing 1,1,2,2-tetrachloroethane in excess of the MCL over many years could experience problems with their liver, kidneys and central nervous system.

State of New Jersey Department of Environmental Protection Mandated Information

The following section has been provided by the New Jersey Department of Environmental Protection – Water Supply Administration – Bureau of Safe Drinking Water. In accordance with New Jersey State Public Laws of 1999, chapter 362, which was signed on January 14, 2000, we are repeating on a verbatim basis the information supplied as part of this Consumer Confidence Report.

Special Considerations 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 of 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 the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Lead: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home plumbing. If you are concerned about elevated lead levels in your home water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791). We will continue testing in this year as required.

Arsenic: EPA is reviewing the drinking water standards for arsenic because of special concerns that may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.

About Lead in Drinking 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 materials and components associated with service lines and home plumbing. The East Brunswick Water Utility 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>.

Water Conservation

The Raritan Basin and, particularly, East Brunswick is considered to be water rich. This sometimes can lead to waste of a very valuable natural resource – WATER. Therefore, water conservation should be important to everyone. The following is advice on water conservation.

*** IMPORTANT *** NOTICE TO ALL RESIDENTS

East Brunswick Water Utility Policy is to schedule all appointments when it is necessary to enter a resident's home. In most cases, East Brunswick Water Utility employees will only need to enter a home when a resident calls for a service-related problem. All East Brunswick Water Utility employees will be wearing a township uniform, driving a township vehicle, and have a township identification badge. If for any reason a Water Utility employee asks to gain access to resident's home without a scheduled appointment, the resident should contact the East Brunswick Police Department at 732-390-6900 or the East Brunswick Water Utility emergency line at 732-390-6793. The East Brunswick Water Utility values the safety, health and well being of all residents and asks that they be cautious when allowing anyone access to their home.

The DOs and DON'Ts of Water Conservation

Residents can save hundreds of gallons of water every week by following these water-saving tips.

Bathroom

DO take shorter showers & save 3-5 gallons every minute.

DO fill the tub halfway & save 10-15 gallons.

DO install water-saving toilets, shower heads & faucet aerators. Place a plastic bottle filled with water in your toilet tank if you can't switch to a low flow toilet.

DON'T run the water while shaving, washing your hands or brushing your teeth. Faucets use 2-3 gallons/minute.

DON'T use the toilet as a wastebasket & **DON'T** flush it unnecessarily.

Everywhere

DO check your water meter or bill to see how much water you are using. A good rule of thumb is 50-60 gallons/day/person.

DO repair leaky faucets & turn taps off tightly. Slow drips waste 10-15 gallons/day.

Kitchen & Laundry

DO run the dishwasher & washing machine only when full. Save even more water by using the short cycle.

DO install front-loading washing machines, which reduce water usage by about 40 percent.

DON'T let the water run while washing dishes.

Outdoor

DO use a self-closing nozzle on your hose.

DO position your downspouts so rain water runs onto the lawn or into the garden, not down the driveway.

DO plant drought-resistant trees/flowers and use mulch to keep the soil moist.

DON'T water lawns during the heat of the day.

DON'T use water to clean sidewalks and driveways – sweep them instead.

New Jersey Water Watch

To get more information, go to https://www11.state.nj.us/DEP_WaterWatch_public/index.jsp and use PWSID: 1204001 and hit search.

The screenshot shows the 'New Jersey Drinking Water Watch' search page. It includes a header with the logo and a brief description of the service. Below the description is a search form with the following fields and options:

- Public Water System Identification Number (PWSID): Input field with 'NJ1204001' entered.
- Water System Name: Input field.
- Water System Type: Input field.
- Water System Status: Radio buttons for 'ALL', 'Active', and 'Inactive'.

There are also two buttons: 'Search' and 'Clear'. Below the form, there are two links: 'View water quality results by laboratory and/or by water system' and 'View a map of New Jersey counties'.

RESIDENTS' ASSISTANCE NEEDED

The unauthorized use of Township hydrants has become a major concern. **ONLY** the East Brunswick Fire Department and the East Brunswick Water Utility have authorization to utilize Township hydrants.

As a resident, if you notice anyone other than those two departments accessing Township hydrants, please contact the East Brunswick Water Utility at 732-390-6793. Thank you for your assistance regarding this matter.





East Brunswick Water Utility
25 Harts Lane | East Brunswick, N.J. 08816

Mayor

David Stahl

Township Council

Michael Hughes, President
James Wendell, Vice President
Denise Contrino, Councilwoman
Nancy Pinkin, Councilwoman
Carnille Ferraro, Councilwoman

Quality on Tap 2011

East Brunswick Consumer Confidence Report

Who to Contact

For billing inquiries, payments, meter readings
and other customer service information:
Call 732-390-6824

For questions about water quality:
Call 732-390-6793

For low pressure, discolored
water or field problems:
Call 732-390-6793

For emergency problems:
Call 732-390-6793