

Township of East Brunswick

Presented by
East Brunswick Water Utility
PWS ID #: NJ1204001

Annual Drinking Water Quality Report

Reporting year 2020

Our Drinking Water Is Regulated

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 Utility Advisor Board and they hold meetings as scheduled, every other month at the utility office: 25 Harts Lane, East Brunswick, N.J. 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.

Water Utility 24-Hour Line (732) 390-6793

Where Do We Get Our Drinking Water?

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 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 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**. **Middlesex Water Company** has invested millions to upgrade their water treatment plant to insure high quality and a sophisticated treatment system which will meet all standards. All water treated and delivered to East Brunswick by Middlesex Water Company must comply with the Federal EPA and State DEP, Bureau of Safe Drinking Water regulations. Middlesex Water Company provides us with copies of their State certified laboratory testing results which are reviewed by the Water Policy Advisory Committee. Once the water is received by East Brunswick, it is again tested by a State certified laboratory and, if need be, treated prior to being delivered to you, the customer. Customers may obtain a copy of the Middlesex Water Company's report by visiting www.middlesexwater.com.

East Brunswick is working with the New Jersey Water Supply Authority and other water customers who are under contract with the Authority, in conjunction with the Federal U.S.G.S. to conduct a study of the raw water characterization. This study helps all water customers understand better what elements must be treated, and during what seasons. The study analyzed 18 water quality constituents by taking more than 800 samples at 21 different sites. A broad spectrum of tests were conducted and the results of the study are available at the East Brunswick Public Library. Also, you can receive updates at www.RaritanBasin.org.

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants 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, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

All Drinking Water May Contain Contaminants

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 water poses a health risk. In order to ensure that tap water is safe to drink, the EPA prescribes 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Required Additional Health Information for 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 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

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.

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.

Fluoride

Since the 1960's, East Brunswick has added hydrofluosilic acid to its drinking water to maintain an optimum level of .7 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.

Local Water Utility Testing Sampling Schedule

- 13 samples are collected weekly for Total Coliform (Bac-t). The New Jersey Department of Environmental Protection requires 50 samples per month.
- Stage 2 DBP quarterly samples for TTHMs and HAA5's are collected in May, August, November and February.
- Iron & Manganese samples are collected yearly.
- Lead & Copper samples were collected in January and July 2020.
- UCMR4 collection dates were 2019 and 2020

Questions?

The East Brunswick Water Utility Advisor Board meets as scheduled, every other month at the utility building, 25 Harts Lane, at 8:00 p.m. Residents are welcome to attend this meeting to discuss any questions or concerns they may have, or may call (732) 257-8313.



We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1 to December 31, 2020. The state requires us to monitor for certain substances less often than once per year because 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. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms, we've provided the following definitions:

- **Action Level (AL)** – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Action Level Goal (ALG)** – the level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
- **Maximum Contaminant Level (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. Secondary MCLs are unenforceable guidelines for aesthetic quality of water.
- **Maximum Contaminant Level Goal (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.
- **Maximum Residual Disinfectant Level (MRDL)** – the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** – the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Minimum Reporting Level (MRL)** – the smallest measured concentration of a substance that can be reliably measured by using a given analytical method.
- **NA** – not applicable.
- **ND** – not detected.
- **TT** – treatment technique.
- **NTU** – Nephelometric Turbidity Units.
- **Parts per billion (ppb)** – micrograms per liter (µg/L) or one ounce in 7,800,000 gallons of water.
- **Parts per million (ppm)** – milligrams per liter (mg/L) or one ounce in 7,800 gallons of water.
- **RUL (Recommended Upper Limit)** – The highest level of a contaminant recommended in drinking water. RULs are set to protect the odor, taste and appearance of drinking water.

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).

Regulated Substances				East Brunswick Water Utility			
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Copper (mg/L)	2020	AL = 1.3	1.3	0.214	0.197-0.214	No	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride (ppm)	2019	4	4	1.3	.6-1.8	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead (mg/L)	2020	0.015		0.0011	0-.0011	No	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Substances				Middlesex Water Company			
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Arsenic (ppb) * ^	2020	5	N/A	<0.5	N/A	No	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes
Barium (ppm)	2020	2	2	0.03	N/A	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	2020	4	4	<0.3	N/A	No	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	2020	5	5	<0.5	N/A	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	2020	100	100	<0.5	N/A	No	Discharge from steel and pulp mills; erosion of natural deposits
Copper (ppb)	2020	AL = 1.3	1.3	0.21		No	Corrosion of household plumbing systems; erosion of natural deposits
Cyanide (ppb)	2020	200	200	<50	N/A	No	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	2020	4	4	<0.05	N/A	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead (ppb)	2020	0.015		1.7		No	Corrosion of household plumbing systems; erosion of natural deposits
Mercury (ppb)	2020	2	2	<0.1	N/A	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands
Nitrate (ppb) +	2020	10	10	0.8	N/A	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm) **	**	1	1	N/A	N/A	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	2020	50	50	<8	N/A	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium (ppb)	2020	2	0.5	<0.3	N/A	No	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Turbidity (NTUs) ***	2020	TT=95%	0	0.1	N/A	No	Soil runoff
	2020	Samples <0.3 NTU	N/A	100%	N/A	No	

* The MCLs for these chemicals were set by the NJDEP below those set by the EPA.

** Testing Waived in 1997 for Middlesex Water Company.

***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. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU (and no sample may exceed 1 NTU).

^ 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.

The listed Lead and Copper concentrations are the 90th Percentile.

+ 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.

Secondary Substances		East Brunswick Water Utility				Middlesex Water Company				Likely Source of Contamination
Substance (Unit of Measure)	RUL	Year Sampled	Amount Detected	Range	Violation Yes/No	Year Sampled	Amount Detected	Range	Violation Yes/No	
Alkalinity (ppm)	500	2020	42.9	33 - 54.7	No	N/A	N/A	N/A	N/A	Naturally present in the environment
Antimony (ppb)	6	N/A	N/A	N/A	N/A	2020	<0.3	N/A	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Iron (ppm)	0.3	2020	<0.0429	N/A	No	2020	N/A	N/A	N/A	Naturally present in the environment
Manganese (ppm)	0.05	2020	<0.0104	N/A	No	2020	N/A	N/A	N/A	Naturally present in the environment
Nickel (ppb)	0.1	N/A	N/A	N/A	N/A	2020	1.2	N/A	No	Naturally present in the environment
Sodium (mg/L)	50	N/A	N/A	N/A	N/A	2020	ND	N/A	No	Naturally occurring

Volatile Organic Chemicals				Middlesex Water Company		
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation Yes/No
Benzene (ppb) *	2020	1	0	<0.5	N/A	No
Carbon Tetrachloride (ppb) *	2020	2	0	<0.5	N/A	No
Meta-Dichlorobenzene (ppb) * +	2020	600	600	<0.5	N/A	No
Ortho-Dichlorobenzene (ppb) *	2020	600	600	<0.5	N/A	No
para-Dichlorobenzene (ppb) * ^	2020	75	75	<0.5	N/A	No
1,1-Dichloroethane (ppb) *	2020	50	N/A	<0.5	N/A	No
1,2-Dichloroethane (ppb) *	2020	2	0	<0.5	N/A	No
1,1-Dichloroethylene (ppb) *	2020	2	7 +	<0.5	N/A	No
cis-1,2-Dichloroethylene (ppb)	2020	70	70	<0.5	N/A	No
Trans-1,2-Dichloroethylene (ppb)	2020	100	100	<0.5	N/A	No
1,2-Dichloropropane (ppb)	2020	5	0	<0.5	N/A	No
Ethylbenzene (ppb)	2020	700	700	<0.5	N/A	No
MTBE (ppb) *	2020	70	70	<0.5	N/A	No
Methylene Chloride (ppb) *	2020	3	N/A	<0.5	N/A	No
Chlorobenzene (ppb) *	2020	50	100 +	<0.5	N/A	No
Naphthalene (ppb) *	2020	300	N/A	<0.5	N/A	No
Styrene (ppb)	2020	100	100	<0.5	N/A	No
Tetrachloroethylene (ppb) *	2020	1	0	<0.5	N/A	No
1,1,2,2-Tetrachloroethane (ppb) *	2020	1	N/A	<0.5	N/A	No
Toluene (ppm)	2020	1	1	<0.0005	N/A	No
1,2,4-Trichlorobenzene (ppb) *	2020	9	70 +	<0.5	N/A	No
1,1,1-Trichloroethane (ppb) *	2020	30	200 +	<0.5	N/A	No
1,1,2-Trichloroethane (ppb) *	2020	3	3	<0.5	N/A	No
Trichloroethylene (ppb) *	2020	1	0	<0.5	N/A	No
Vinyl Chloride (ppb)	2020	2	0	<0.2	N/A	No
Xylenes (ppm) *	2020	1	10 (Note 3)	<0.0005	N/A	No

* The MCLs for these chemicals were set by the NJDEP below those set by the EPA.

+ These MCLGs are set by the EPA.

^ Giardia and Cryptosporidium are removed/inactivated by a combination of physical removal (see Turbidity above) and Disinfection under the IESWTR.

Frequently Asked Questions

What can I do to conserve water?

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 by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 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. If you see color in the bowl, you have a 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.

Tap vs. Bottled, Rethinking What You Are Drinking

When choosing the water you want to drink, it is often easy to be convinced that bottled water is healthier for you than tap water, but in truth is it? The answer, thanks to a study by the Natural Resources Defense Council (NRDC), is not always. First, approximately 25 percent of bottled water is – in reality – bottled tap water. Additionally, the Food and Drug Administration (FDA) regulates bottled water; however, their testing standards are not as rigorous as the ones required by the US Environmental Protection Agency (EPA) for tap water. Moreover, FDA oversight does not apply to water that is packaged and sold within the same state. According to the NRDC’s report, this leaves approximately 60-70 percent of bottled water, including the contents of watercooler jugs, free of FDA regulation.

It is estimated that people spend almost 5,000 times more per gallon for bottled water than they would for tap water. For those who get their recommended eight glasses of water a day, you could be saving over \$1,000 annually if you switched to tap water!

How much water do I use during a typical shower?

Based on the age of your house and your showerheads, anywhere from 20 to 40 gallons of water can be used during a typical shower.

Synthetic Organic Chemicals				East Brunswick Water Utility		Middlesex Water Company			
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Atrazine (ppb)	2020	3	3	N/A	N/A	<0.1	N/A	No	Runoff from herbicide used on row crops
Benzo(a)pyrene (ppt)	2020	200	0	N/A	N/A	<0.02	N/A	No	Leaching from linings of water storage tanks and distribution lines
Di-(2-Ethylhexyl)adipate (ppb)	2020	400	400	N/A	N/A	<0.6	N/A	No	Discharge from chemical factories
Di-(2-Ethylhexyl)phthalate (ppb)	2020	6	0	N/A	N/A	<0.6	N/A	No	Discharge from rubber and chemical factories
Hexachlorobenzene (ppb)	2020	1	0	N/A	N/A	<0.1	N/A	No	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	2020	50	50	N/A	N/A	<0.1	N/A	No	Discharge from chemical factories
Simazine (ppb)	2020	4	4	N/A	N/A	<0.07	N/A	No	Herbicide runoff
Perfluorononanoic acid (PFNA) (ppt)	2020	13	N/A	0.75	N/A	< 2	N/A	No	Discharge from rubber and chemical factories
1,2,3-Trichloropropane (1,2,3-TCP) (ppt)	2020	30	N/A	<5	N/A	<5	N/A	No	Discharge from metal refineries and agricultural chemical factories
1,2-Dibromo-3-Chloropropane (ppt)	2020	200	N/A	<5	N/A	<5	N/A	No	Discharge from chemical factories
Ethylene Dibromide (ppt)	2020	50	N/A	<5	N/A	<5	N/A	No	Herbicide runoff

Regulated Contaminants			East Brunswick Water Utility				Middlesex Water Company				
Substance (Unit of Measure)	MCL [MRDL]	MCLG [MRDLG]	Year Sampled	Amount Detected	Range Low-High	Violation Yes/No	Year Sampled	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Total Trihalomethanes (Stage 2) (ppb)	80	N/A	2020	Site #8: 38.2	Site #8: 24 - 51	No	2020	56	18 - 64	No	Byproduct of drinking water disinfection
				Site #3: 44.8	Site #3: 31.4 - 69						
				Site #4: 37.9	Site #4: 26.8 - 51.8						
				Site #9: 44.9	Site #9: 31.1 - 63						
Haloacetic Acids (HAA5) (Stage 2) (ppb)	60	N/A	2020	Site #8: 30.6	Site #8: 24.61 - 38.1	No	2020	49	15 - 37	No	Byproduct of drinking water disinfection
				Site #3: 28.3	Site #3: 27.02 - 29.33						
				Site #4: 31.2	Site #4: 25.43 - 35.22						
				Site #9: 29	Site #9: 19.49 - 39						

Site #8: Old Stage Road & Summerhill Road Site #3: 334 Dunhams Corner Road Site #4: Old Bridge TPK Site #9: Riva Ave (Mikes Market)

Regulated Disinfectants			East Brunswick Water Utility				Middlesex Water Company				
Substance (Unit of Measure)	MCL [MRDL]	MCLG [MRDLG]	Year Sampled	Amount Detected	Range Low-High	Violation Yes/No	Year Sampled	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Chlorine (ppm)	<4	<4	2020	0.86	0.6 - 1.0	No	2020	0.7	0.2 - 1.6	No	Water additive used to control microbes

Microbiological Contaminants			East Brunswick Water Utility				Middlesex Water Company				
Substance (Unit of Measure)	MCL [MRDL]	MCLG [MRDLG]	Year Sampled	Amount Detected	Range Low-High	Violation Yes/No	Year Sampled	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Total Coliform Bacteria (0 colonies/100ml)	<5% of monthly total sample	0	2020	1**	N/A	No	2020	2.3%	N/A	No	Naturally present in the environment
Fecal Coliform and E. Coli (tt/0)	0	0	2020	0	N/A	No	2020	ND	N/A	No	Human and animal fecal waste
Cryptosporidium (oocysts/L) *	N/A (TT)	N/A (TT)	N/A	N/A	N/A	N/A	2020	ND	N/A	No	Human and animal fecal waste
Giardia (cysts/L) *	N/A (TT)	N/A (TT)	N/A	N/A	N/A	N/A	2020	ND	N/A	No	Human and animal fecal waste

* Giardia and Cryptosporidium are removed/inactivated by a combination of physical removal (see Turbidity above) and Disinfection under the IESWTR.

** 1 positive sample in July, 2020. Upon retesting, zero positive samples.

Unregulated Substances				East Brunswick Water Utility			
Substance (Unit of Measure)	Year Sampled	SMCL	MCLG	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Chloroform (ppb)	2020	70	N/A	29.6	17 - 54.4	No	By-products of drinking water chlorination

Additional Monitoring (Additional Contaminants for which we monitor that are currently not regulated by the EPA)				East Brunswick Water Utility		Middlesex Water Company		
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation Yes/No
Legionella (CFU/ml)	2020	N/A	0	N/A	N/A	ND	N/A	N/A
Perchlorate (ppt)	2020	N/A	N/A	N/A	N/A	0.2	0.1 – 0.2	N/A
Perfluorobutane sulfonic acid (PFBS) (ppt)	2020	N/A	N/A	N/A	N/A	ND	N/A	N/A
Perfluoroheptanoic acid (PFHepA) (ppt)	2020	N/A	N/A	N/A	N/A	3	ND – 3	N/A
Perfluorohexane sulfonic acid (PFHxS) (ppt)	2020	N/A	N/A	N/A	N/A	ND	N/A	N/A
Perfluorohexanoic Acid (PFHxA) (ppt)	2020	N/A	N/A	N/A	N/A	2	ND – 2	N/A
Perfluorooctanoic acid (PFOA)* (ppt)	2020	N/A	N/A	3.6	N/A	5	ND - 5	N/A
Perfluorooctane sulfonic acid (PFOS)* (ppt)	2020	N/A	N/A	3.1	N/A	2	ND - 2	N/A
Chlorate (ppb)	2020	N/A	N/A	N/A	N/A	262	104 - 262	N/A
Chromium-6 (ppb)	2020	N/A	N/A	N/A	N/A	0.11	0.06 - 0.11	N/A
1,4 dioxane (ppb)	2020	N/A	N/A	N/A	N/A	4.4	0.1 – 4.4	N/A



* PFNA is currently regulated by NJDEP at 13 ng/l. Numbers are not regulatory as those samples are being taken in 2020. PFOA and PFOS are in a group of per and polyfluoroalkyl substances widely found in the environment. NJDEP has pending legislation setting MCLs at 14 and 13 ppt respectively.

Unregulated Contaminant Monitoring Rule 4 (UCMR4) *			East Brunswick Water Utility				Middlesex Water Company				
Substance (Unit of Measure)	MCL [MRDL]	MCLG [MRDLG]	Year Sampled	Amount Detected	Range Low-High	Violation Yes/No	Year Sampled	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Manganese (ppb)	N/A	N/A	2019	0.4	ND-.4	N/A	2018	0.4	ND – 0.4	N/A	Natural occurrence from soil leaching
HAA6Br (ppb)	N/A	N/A	2019	11.58	ND- 11.58	N/A	2018	0.1	ND – 0.1	N/A	By-product of drinking water disinfection
Haa9 (ppb)	N/A	N/A	2019	73.88	ND-73.88	N/A	2018	ND	N/A	N/A	By-product of drinking water disinfection

* The purpose of the UCMR monitoring is to provide the EPA Administrator with data to support decisions concerning whether or not to regulate these contaminants.

