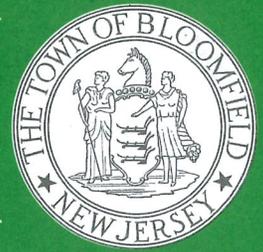


Township of Bloomfield

2020



CONSUMER CONFIDENCE REPORT

June 2021

PWS ID 0702001

Dear Customer,

The Township of Bloomfield is committed to providing our customers and the community with high quality drinking water through prompt service, courteous and helpful communication, and excellence in the treatment and distribution of our most valued resource...water.

The purpose of this report is to provide you, our customer, with information on the sources of your drinking water. This report will also describe the water treatment process, and explain what potential substances may be found in drinking water. Health information and a listing of the amounts of detected substances and how they compare to the state and federal regulations are also provided.

This report confirms that your drinking water is safe. Furthermore, the report also confirms that our water quality continues to improve. In the second half of 2020, the Township was compliant with lead levels, meaning that over 90 percent of the samples taken were under the lead contaminant level of 15 parts per billion. We anticipate this trend to continue and significantly improve for the first half of 2021. While disinfection by-products such as Haloacetic Acids (HAA5) have been problematic in our system over the past several years, the levels at our sampling points continue to improve. Furthermore, now in 2021, we are **FULLY COMPLIANT FOR HAA5 and have no violations or exceedences related to disinfection by-products like HAA5 or TTHM**. These improvements to water quality are a result of a combined effort between the Bloomfield Water Department; the City of Newark, who supply our water and the NJDEP who enforce the regulations. While the City of Newark has been improving the treatment of the water they provide us, the Bloomfield Water Department has been continually improving our water system through major capital programs such as watermain cleaning and lining; elimination of dead-end mains; removal of lead service and supply lines and water valve replacements. We will continue these improvement into 2021 and beyond with construction of a new pump station that will provide a second source of water supply from the Wanaque Watershed. We anticipate that the combination of water from the Wanaque Watershed, in combination with Pequannock, will enhance water quality as well as increase our system's resiliency to provide a reliable source of water during normal operations and potential, emergency situations.

The Bloomfield Water Department has invested over \$4 million in our water infrastructure over the past several years. We anticipate this expenditure to double with the addition of the Wanaque Pump Station; as well as a program to replace all customer meters with reliable remote metering and billing and a program to identify and remove hundreds of lead service and supply lines when they are discovered. The Township of Bloomfield has been using the New Jersey Infrastructure Bank as a funding source which provides low interest loans for the majority of these projects to offset costs to the Bloomfield Water Department.

The Bloomfield Water Department is committed to providing safe and compliant drinking water to our customers and will continue to make improvements and adjustments to our policies and procedures to accomplish this. I recommend you periodically check our website under the "Residents" tab for information and updates related to our drinking water.

We hope you will find this report informative and that it provides you with a better understanding of all that's involved in bringing high quality drinking water into your home. If you would like additional information or if you have any questions concerning this report, feel free to call me at 973-680-4009. You can also call the EPA Safe Drinking Water Hotline at 1-800-426-4791.

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

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Thank you for allowing us the opportunity to serve you.

Very truly yours,

Township Engineer
Township Water Operator
N.J. W-3 Lic. No. 598654



Township of
Bloomfield

Mayor
Michael J. Venezia

Council Members

Dr. Wartyna L. Davis, Phd.

Ted Gamble

Richard Rockwell

Jenny Mundell

Nicholas Joanow

Sarah Cruz

Sources of Drinking Water:

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

The Township of Bloomfield purchases bulk drinking water from the North Jersey District Water Supply Commission, Wanaque North and South Reservoirs. However, at this time, we cannot physically obtain this water from these reservoirs. We therefore trade or "wheel" this water from the City of Newark Pequannock Watershed system. Therefore, all of our drinking water originates from the Pequannock watershed. The City of Newark's water supply is entirely from surface water sources in the Pequannock and Wanaque watersheds which cover approximately 150 square miles of forest lands in Morris, Sussex and Passaic Counties. The Pequannock watershed supplies five reservoirs (Charlottesburg, Echo Lake, Canistear, Clinton and Oak Ridge Reservoirs) which have a combined capacity of 14.4 billion gallons. The Wanaque watershed supplies the following two reservoirs: the 29.6 billion gallon Wanaque Reservoir and the 7 billion gallon Monksville Reservoir. The Wanaque Reservoir is operated by the North Jersey District Water Supply Commission (NJDWSC) which has pump stations designed to pump 250 million gallons per day from the Pompton River and 150 million gallons per day from the Ramapo River into the reservoir when needed.

"The New Jersey Department of Environmental Protection (NJDEP) has completed Source Water Assessment Reports and Summaries for all public water systems. Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP's

source water web site at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550.

Ongoing Water System Improvements:

The Township of Bloomfield is committed to providing water that meets or exceeds all federal and state requirements for drinking water. In general, our water system is in good condition.

However, as with many water systems within the region, the advanced age of pipes and valves represent a challenge in delivering safe and reliable drinking water to our customers. In order to ensure that the Township's water system continues to operate efficiently to provide safe, adequate, and reliable service, we are continuing to improve our system. Improvements to the Township's water system include cleaning and cement mortar lining of older water mains and the installation of new valves and hydrants to improve water quality, hydraulic capacity and operation of the distribution system.

Other Improvements Include: Lead Service Line Replacement:

At the time of this printing, the Bloomfield Water Department has uncovered approximately 250 lead service or supply connections. We have replaced 150 of these connections with copper piping. This work was done through a combination of in-house replacements by the Township's Department of Public Works and contracts with private utility contactors. To date, this work has contributed to a significant reduction in lead content within our water based upon the current lead sampling period. In 2021 the Township will engage a private contractor to uncover approximately 500 locations where lead service connections are suspected. If the connections are confirmed to be lead, they will be replaced with copper

piping. We anticipate continued replacement of approximately 300 lead service lines by the end of 2021. This replacement program will continue annually until all lead and galvanized service lines have been replaced with copper.

Customer Water meter replacements:

The Township has awarded a \$4.4 million contract to replace all customer water meters throughout the township. This project will provide the Bloomfield Water Department with real-time information on use of water by customers and even notify them of excess water usage due to an unknown plumbing leak within their residence. In addition to saving and conserving water, this will prevent a resident from receiving a large water bill due to an undetected leak that may have occurred over a billing period. This program will also allow the Bloomfield Water Department to determine, during installation of the new meter, if a residence has a lead service line and therefore advise them as to what remediation actions should be taken to eliminate the lead. To date, 7,400 of the Township's 11,704 meters have been replaced. This program will continue into 2021. REPLACEMENT OF YOUR METER IS MANDATORY The meter replacement program is useful for finding lead service connections. However, this program is also MANDATORY, meaning you must get your meter replaced. Failure to schedule a meter replacement will result in the township no longer reading the old meter. You will only receive estimated bills plus a possible administrative surcharge if we can't replace your meter.

• Cleaning and Lining of Large Distribution Mains:

The Township has thousands of feet of large distribution mains. These are mains with diameters of twelve inches and sixteen

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inches. All of these mains were constructed in the early and mid-twentieth century and have not been improved or maintained since their original installation. Cleaning and lining will remove sediment, rust and corrosion within these mains and apply a thin cement coating throughout the pipe. This dramatically improves the flow and the quality of the water moving through the pipes and ultimately into your taps. The first and second phases of this work have been completed with a third phase to start in 2021 or 2022.

• Dead-End Elimination Program:

Dead-ends within a water system are, by nature, problematic. Water tends to stagnate or circulate very slowly at dead-ends thereby increasing the age of the water which can lead to the build-up of chlorine by-products. The Bloomfield Water Department has completed two phases of dead-end elimination and anticipates further eliminations in 2021.

• New North Jersey District Water Supply Commission (NJDWSC) Interconnection:

For many years the township has been a member of the NJDWSC. We therefore purchase our water supply, in bulk from the NJDWSC. Although a member, we have not been able to acquire this water directly from the Wanaque watershed due to a lack of a physical connection to the system. We therefore have been acquiring our water using the Newark water system and paying a “wheeling” fee for this service. The township is currently in the process of designing and constructing a pump station that will allow us to acquire water directly from NJDWSC through their supply line at the northerly end of town. This will ultimately lead to reduced wheeling rates, more resiliency and better circulation in our system to enhance water quality.

The engineering department will also work toward improving the distribution of information about our system to our customers by enhancing our profile on the township website.

Concerning decisions that may affect the quality of water in the Township of Bloomfield, an opportunity for public participation is provided during regularly scheduled council meetings.

Meetings are held in the Council Room on the second floor of the Municipal Building beginning at 7 pm on the following dates:
Mondays: July 13 and 27, August 10 and 24, September 14 and 28, October 5 and 19, November 9 and 23, and December 7 and 14.

Also, the City of Newark suggests that you contact them directly at 973-256-4965 for information concerning the next opportunity for public participation about drinking water provided by the City of Newark or find out more about the City of Newark on the Internet at www.ci.newark.nj.us.

Compliance with Drinking Water Standards:

In order to ensure the safety of drinking water, the EPA and the state’s Department of Environmental Protection (DEP) 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, meets and most often surpasses the quality standards set by those agencies.

Potential Contaminants:

The types of contaminants that may be found in the raw water before it is treated to produce drinking 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 storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming.

***Pesticides** are chemicals used to destroy insects and rodents. Herbicides are chemicals used to kill weeds. Both contaminants may come from a variety of sources such as agriculture, urban storm water and residential uses.

***Radioactive Contaminants** which can be naturally occurring or be the results of oil and gas production and mining activities.

***Organic Chemical Contaminants** including synthetic (SOC) and volatile organic chemicals (VOC), which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

All drinking water, including bottled water, may reasonably be expected to contain naturally occurring minerals and traces of contaminants. The presence of

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WATER QUALITY DATA

Township of Bloomfield 2020 Concentrations of Detected Contaminants Report

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).

PWS ID #0714001		City of Newark (Pequannock)		2020 Water Quality Report			
The table below lists all the drinking water analytes that we detected during the calendar year 2020. The presence of these analytes in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from January 1 through December 31, 2020. The state requires us to monitor the water for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.							
Inorganic	City of Nwk Result	Min	Max	Federal/State MCL	MCL Meets Standard	MCLG	Typical Source of Contaminant
Arsenic (ppb)	<0.5			10.0/5.0	Yes		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	0.00665			2.0/2.0	Yes	2	Erosion of natural deposits
Mercury (ppm)	<0.0002			0.002/0.002	Yes	0.002	Erosion of natural deposits; discharge from refineries and factories
Flouride (ppm)	<0.1			≤2.0			Erosion of natural deposits
Nitrate (ppm as Nitrogen)	<0.1			10.0/10.0	Yes	10	Runoff from fertilizer use; Leaching from septic tanks,
Turbidity (NTU and Combined Filtered Water)		Min 0.01	Max 2.11*	TT (<0.3 NTU 95% of the time; upper range 1 NTU)	Yes		Soil run-off *Note: On 9/25/2020, the turbidity of the Newark treatment plant rose rapidly due to equipment failure of valve overfeeding coagulant chemical. The valve was repaired on the afternoon of 9/26/2020, the chlorine levels were adjusted as needed to provide additional disinfection and sampling was done to ensure the absence of coliform bacteria.
		*2.11 highest single measurement					
		99.6% of samples <0.3 NTU					
		0.01 Average Turbidity					
Radiological Contaminants							
Combined Radium (pCi/L)2C	1.5			5	Yes	0	Erosion of natural deposits
Total Organic Carbon (TOC)	Raw TOC Range = 2.50 - 4.42 ppm Delivered TOC Range = 1.64 - 2.43 ppm Removal Ratio 1.08 - 1.45			TT= Meeting criteria removal ratio of 1.0	Yes	N/A	Naturally present in Environment
Source (Raw) Water Pathogen Monitoring							
		Min	Max				
Giardia Cyst		0	0				Microbial Pathogens found in all untreated Surface Water Causes Giardiasis Chlorination will inactivate Giardia
Giardia, Cyst/L		0	0				
VOC's (ppb)	ND			Dependant on Specific VOC	Yes		Industrial factory discharge. They include benzene, toluene and naphthalene
Inorganic Compounds:							
Secondary Compounds:							
Alkalinity	26.9	ppm		NS			A characteristics of water caused by carbonate and bicarbonates
Aluminum (2017)	0.0372	ppm		≤0.200	Yes		By-product of water treatment using aluminum salts
Chloride	36.5	ppm		≤250	Yes		Erosion of natural deposits
Color	2	CU		≤10	Yes		Presence of manganese and iron, plankton, humus, peat and weeds
Hardness	45.7	ppm		50-250	Yes		Caused primarily by salts of calcium and magnesium
Iron	0.007	ppm		≤0.3	Yes		Erosion of natural deposits
Manganese	0.038	ppm		≤0.05	Yes		Erosion of natural deposits
pH	7.56	units		6.5-8.5	Yes		Presence of carbonate, bicarbonates and carbon dioxide
Sodium	23.5	ppm		≤50	Yes		Runoff from road salt and from some water softening process
Sulfate	11.0	ppm		≤250	Yes		Erosion of natural deposits
Total Dissolved Solids	110	ppm		≤500	Yes		Erosion of natural deposits
Zinc	<0.2	ppm		≤5	Yes		Erosion of natural deposits, pipe corrosion and/or runoff
Odor	<1	Ton		≤3	Yes		Algae and plant matter
PFNA's							
1,2 Dibromoethane	<0.01	ug/l		0.05	Yes		
1,2 Dibromo-3 Chloropropane	<0.01	ug/l		0.2	Yes		
1,2,3 Trichloropropane	<0.01	ug/l		0.03	Yes		
PFA's	<2.0	ug/l		2.0	Yes		

WATER QUALITY DATA

Township of Bloomfield 2020 Concentrations of Detected Contaminants Report (continued)

Unregulated Contaminant Monitoring Rule (UCMR-4) 2020					
545 UCMR4 Algal Toxins		Analytical Method: EPA 545			
<i>Analyte</i>	<i>Results</i>	<i>Unit</i>	<i>Reporting Limit</i>	<i>MDL</i>	
Anatoxin	<0.030	ug/l	0.03	0.01	
Cylindrospermopsin	<0.090	ug/l	0.09	0.03	
546 Total Microcystins, ELISA		Analytical Method: EPA 546			
<i>Analyte</i>	<i>Results</i>	<i>Unit</i>	<i>Reporting Limit</i>	<i>MDL</i>	
Total Microcystins	<0.15	ug/l	0.3	0.1	

Regulated Contaminants	Units	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)	Results		Source of Contaminant
Inorganic Contaminants:						
wLead	ppm	0	AL=0.015	36 Samples (Jan-June) 0.0059 ppm*	Corrosion of household plumbing systems; erosion of natural deposits	
				67 Samples (July-Dec) 0.00882 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits	
Copper	ppm	1.3	AL=1.3	0.126 ppm	Corrosion of household plumbing systems; erosion of natural deposits	
				0.118 ppm		
*Bloomfield Water Department did not obtain the minimum amount of compliant samples for January to June 2020						
Microbiological Substance:						
Total Coliforms Bacteria	Presence of positive sample	0	Presense of Coliforms in >5% of monthly samples	0	Naturally present in the environment	

Regulated Disinfectants:						
	Units	MRDL	MRDLG			
Chlorine Residual	ppm	44		<0.05-1.25		Water additive used to control microbes
Highest Annual Average = 0.81 MG/L						
Secondary Contaminants	Units	Secondary Maximum Contaminants Level (SMCL)	Results		Source of Contaminant	
				Newark Pequannock System		
Asbestos waiver granted 01/01/11 - 12/31/20						
Iron	ppm	<0.05 MG/L	<0.007 MG/L		Erosion of natural deposits	
Manganese	ppm	0.00654 MG/L	<0.038 MG/L		Erosion of natural deposits	

Stage 2 Trihalomethanes MCL: 80 (ppb)				Stage 2 Haloacetic Acids MCL: 60 (ppb)			
Site No.	Min	Max	LRAA*	Site No.	Min	Max	LRAA*
Site 1	47	74	57	Site 1	25	54	44
Site 2	38	67	52	Site 2	44	56	50
Site 3	37	65	52	Site 3	27	53	43
Site 4	43	71	54	Site 4	29	51	40

* LRAA - Locational running annual average
 Source of contaminant: a by-product of disinfection or chlorine
 NOTE - ALL SITES COMPLIANT

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Water systems with uncovered finished water reservoirs are required to eliminate or cover these reservoirs, treat the discharge from these reservoirs, or be in compliance with a state approved schedule to eliminate or cover the reservoirs or provide treatment by April 1, 2009. Newark has executed an Administrative Consent Order with the Department of Environmental Protection wherein Newark is required to develop a plan and implementation schedule to eliminate, cover or provide treatment for their uncovered reservoirs.

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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 **Environmental Protection Agency (EPA) Hotline 1-800-426-4791**, or Online at **www.water.epa.gov**

Terms and Abbreviations:

N/A = Not Applicable

ND = Not Detected

AL = Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

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 contamination.

pCi/l = picocuries per liter (measure of radiotactivity)

ppm = parts per million; (comparable to one minute in two years or one penny in \$10,000.00).

ppb = parts per billion; (comparable to one minute in two thousand years or one penny in \$10,000,000.00).

Water Quality Data:

The table lists all the drinking water contaminants that we detected during the 2020 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing performed on samples of water taken from January 1 through December 31, 2020. The state requires us to monitor for certain contaminants at intervals greater than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Health/Educational Information:

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 provider. EPA/CDC (Centers for Disease Control) 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**.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers and Others:

Children may receive a slightly higher amount of contamination 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 concerns. 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 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 about 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.

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The Bloomfield Water Department is a public community water system consisting of one purchased ground water source. Bloomfield purchases water from the City of Newark. The system's source water comes from the Pequannock watershed, Cedar Grove reservoir.

SUSCEPTIBILITY RATINGS FOR NEWARK WATER DEPARTMENT SOURCES

The 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 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.

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 rating.

Sources	Pathogenes			Nutrients			Pesticides			Volatile Organic Compounts			Inorganics			Radionuclides			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																											
GUI - 0																											
Surface water intakes - 1	1					1			1			1	1					1			1	1					

- **Pathogenes:** 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 Compounts:** 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 chloride) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

In response to the events of September 11, and to the State's Domestic Security Preparedness Act, Newark has completed a vulnerability assessment of its water supplies, treatment plant and transmission system, provided additional security, and reviewed operations to include a greater emphasis on security issues. The City is taking the necessary proactive steps to implement the conclusions of this study.

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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 Township of Bloomfield 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>. The Township will be monitoring for lead throughout 2021. Any customer who has their water sampled for lead will receive the results of the sample, via US mail, within 30 days of receipt of the information from the laboratory. All residents were provided this information in 2020 within the required time. We were, however, notified by the NJDEP that we did not submit the certification of these notifications to their offices within the required time. This did not result in any failure to notify our residents of their lead results and is considered a "record keeping violation" by the State of New Jersey. This oversight has been corrected and should not occur in the future. Any resident who did not receive their results in the mail should contact the Bloomfield Engineering Department at 973-680-4009 and we will re-send them.

Arsenic

While your drinking water meets the USEPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the

costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Effective January 23, 2006, the MCL for arsenic is 5ppb. The results for arsenic in the drinking water was <0.5ppb in 2020.

Water System:

The Township of Bloomfield purchases bulk water from the NJDWSC which is supplied by the Wanaque watershed. Since we do not have a physical connection with NJDWSC, the Township has a "wheeling" agreement with the City of Newark. Each of Newark's watersheds has a water treatment plant which purifies and filters the water to produce safe and potable water. For the Pequannock system, the City of Newark Water Treatment Plant is located in West Milford; and for the Wanaque system, the NJDWSC Water Treatment Plant is located in Wanaque. At these plants, the water is routinely monitored and tested to ensure the safety of the water. From the plants, the water is conveyed through large diameter transmission mains to the Township of Bloomfield's distribution system. The Township maintains three metered interconnections with the City of Newark and emergency interconnections with East Orange, PVWC, Montclair and Nutley. The Township of Bloomfield's water distribution system provides potable water and fire protection throughout the municipality. Throughout the distribution system the water is continually monitored to maintain high quality drinking water in the system.

Questions and Answers Is my water hard or soft?

Hardness describes the level of dissolved natural minerals (calcium and magnesium)

in drinking water. These minerals are an important part of a healthy diet. Hard water contains more mineral nutrients and less sodium. A gradual build-up of calcium and magnesium in hard water can form harmless, filmy white deposits on faucets, bathtubs, and tea kettles. Hard water also requires more soap to lather fully. The degree of hard water varies depending on where you live. Newark's water in this area has a hardness level of 45.7 parts per million which means it is moderately soft.

Why is there chlorine in my water?

A century ago, acute diseases such as typhoid fever were a very real threat to our health because of microorganisms that caused these diseases were found in public drinking water. However, for almost 100 years, water suppliers in America and other countries have used chlorine to treat or disinfect drinking water. According to the U.S. Environmental Protection Agency and other health agencies, Chlorine is currently one of the most effective disinfectants to kill harmful microorganisms. Disinfection of all public water supplies is required by federal and state laws and regulations, including the Safe Drinking Water Act and the Surface Water Treatment Rule.

What is Turbidity?

Turbidity is the measure of the cloudiness of water. The city monitors it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfection.

Does Newark add fluoride to my water?

No. Newark does not add fluoride to the water in your community. However, a small amount of fluoride may occur naturally in your water. Less than 0.10 parts per

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million fluoride was detected in your water supply last year. You may have noticed media attention to public water supply issues related to radiological substances, mercury, lead, radon, arsenic, and Cryptosporidium. At Newark, they are well aware of these water quality matters. They have performed - and continue to perform - extensive testing of all our water supplies. We want to assure our customers that we are providing the high-quality water you expect and deserve. You may be interested to know the following information:

Radiological Substances:

Newark's tests show radiological substances level in our water supplies is significantly less than the level deemed acceptable by the U.S. EPA. In some cases, the level is so low that it cannot be detected. These substances are naturally occurring radioactive compounds.

Mercury:

Newark's testing equipment can detect mercury at a level 10 times less than the standard. They detected a mercury level of < 0.0002 parts per million in 2020.

Lead:

While the concentration of lead leaving the NJDWSC treatment facility and the Newark Pequannock facility is far below the action level (AL) of 15 parts per billion mandated by the Federal Lead and Copper Rule (most times it is non-detectable), some communities which the Commission and Newark serves, have failed to meet the AL at the water tap. It has been determined that this lead is most likely caused by lead pipes or lead solder and faucet fixtures in home plumbing and is not coming from the source supply. It should be noted that infants and children,

who drink water containing lead in excess of the action level, could experience delays in their physical and mental development. Children could show deficits in attention span and learning abilities. Also, adults who drink this water over many years could develop kidney problems or high blood pressure. High concentrations of lead are more prevalent in water which sits in home plumbing pipes for a number of hours (particularly overnight). Let the water run from the tap before using it for drinking or cooking any time the water in the faucet has gone unused for more than six hours. The longer the water resides in plumbing the more lead it contains. Flushing the tap means running the cold-water faucet for about 15-30 seconds. Although toilet flushing or showering flushes water through a portion of the plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your health. It usually uses less than one gallon of water. For those with lead service lines or until you determine if you are served by one, let the water run from the tap longer based on the length of the lead service line and the plumbing configuration in your home. In other words, the larger the home or building and the greater the distance to the water main (in the street), the more water it will take to flush properly.

Replace brass faucets, fittings, and valves that do not meet the current definition of "lead free." The current definition went into effect January 4, 2014; therefore, any "lead free" plumbing materials purchased and/or installed prior to that date should be discarded or replaced. Visit the NSF website at www.nsf.org to learn more about lead-containing plumbing fixtures.

Sodium:

For healthy individuals, the sodium intake from water is not important, because a

much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be a concern to individuals on a sodium restricted diet.

Cryptosporidium:

Lakes, rivers and reservoirs may contain this tiny microbe. It is found in feces of humans and many domestic wild animals. Newark tests for Cryptosporidium on a monthly basis in their Pequannock finished water surface water supplies. It has never been detected in a viable state in any of their treated water supplies. Neither has it been found in the Wanaque Supply.

Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s):

Trihalomethanes and Haloacetic Acids are formed when raw water is treated with chlorine. Chlorine is used as a disinfectant to inactivate the disease causing organisms in the water. Trihalomethanes are a group of four chemicals Chloroform, Bromochloromethane, Dibromochloromethane, and Bromoform. The Maximum Contaminant Level (MCL) of Total Trihalomethanes in drinking water is 80 parts per billion. The five regulated Haloacetic Acids are monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, mono-bromoacetic acid and tribromoacetic acid. The Maximum Contaminant Level (MCL) for Haloacetic Acids is 60 parts per billion. The United States Environmental Protection Agency has set the MCL for both TTHMs and HAA5s because they are cancer causing contaminants. People who drink Trihalomethanes and Haloacetic Acids in excess of the MCL over many years may experience problems with their liver, kidney or central nervous system and may have increased risk of getting cancer. People with a severely compromised immune system, have an infant, are pregnant or are elderly, may be at increased risk and should seek advise from their health care providers about drinking this water.

Solutions to Stormwater Pollution

- If you have hazardous products in your home or workplace, make sure you store or dispose of them properly. Read the label for guidance.
- Use natural or less toxic alternatives when possible.
- Recycle used motor oil.
- Contact your municipality, county or facility management office for the locations of hazardous-waste disposal facilities.

Keep pollution out of storm drains

- Municipalities and many other public agencies are required to mark certain storm drain inlets with messages reminding people that storm drains are connected to local waterbodies.
- Do not let sewage or other wastes flow into a stormwater system.



Clean up after your pet

- Many municipalities and public agencies must enact and enforce local pet-waste rules.
- An example is requiring pet owners or their keepers to pick up and properly dispose of pet waste dropped on public or other people's property.
- Make sure you know your town's or agency's requirements and comply with them. It's the law. And remember to:
 - Use newspaper, bags or pooper-scoopers to pick up wastes.
 - Dispose of the wrapped pet waste in the trash or un-wrapped in a toilet.
 - Never discard pet waste in a storm drain.

Don't feed wildlife

- Do not feed wildlife, such as ducks and geese, in public areas.
- Many municipalities and other public agencies must enact and enforce a rule that prohibits wildlife feeding in these areas.

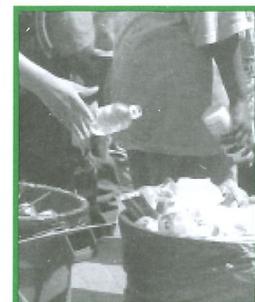


Don't litter

- Place litter in trash receptacles.
- Recycle. Recycle. Recycle.
- Participate in community cleanups.

Dispose of yard waste properly

- Keep leaves and grass out of storm drains.
- If your municipality or agency has yard waste collection rules, follow them.
- Use leaves and grass clippings as a resource for compost.
- Use a mulching mower that recycles grass clippings into the lawn.



As a resident, business, or other member of the New Jersey community, it is important to know these easy things you can do every day to protect our water.

Limit your use of fertilizers and pesticides

- Do a soil test to see if you need a fertilizer.
- Do not apply fertilizers if heavy rain is predicted.
- Look into alternatives for pesticides.
- Maintain a small lawn and keep the rest of your property or yard in a natural state with trees and other native vegetation that requires little or no fertilizer.
- If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply it. Make sure you properly store or discard any unused portions.

Properly use and dispose of hazardous products

- Hazardous products include some household or commercial cleaning products, lawn and garden care products, motor oil, antifreeze, and paints.
- Do not pour any hazardous products down a storm drain because storm drains are usually connected to local waterbodies and the water is not treated.

