

Source Water Assessment Summary

A State Review of Potential Contamination Sources Near Your Drinking Water

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for all public water systems. The Source Water Assessment and related questions can be obtained by logging onto the NJDEP’s source water assessment website at www.state.nj.us/dep/swap or by contacting the NJDEP’s Bureau of Safe Drinking Water at (609) 292-5550. **If a system is rated highly susceptible for a contamination category, it does not mean a customer is or will be consuming contaminated 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. The source water assessments performed on the intakes for each system lists the following susceptibility rated as indicated in the following table.

SUSCEPTIBILITY RATINGS FOR PASSAIC VALLEY WATER COMMISSION, CITY OF NEWARK WATER, JERSEY CITY MUNICIPAL UTILITIES AUTHORITY AND NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION-WANAQUE NORTH SYSTEMS SOURCES								
Intakes	Pathogens	Nutrients	Pesticides	Volatile Organic Compounds	Inorganic Contaminants	Radionuclides	Radon	Disinfection Byproduct Precursors
PVWC 4 - Surface Water	4 - High	4 - High	1 - Medium 3 - Low	4 - Medium	4 - High	4 - Low	4 - Low	4 - High
NJDWSC 5 - Surface Water	5 - High	5 - High	2 - Medium 3 - Low	5 - Medium	5 - High	5 - Low	5 - Low	5 - High
Newark 1 - Surface Water	High	Low	Low	Low	High	Low	Low	High

Cryptosporidium
Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Water Quality Chart Definitions

- ABS/LAS:** Alkylbenzene Sulfonate and Linear Alkylbenzene Sulfonate (surfactants)
- AL:** Action Level; the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- CDC:** Center for Disease Control
- CU:** Color Unit
- Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.
- HAA5:** Haloacetic Acids (sum of five compounds)
- Inorganic Contaminants:** Salts and metals which can be naturally-occurring, or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. These contaminants may be present in source water.
- Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.
- LRAA:** Locational running annual average
- MCL:** Maximum Contaminant Level; the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.
- MCLG:** Maximum Contaminant Level Goal; the level of a contaminant in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Microbial Contaminants/Pathogens:** Disease-causing organisms such as bacteria and viruses, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Common sources are animal and human fecal wastes. These contaminants may be present in source water.
- MPN:** Most Probable Number
- 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.)
- NA:** Not Applicable
- ND:** Not Detected
- NJDEP:** New Jersey Department of Environmental Protection
- NJDWSC:** North Jersey District Water Supply Commission
- NS:** No Standard
- NTU:** Nephelometric Turbidity Unit
- Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- Organic Contaminants/Volatile Organic Compounds:** Compounds 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. Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
- Pesticides (Herbicides, Insecticides, Fungicides, Rodenticides):** Man-made chemicals used to control pests, weeds and fungus, which may come from a variety of sources such as agriculture, stormwater runoff and residential uses and may be present in source water. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine and insecticides such as chlordane.
- ppb:** parts per billion (approximately equal to micrograms per liter)
- ppm:** parts per million (approximately equal to milligrams per liter)
- PWSID:** Public Water System Identification
- RAA:** Running Annual Average
- Radioactive Contaminants/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.
- RUL:** Recommended Upper Limit; the highest level of a constituent of drinking water that is recommended in order to protect aesthetic quality.
- RUL Achieved:** Yes entry indicates the state recommended upper limit was not exceeded. A no entry indicates the state recommended upper limit was exceeded.
- TON:** Threshold odor number
- TTHM:** Total Trihalmethanes (sum of four compounds)
- TT:** Treatment Technique; a required process intended to reduce the level of a contaminant in drinking water.
- Turbidity:** A measure of the particulate matter or “cloudiness” of the water. High turbidity can hinder the effectiveness of disinfectants.

Water Quality Data Table - 2020

Substances not listed in the following tables were not detected in the treated water supply during the year 2020. The presence of the following analytes in the water does not necessarily indicate that the water poses a health risk.

PRIMARY CONTAMINANTS						
Contaminant	MCLG	MCL	TREATED DRINKING WATER AT THE TREATMENT PLANT HIGHEST RESULT AND RANGE OF RESULTS (LOW TO HIGH)			Typical Source
			PVWC	NJDWSC	NEWARK	
Turbidity (NTU)	NA	TT = 1	0.266 (0.021 - 0.266)	0.9 (0.01 - 0.9)	2.11* (0.01 - 2.11)	Soil runoff
	NA	TT = percentage of samples <0.03 NTU (min 95% required)	Lowest Monthly Percentage of Samples Meeting Turbidity Levels			
			100%	99.1%	99.6%	
Total Organic Carbon (%)	NA	TT = % removal or removal ratio	Percent (%) Removal	Removal Ratio		Naturally present in the environment
			55 - 62 (25 - 50 required)	(0.8 - 1.1)	(1.08 - 1.45)	

MICROBIOLOGICAL CONTAMINANTS							
Contaminant	MCLG	MCL	HIGHEST MONTHLY RESULT				Typical Source
			PVWC	NJDWSC	NEWARK	NUTLEY	
Total Coliform Bacteria (%)	0	5% of monthly samples are positive				0 out of 360 Total Coliform Positive	Naturally present in the environment

INORGANIC CONTAMINANTS							
Contaminant	MCLG	MCL	HIGHEST RESULT AND RANGE OF RESULTS				Typical Source
			PVWC	NJDWSC	NEWARK	NUTLEY	
Arsenic (ppb)	0	10	ND	ND	<0.5	ND	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.026 (0.016 - 0.026)	0.0078	0.00665	ND	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Bromate (ppm)	NA	10	6.98 (<5.0 - 6.98)	ND	ND	ND	By-product of drinking water disinfection.
Fluoride (ppm)	4	4	0.050 (ND - 0.05)	ND	ND	ND	Erosion of natural deposits
Nickel (ppm)	NA	NA	3.40 (1.96 - 3.40)	ND	ND	ND	Erosion of natural deposits
Nitrate (ppm)	10	10	2.14 (0.59 - 2.14)	0.154	ND	ND	Runoff from fertilizer use, Leaching from septic tanks, sewage, erosion of natural deposits
Selenium (ppb)	50	50	Less than 2	ND	ND	ND	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

SECONDARY CONTAMINANTS										
Contaminant	NJ RUL	HIGHEST RESULT AND RANGE OF RESULTS								Typical Source
		PVWC		NJDWSC		NEWARK		NUTLEY		
		Result	Achieved	Result	Achieved	Result	Achieved	Result	Achieved	
A.B.S./L.A.S. (ppb)	500	90 - 120	Yes	ND	Yes	ND (2017)	Yes	-	-	A characteristic of water primarily caused by carbonate, bicarbonate, and hydroxide ions
Alkalinity (ppm)	NA	47 - 79	NA	39	NA	26.9	NA	28 - 64	NA	
Aluminum (ppb)	200	12.8 - 32.4	Yes	77	Yes	37.2	Yes	-	-	Byproduct of water treatment using aluminum salts
Chloride (ppm)	250	92.2 - 138.1	Yes	47.2	Yes	36.5	Yes	-	-	Erosion of natural deposits
Color (cu)	10	< 5	Yes	2	Yes	2	Yes	-	-	Presence of manganese and iron, plankton, humus, peat and weeds
Copper (ppm)	<1	ND	Yes	0.012	Yes	ND	Yes	-	-	A characteristic of water caused primarily by salts of calcium and magnesium
Hardness, CaCO ₃ (ppm)	250	88 - 178	Yes	53	Yes	45.7	Yes	-	-	
Iron (ppb)	300	< 100	Yes	104	Yes	7	Yes	< 100	Yes	Sloughing from distribution pipes
Manganese (ppb)	50	11.5 - 25.5	Yes	5.3	Yes	38	Yes	2.75	Yes	
Odor (TON)	3	2 - 100	No	<1	Yes	<1	Yes	-	-	Algae and plant matter
pH (optimum range)	6.5 - 8.5 (optimum average)	7.6 - 8.4	Yes	8.05	Yes	7.56	Yes	-	-	Presence of carbonate, bicarbonates and carbon dioxide
Sodium (ppm)	50	46.1 - 94.8	No**	23.4	Yes	23.5	Yes	-	-	Natural mineral, road salt
Sulfate (ppm)	250	44.7 - 87.8	Yes	7.54	Yes	11	Yes	-	-	Naturally present in the environment
Total Dissolved Solids (ppm)	500	301 - 510	No	104	Yes	110	Yes	-	-	Erosion of natural deposits
Zinc (ppb)	5,000	1.9 - 3.7	Yes	13	Yes	ND	Yes	-	-	

HEALTH EFFECTS

- * NEWARK TURBIDITY VIOLATION**
On 9/25/2020 the turbidity at the Pequannock WTP rose rapidly due to the failure of a valve feeding coagulant chemical. The valve was repaired on the afternoon of 9/26/2020. Chlorine levels were adjusted as needed to provide additional disinfection. Sampling was conducted to ensure the absence of coliform bacteria.
- ** PVWC FINISHED WATER EXCEEDS SODIUM RUL**
PVWC's finished water was above New Jersey's Recommended Upper Limit (RUL). Possible sources of sodium include natural soil runoff, roadway salt runoff, upstream wastewater treatment plants, and a contribution coming from chemicals used in the water treatment process. 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.

Vulnerable Populations Statement

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants 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.

RADIOLOGICAL CONTAMINANTS							
Contaminant	MCLG	MCL	HIGHEST RESULT AND RANGE OF RESULTS				Typical Source
			PVWC	NJDWSC	NEWARK	NUTLEY	
Combined radium-226 + 228 (pCi/L)	0	5	ND (2014 Data)	ND (2014 Data)	1.5 (2017 Data)	NA	Erosion of natural deposits

SOURCE WATER PATHOGEN MONITORING		
Contaminant	PVWC Plant Intake	Typical Source
<i>Cryptosporidium</i> (Oocysts/L)	0 - 0.09	Microbial pathogens found in surface waters throughout the United States
<i>Giardia</i> (Cysts/L)	0 - 0.83	

TESTING FOR EMERGING CONTAMINANTS	
Contaminant	Little Falls WTP Effluent Range of Results
Chlorate (ppb)	121.2 - 344.9
1,4-Dioxane (ppb)	ND - 0.243
Perfluorobutanesulfonic acid (PFBS) (ppt)	<2.0 - 3.1
Perfluoroheptanoic acid (PFHpA) (ppt)	<2.0 - 3.1
Perfluorohexanesulfonic acid (PFHxS) (ppt)	<2.0 - 2.1
Perfluorohexanoic acid (PFHxA) (ppt)	3.1 - 8.6
Perfluorooctanesulfonic acid (PFOS) (ppt)	2.9 - 4.4
Perfluorooctanoic acid (PFOA) (ppt)	4.8 - 7.6

Test results presented in this table were collected in 2020 to monitor the occurrence of emerging contaminants. There are currently, no EPA drinking water standards in effect for these contaminants.

PVWC monitors for the presence of perfluorochemicals in source water and finished drinking water monthly. The NJDEP has formally established MCLs for Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) of 14 ppt and 13 ppt respectively.

These rules were effective January 1, 2021. The results observed in 2021 were below the NJDEP newly established MCL.

REPORT COMMENTS

- Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
- Coliform is bacteria which are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.
- 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 sytems and may have an increased risk of cancer.
- We do not add fluoride to your drinking water.
- Nitrate in drinking water at levels above 10ppm 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
- Sulfate is regulated for reason of aesthetic quality only.

NJ DRINKING WATERWATCH

Drinking WaterWatch from the NJDEP enables users to view drinking water information for NJ water systems. Visit https://www9.state.nj.us/DEP_WaterWatch_public for more details and information.

SOLUTIONS TO STORMWATER PREVENTION

Pollution on streets, parking lots, and lawns is washed by rain into storm drains, then directly to our drinking water supplies, and the ocean and lakes that our children play in. Fertilizer, oil, pesticides, detergents, pet waste, grass clippings – you name it, and it ends up in our water.

Stormwater pollution is one of New Jersey's greatest threats to clean and plentiful water, and that is why we are all doing something about it.

By sharing the responsibility and making small, easy changes in our daily lives, we can keep common pollutants out of stormwater. It all adds up to cleaner water, and it saves the high cost of cleaning up once it is dirty.

As part of New Jersey's initiative to keep our water clean and plentiful, and to meet federal requirements, many municipalities and other public agencies including colleges and military bases must adopt ordinances or other rules prohibiting various activities that contribute to stormwater pollution. Breaking these rules can result in fines or other penalties.

Chapter 622 of the Township Code establishes regulations for the management of stormwater. Any building plan that will add impervious coverage to a property must be reviewed by the Municipal Engineer to ensure that preventive measures are put in place to protect persons and property and preserve the public health, safety and welfare. If you are contemplating any construction that may be affected by the stormwater regulations, you should contact the Building Department. **For more information, please visit www.nutleynj.org/stormwater-management.**

LEAD AND COPPER TESTING - NUTLEY RESIDENTIAL TAPS				
Contaminant	MCLG	Action Level	90th Percentile	Typical Source
Copper (ppm)	1.3	1.3	0.08798 (June) 0.06194 (Dec)	Corrosion of household plumbing systems
Lead (ppm)	0	15	0.00073 (June) 0.0009 (Dec)	Corrosion of household plumbing systems

- Semi-Annual testing completed in June and December 2020.
- Lead and Copper compliance is based on the 90th percentile results. INFANTS AND YOUNG CHILDREN ARE TYPICALLY MORE VULNERABLE TO LEAD IN DRINKING WATER THAN THE GENERAL POPULATION. INFANTS AND CHILDREN WHO DRINK WATER CONTAINING LEAD IN EXCESS OF THE ACTION.

DISINFECTANT RESIDUALS - NUTLEY DISTRIBUTION SYSTEM				
Contaminant	MRDL	MRDLG	Running Annual Average	Typical Source
Chlorine (ppm)	4.0	4.0	1.13	Water additive used to control microbes

DISINFECTION BYPRODUCTS - NUTLEY DISTRIBUTION SYSTEM				
Stage 2	Site	MCL	Locational RAA	Typical Source
Haloacetic Acids (HAA5) (ppb)	N-1	80	14.4575	Byproduct of drinking water disinfection
	N-1A		22.4100	
	N-7		34.3900	
	N-8		36.8050	
Total Trihalomethanes (TTHMs) (ppb)	N-1	60	52.0250	Byproduct of drinking water disinfection
	N-1A		37.8500	
	N-7		45.1250	
	N-8		43.9000	

- Stage 2 HAA5 and TTHM compliance is based on the locational running annual average (LRAA) calculated at each monitoring location.
- Monitoring is conducted at four (4) locations throughout the Township of Nutley. This result is the locational running annual average in 2020.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Newark Water Customers (436 Households)

Nutley Water Department Had Levels of Haloacetic Acid 5 (HAA5) Above Water Standards

Our water system violated the drinking water standard or maximum contaminant level (MCL) for HAA5 from January 1, 2020 to March 31, 2020. As our customers, you have a right to know what happened and what we did to correct this situation. This is not an emergency situation, and you may continue to drink the water.

The standard for HAA5 is 60 micrograms per liter (µg/L) or parts per billion (ppb). This is determined by averaging all the sample results collected at each sampling location for the past 12 months (a locational running annual average (LRAA)). The LRAA level(s) of HAA5 at two (2) of the four (4) sampling locations exceeded the 60 ppb standard.

The Nutley Water Department failed to provide this notification, as required, within 30 days of becoming aware of the LRAA exceedances for the January – March 2020 compliance period. We are required to inform you every quarter if the LRAA is over the standard or MCL of 60 ppb. Nutley Water Department had issued multiple public notices in 2019 and one on January 10, 2020 to its water customers receiving City of Newark Water for previous exceedances of the HAA5 standard. Recent sampling shows the LRAA and current level of HAA5s in the water is less than 60 ppb.

The City of Newark has implemented a remedial plan to modify treatment to reduce DBPs such as HAA5, prior to entering our distribution system. This plan was implemented in the summer of 2019. Our current levels of HAA5 have been below 60 ppb since the third quarter of 2019 and all LRAAs have been below the standard since the first quarter of 2020.

The City of Newark serves 436 Nutley households with Pequannock Reservoir Water. This area is located west of Ridge Road and Van Winkle Avenue and bordered by Glenview Road, the Township of Nutley/Bloomfield boundary line and East Passaic Avenue.

For more additional information and public notices please visit our website at www.nutleynj.org/water or contact Dominic Ferry, Licensed Water Operator at (973) 284-4984 or dferry@nutleynj.org.

About the Nutley Water Department and the Sources of Your Drinking Water

The Nutley Water Department is a division within the Department of Public Works, and operates solely on revenues received for the services rendered. This means tax dollars are not necessary for this utility to function under normal conditions.

Nutley receives the majority of its potable water from the Passaic Valley Water Commission (PVWC). Its main facility is the Little Falls Water Treatment Plant in Totowa, NJ. Water is diverted from the Passaic and Pompton Rivers, is treated, filtered and disinfected at the plant. In drought conditions or other emergencies, water from the Point View Reservoir in Wayne, NJ can be used to supplement river sources. Treated water is then mixed at PVWC's main pumping station with treated water from the North Jersey District Water Supply Commission's Wanaque Reservoir treatment plant. Water is then pumped into underground transmission lines running through Nutley. Nutley has four (4) intake pit areas along this transmission line located at:

Coeyman Avenue • Ridge Road • Centre Street • Meacham Avenue

At these intakes, the water goes into our distribution system. The water is then conveyed into all homes or businesses connected to the system.

The City of Newark serves 436 Nutley households with Pequannock Reservoir Water. This area is located west of Ridge Road and Van Winkle Avenue and bordered by Glenview Road, the Township of Nutley/Bloomfield boundary line and East Passaic Avenue.

The Nutley Water Department is a public community water system and purchases water from the following water systems:

- Passaic Valley Water Commission - PWSID # NJ1605002
- North Jersey District Water Supply Commission - Wanaque North System - PWSID # NJ1613001
- Newark Water Department - PWSID # NJ0714001

Monitoring and Testing of Drinking Water

The Nutley Water Department routinely monitors for contaminants in your drinking water according to federal and state laws. This report covers the period from January 1, 2020 thru December 31, 2020. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water including bottled drinking water may be reasonably expected to contain at least small amounts of some constituents. It is very important to remember that the presence of these contaminants does not necessarily pose a health risk.

For the year 2020, Passaic Valley Water Commission (PVWC) did all the required testing of our water supply. The Township of Nutley in 2020 sampled and tested water throughout the township for:

- Chlorine Residuals
- Coliforms
- Haloacetic Acids
- Iron and Manganese
- Lead and Copper
- Radionuclides (tested by the State in 2001)
- Trihalomethanes

For Additional Information

If you have any questions about this report or concerning the Nutley Water Department, please kindly contact Mr. Dominic Ferry, Licensed Water and Sewer Operator at (973) 284-4984 or dferry@nutleynj.org.

Public Input

The Board of Commissioners of the Township of Nutley meet on the first and third Tuesday of every month. For dates and times of these meetings, please call the offices of the Department of Public Works at (973) 284-4959 or visit the Township of Nutley's website at www.nutleynj.org.

Health and Educational Information

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline 1-800-426-4791.

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 that 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 waste-water discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and 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.

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

The standards for these contaminants are known as Maximum Contaminant Levels (MCLs) that are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Special 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 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.

Additional Information on 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 Nutley Water Department 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 two 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.



Water Conservation Tips from Commissioner Scarpelli...

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

Download the *Guide to Water Conservation* and view the Water Conservation Ordinance enacted in May 2013 at www.nutleynj.org/water-conservation.

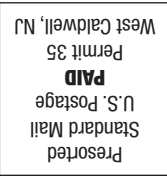
- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Additional Water Information Resources

- Nutley Water Department website: www.nutleynj.org/water
- Nutley Stormwater Regulations: www.nutleynj.org/stormwater-management
- USEPA's Drinking Water website: www.epa.gov/safewater
- NJDEP Water Supply website: www.nj.gov/dep/watersupply
- American Water Works Association (AWWA) website: www.awwa.org
- Nutley Water Department - Water Service: (973) 284-4984
- Nutley Water Department - Water Billing & Accounts: (973) 284-4962
- USEPA Safe Drinking Water Hotline: 1-800-426-4791
- NJDEP Bureau of Safe Drinking Water: (609) 292-5550

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

POSTAL CUSTOMER
NUTLEY, NJ 07110



Township of Nutley
Water Department
Commissioner Dr. Joseph P. Scarpelli
Director of Public Works



Nutley Water Department
Commissioner Dr. Joseph P. Scarpelli, Director



Dear Customer,

United States Environmental Protection Agency (EPA) regulations require that all public water systems issue an annual Water Quality Report. The intent of this regulation is to inform consumers about the source and quality of their drinking water, and to assemble this information in an easy to read format.

This is the 22nd annual report on the quality of water delivered by the Township of Nutley. It meets the Federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and the health risks associated with any contaminants.

The purpose of this report is to provide our customers with information on the sources of their drinking water, how this water gets to each customer, potential substances that may be found in drinking water, some related health information, and a listing of the substances present in our water and how their levels compare to the state and federal drinking water regulations.

I am pleased to report that our drinking water is safe and meets all federal and state requirements.

Over the past two years, the 436 homes in the southwestern part of town that receive water from the City of Newark, have had issue with compliance that is traced directly back to the source water. Consequently, Newark has modified their treatment facilities to significantly reduce the amount of disinfection by-products, such as haloacetic acids, that enter our system. They have also implemented new corrosion control treatment to reduce corrosion. This should dramatically reduce any potential for lead to enter your tap water.

The Nutley Water Department has also taken an aggressive program to identify and remove any lead service lines within our system and is actively implementing other improvements to our water system to provide you with a better quality of drinking water. These improvements include: water system valve exercising, hydrant flushing, along with examining our ability to access other sources of water.

The Township of Nutley 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 distribution of our most valued resource... water.

Dr. Joe
Commissioner Dr. Joseph P. Scarpelli
Director of Public Works

2020 Water Quality Report