

**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](http://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 |
| <b>PVWC</b><br>4 - Surface Water  | 4 - High  | 4 - High  | 1 - Medium<br>3 - Low | 4 - Medium                 | 4 - High               | 4 - Low       | 4 - Low | 4 - High                          |
| <b>NJDWSC</b><br>5 - Surface Water  | 5 - High  | 5 - High  | 2 - Medium<br>3 - Low | 5 - Medium                 | 5 - High               | 5 - Low       | 5 - Low | 5 - High                          |
| <b>Jersey City MUA</b><br>1 - Surface Water   | High      | Medium    | Low                   | Medium                     | Medium                 | Low           | Low     | High                              |
| <b>Newark</b><br>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 Trihalomethanes (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 - 2019**

Substances not listed in the following tables were not detected in the treated water supply during the year 2019. The presence of the following analytes in the water does not necessarily indicate that the water poses a health risk.

| Contaminant              | MCLG | MCL   | PRIMARY CONTAMINANTS                |                          |                           |                        |        | Typical Source                       |
|--------------------------|------|---|-------------------------------------|--------------------------|---------------------------|------------------------|--------|--------------------------------------|
|                          |      |   | HIGHEST RESULT AND RANGE OF RESULTS |                          |                           |                        |        |                                      |
|                          |      |   | PVWC                                | NJDWSC                   | JERSEY CITY               | NEWARK                 | NUTLEY |                                      |
| Turbidity (NTU)          | NA   | TT = 1  | 0.34<br>(0.017 - 0.34)              | 2.1 ^<br>(0.09 average)  | 0.21<br>(0.054 - 0.21)    | <0.30<br>(0.01 - 0.38) | NA     | Soil runoff                          |
|                          | NA   | TT = percentage of samples <0.03 NTU (min 95% required) | 100%                                | 98.6%                    | 100%                      | 95%                    | NA     |                                      |
| Total Organic Carbon (%) | NA   | TT = % removal or removal ratio                         | Percent (%) Removal                 | Removal Ratio            |                           | NA                     | NA     | Naturally present in the environment |
|                          |      |   | 58 - 100<br>(25 - 50 required)      | 1.1 (RAA)<br>(1.0 - 1.3) | 1.08 (RAA)<br>(1.0 - 1.3) |                        |        |                                      |

| Contaminant                 | MCLG | MCL                                | MICROBIOLOGICAL CONTAMINANTS |        |             |        |                                      | Typical Source                       |
|-----------------------------|------|------------------------------------|------------------------------|--------|-------------|--------|--------------------------------------|--------------------------------------|
|                             |      |                                    | HIGHEST MONTHLY RESULT       |        |             |        |                                      |                                      |
|                             |      |                                    | PVWC                         | NJDWSC | JERSEY CITY | NEWARK | NUTLEY                               |                                      |
| Total Coliform Bacteria (%) | 0    | 5% of monthly samples are positive |                              |        |             |        | 1 out of 363 Total Coliform Positive | Naturally present in the environment |

| Contaminant    | MCLG | MCL | INORGANIC CONTAMINANTS              |        |                       |        |        | Typical Source  |
|----------------|------|-----|-------------------------------------|--------|-----------------------|--------|--------|---|
|                |      |     | HIGHEST RESULT AND RANGE OF RESULTS |        |                       |        |        |   |
|                |      |     | PVWC                                | NJDWSC | JERSEY CITY           | NEWARK | NUTLEY |   |
| Arsenic (ppb)  | 0    | 10  | ND                                  | ND     | 0.63                  | <0.5   | ND     | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes            |
| Barium (ppm)   | 2    | 2   | Less than 0.10                      | 0.0069 | 0.02                  | <0.1   | ND     | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural depositss                       |
| Chromium (ppb) | 100  | 100 | ND                                  | ND     | 1                     | ND     | ND     | Discharge from steel and pulp mills; Erosion of natural deposits  |
| Fluoride (ppm) | 4    | 4   | 0.050<br>(ND - 0.050)               | ND     | ND                    | <0.1   | ND     | Erosion of natural deposits   |
| Mercury (ppb)  | 2    | 2   | ND                                  | ND     | ND                    | <0.2   | ND     | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Nickel (ppm)   | NA   | NA  | 2.53<br>(ND - 2.53)                 | ND     | 1.54                  | ND     | ND     | Erosion of natural deposits   |
| Nitrate (ppm)  | 10   | 10  | 2.81<br>(ND - 2.81)                 | 0.155  | 0.48<br>(0.14 - 0.48) | 0.111  | ND     | Runoff from fertilizer use, Leaching from septic tanks, sewage, erosion of natural deposits                       |
| Selenium (ppb) | 50   | 50  | Less than 2                         | ND     | ND                    | ND     | ND     | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines                  |

| Contaminant                                      | NJ RUL                      | SECONDARY CONTAMINANTS              |          |        |          |             |          |           |          |        |          | Typical Source   |
|--|-----------------------------|-------------------------------------|----------|--------|----------|-------------|----------|-----------|----------|--------|----------|--|
|  |                             | HIGHEST RESULT AND RANGE OF RESULTS |          |        |          |             |          |           |          |        |          |  |
|  |                             | PVWC                                |          | NJDWSC |          | JERSEY CITY |          | NEWARK    |          | NUTLEY |          |  |
| Result   | Achieved                    | Result                              | Achieved | Result | Achieved | Result      | Achieved | Result    | Achieved | Result | Achieved |  |
| A.B.S./L.A.S. (ppb)                              | 500                         | ND - 60                             | Yes      | ND     | Yes      | ND          | Yes      | ND (2017) | Yes      | -      | -        |  |
| Alkalinity (ppm)                                 | NA                          | 28 - 80                             | NA       | 40     | NA       | 30 - 59     | NA       | 26.9      | NA       | -      | -        | A characteristic of water primarily caused by carbonate, bicarbonate, and hydroxide ions |
| Aluminum (ppb)                                   | 200                         | 20 - 42                             | Yes      | 28     | Yes      | ND - 60     | Yes      | 83 (2017) | Yes      | -      | -        | Byproduct of water treatment using aluminum salts  |
| Chloride (ppm)                                   | 250                         | 48 - 161                            | Yes      | 44     | Yes      | 64 - 142    | Yes      | 36.5      | Yes      | -      | -        | Erosion of natural deposits  |
| Color (cu)                                       | 10                          | < 5                                 | Yes      | 2      | Yes      | ND          | Yes      | 2         | Yes      | -      | -        | Presence of manganese and iron, plankton, humus, peat and weeds                          |
| Hardness [as CaCO <sub>3</sub> ] (ppm)           | 250                         | 58 - 172                            | Yes      | 43     | Yes      | 62 - 93     | Yes      | 45.7      | Yes      | -      | -        | A characteristic of water caused primarily by salts of calcium and magnesium             |
| Hardness [as CaCO <sub>3</sub> ] (grains/gallon) | 15                          | 3 - 10                              | Yes      | 3      | Yes      | 4 - 5       | Yes      | 3         | Yes      | -      | -        |  |
| Iron (ppb)                                       | 300                         | < 100                               | Yes      | 17     | Yes      | ND - 40     | Yes      | 10        | Yes      | < 100  | Yes      | Sloughing from distribution pipes  |
| Manganese (ppb)                                  | 50                          | ND - 211                            | No       | 18     | Yes      | ND          | Yes      | 39        | Yes      | 3.19   | Yes      | Algae and plant matter   |
| Odor (ton)                                       | 3                           | 2 - 9                               | No       | ND     | Yes      | ND          | Yes      | 1 (2017)  | Yes      | -      | -        | Presence of carbonate, bicarbonates and carbon dioxide                                   |
| pH (optimum range)                               | 6.5 - 8.5 (optimum average) | 8.1 - 8.4                           | Yes      | 8.09   | Yes      | 6.99 - 7.6  | Yes      | 7.28      | Yes      | -      | -        | Natural mineral, road salt   |
| Sodium (ppm)                                     | 50                          | 28 - 115                            | No *     | 23     | Yes      | 35 - 74     | No *     | 29.2      | Yes      | -      | -        | Naturally present in the environment   |
| Sulfate (ppm)                                    | 250                         | 9 - 82                              | Yes      | 6      | Yes      | 8           | Yes      | 10.3      | Yes      | -      | -        | Erosion of natural deposits  |
| Total Dissolved Solids (ppm)                     | 500                         | 190 - 561                           | No       | 118    | Yes      | 149 - 300   | Yes      | 105       | Yes      | -      | -        |  |
| Zinc (ppb)                                       | 5,000                       | < 40                                | Yes      | 10     | Yes      | ND - 50     | Yes      | <200      | Yes      | -      | -        |  |

**HEALTH EFFECTS**

- ^ NJDWSC TURBIDITY VIOLATION**  
NJDWSC incurred a Combined Filter Effluent Turbidity violation in May 2019. There is nothing you need to do. You weren’t being supplied with water from NJDWSC at the time of the turbidity violation. 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.
- \* PVWC AND JERSEY CITY FINISHED WATER EXCEEDS SODIUM RUL**  
PVWC and Jersey City’s finished water was above NJ’s Secondary Recommended Upper Limit (RUL) of 50ppm for Sodium in 2018. Possible sources of sodium include roadway salts runoff with a small contribution coming from chemicals used in the 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. If you have any concerns please contact your health care provider.

**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.

| Contaminant                       | MCLG | MCL | RADIOLOGICAL CONTAMINANTS           |                   |                     |                    |        | Typical Source              |
|-----------------------------------|------|-----|-------------------------------------|-------------------|---------------------|--------------------|--------|-----------------------------|
|                                   |      |     | HIGHEST RESULT AND RANGE OF RESULTS |                   |                     |                    |        |                             |
|                                   |      |     | PVWC                                | NJDWSC            | JERSEY CITY         | NEWARK             | NUTLEY |                             |
| Combined radium-226 + 228 (pCi/L) | 0    | 5   | ND<br>(2014 Data)                   | ND<br>(2014 Data) | 0.14<br>(2014 Data) | 1.5<br>(2017 Data) | NA     | Erosion of natural deposits |

| Contaminant                 | PVWC Intake Avg. (Range of Results) | PVWC Little Falls WTP Avg. (Range of Results) | Jersey City WTP Avg. (Range of Results) | Newark Pequannock Intake (Range of Results) | Newark Pequannock WTP (Range of Results) |
|-----------------------------|-------------------------------------|---|---|---|--|
|                             |                                     |   |   |   |  |
| Bromide (ppb)               | 44 (33 - 69)                        |   |   |   |  |
| Total Organic Carbon (mg/L) | 6 (4 - 7)                           |   |   | (3 - 4)                                     |  |
| Manganese [Total] (ppb)     |                                     | 8 (2 - 14)                                    | (0.89 - 2.17)                           |   | (3 - 53)                                 |

Unregulated contaminants are those for which EPA requires monitoring but has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

| SOURCE WATER PATHOGEN MONITORING   |                   |  |
|------------------------------------|-------------------|--|
| Contaminant                        | PVWC Plant Intake | Typical Source   |
| <i>Cryptosporidium</i> (Oocysts/L) | 0 - 0.57          | Microbial pathogens found in surface waters throughout the United States |
| <i>Giardia</i> (Cysts/L)           | 0 - 1.23          |  |

| ADDITIONAL PVWC TREATMENT PLANT MONITORING RESULTS |  |
|--|--|
| Contaminant  | Little Falls WTP Effluent Range of Results |
| Chlorate (ppb)                                     | 35 - 413                                   |
| 1,4-Dioxane (ppb)                                  | ND - 0.09                                  |
| Perfluorobutanesulfonic acid [PFBS] (ppb)          | ND - 0.0021                                |
| Perfluoroheptanoic acid [PFHpA] (ppb)              | ND - 0.0027                                |
| Perfluorohexanesulfonic acid [PFHxS] (ppb)         | ND - 0.0029                                |
| Perfluorohexanoic acid [PFHxA] (ppb)               | ND - 0.0054                                |
| Perfluorooctanesulfonic acid [PFOS] (ppb)          | ND - 0.0086                                |
| Perfluorooctanoic acid [PFOA] (ppb) *              | 0.0039 - 0.010                             |

Test results presented in this table were collected in 2019 as part of a study to determine the general occurrence of these contaminants. PVWC continues to participate in and support these types of regulatory and research efforts to maintain a position in leadership in drinking water supply.

There are currently, no EPA drinking water standards in effect for these contaminants although EPA has established health advisory levels for some of these to provide an estimate of acceptable drinking water levels based on health effects information. EPA has published Health Advisory levels for Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) of 0.070 ppb combined.

Health advisory levels are non-enforceable and non-regulatory and provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

The results observed in 2019 were well below EPA established health advisory levels.

**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 systems 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.

**WAIVER INFORMATION**

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. A monitoring waiver for synthetic organic compounds for the 2017-2019 monitoring period was granted to the Jersey City, Newark and NJDWSC water systems. PVWC received a monitoring waiver for all of the synthetic organic contaminants except for Di(2-Ethylhexyl)Phthalate for 2017-2019 monitoring period.

**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](https://www9.state.nj.us/DEP_WaterWatch_public) for more details and information.

**LEAD AND COPPER TESTING - NUTLEY RESIDENTIAL TAPS**

| Contaminant  | MCLG | Action Level | 90th Percentile | Typical Source                          |
|--------------|------|--------------|-----------------|---|
| Copper (ppm) | 1.3  | 1.3          | 0.08054         | Corrosion of household plumbing systems |
| Lead (ppm)   | 0    | 15           | 0.00091         | Corrosion of household plumbing systems |

- Semi-Annual testing completed on December 13, 2019.
- 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   | 1.06                   | 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  | 18.8000        | Byproduct of drinking water disinfection |
|                                     | N-1A |     | 20.0075        |  |
|                                     | N-7  |     | 70.4975        |  |
|                                     | N-8  |     | 69.2300        |  |
| Total Trihalomethanes (TTHMs) (ppb) | N-1  | 60  | 35.8250        | Byproduct of drinking water disinfection |
|                                     | N-1A |     | 31.6750        |  |
|                                     | N-7  |     | 62.3500        |  |
|                                     | N-8  |     | 57.4250        |  |

- 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 2019.

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

**Nutley Water Department Has Levels of Haloacetic Acids (HAA5) Above Water Standards and Failed to Take Action to Bring Water into Compliance with HAA5 Maximum Contaminant Level (MCL) Within One Year**

Our water system is required to take any action necessary to bring the water system into compliance with applicable MCL(s) within one-year from the initial violation. Our water system has continued to exceed the HAA5 MCL since the 4th Quarter 2018 and failed to regulatory comply with the HAA5 MCL violation by the one-year deadline of January 6, 2020. You were previously notified of the HAA5 MCL violation in public notices issued on February 4, 2019; April 22, 2019; July 5, 2019; and November 8, 2019.

This is an issue with our source water supplier, Newark Water Department and their disinfection process. When disinfectants are used in the treatment of drinking water, disinfectants react with naturally-occurring organic and inorganic matter present in water to form disinfection byproducts.

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](http://www.nutleynj.org/water) or contact Dominic Ferry, Licensed Water Operator at (973) 284-4984 or [dferry@nutleynj.org](mailto:dferry@nutleynj.org).



# Nutley Water Department

## Commissioner Dr. Joseph P. Scarpelli, Director



### 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:

- Coyman 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
- Jersey City Municipal Utilities Authority - PWSID # NJ090600
- 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, 2018 thru December 31, 2018. 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 2018, Passaic Valley Water Commission (PVWC) did all the required testing of our water supply. The Township of Nutley in 2018 sampled and tested water throughout the township for:

- Chlorine Residuals
- Coliforms
- Haloacetic Acids
- Iron and Manganese
- Lead and Copper (tested on December 13, 2019)
- 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](mailto: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](http://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 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 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](http://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](http://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](http://www.epa.gov/watersense) for more information.

#### Additional Water Information Resources

- Nutley Water Department website: [www.nutleynj.org/water](http://www.nutleynj.org/water)
- Nutley Stormwater Regulations: [www.nutleynj.org/stormwater-management](http://www.nutleynj.org/stormwater-management)
- USEPA's Drinking Water website: [www.epa.gov/safewater](http://www.epa.gov/safewater)
- NJDEP Water Supply website: [www.nj.gov/dep/watersupply](http://www.nj.gov/dep/watersupply)
- American Water Works Association (AWWA) website: [www.awwa.org](http://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

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

POSTAL CUSTOMER

NUTLEY, NJ 07110

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

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West Caldwell, NJ

**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 21st 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

**2019 Water Quality Report**  
PWSID # NJ0716001