Frequently Asked Questions

What can I do to conserve water?

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.

Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Tap vs. Bottled, Rethinking What You Are Drinking

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

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

How much water do I use during a typical shower?

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

Montclair Water Bureau 54 Watchung Avenue Montclair, NJ 07043

If you have questions concerning this report or your drinking wat please contact Gary Obszarny, Director of Utilities, Licensed Operator, by

Montclair & Glen Rid Presented by Montclair Water Bureau PWS ID: #0713001 and #0708001

Annual Drinking Water Quality Report

Reporting year 2016

Our Drinking Water Is Regulated

The Montclair Water Bureau is pleased to share this report with you. This report is a summary of the quality of the water we provide our customers. Our water meets all state and federal standards. The analysis covers January 1 through December 31, 2016, and was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Where Do We Get Our Drinking Water?

The Township of Montclair and the Borough of Glen Ridge obtain their water from North Jersey District Water Supply Commission (NJDWSC). The Township of Montclair and the Borough of Glen Ridge are partners in the NJDWSC, which owns and operates the 29.6 billion-gallon Wanaque Reservoir and Treatment Plant and the 7-billion-gallon Monksville Reservoir.

The water is received by the Township of Montclair through its Grove Street Pumping Station and is pumped throughout Montclair. The Montclair system also includes 3 municipal wells, one in each of the 3 pressure zones.

The Borough of Glen Ridge has 3 interconnections with Montclair through which it receives its water supply.

Source of Drinking Water

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

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

All Drinking Water May Contain Contaminants

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Required Additional Health Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Montclair Water Bureau is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) completed Source Water Assessment Reports and Summaries for all public water systems in 2005. Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP's source water website at www. state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact the Montclair Water Bureau at (973) 744-4600.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen, disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use and avoid using hot water, to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule. 2016 Test Results PWS ID #0713001, 0708001

We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1 to December 31, 2016. The state requires us to monitor for certain substances less often than once per year because concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms, we've provided the following definitions:

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

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Regulated Substances ¹					Montclair Water Bureau		NJDWSC		Glen Ridge Water		
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range	Amount Detected	Range	Amount Detected	Range	Violation Yes/No	Likely Source of Contamination
Alpha Emitters (pCi/L)	2015	15	0	4.68	ND-4.68	NA	NA	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2014	5	0	2.0810	1.36-2.6110	NA	NA	NA	NA	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2016	2	2	0.51710	0.44-0.5910	0.014	ND - 0.014	NA	NA	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	2016	[4]	[4]	0.63	0.5 - 1.0	0.55	NA	0.352	0.2 - 0.6	No	Water additive used to control microbes
Fluoride (ppm)	2016	4	4	<0.2510	ND-<0.25 ¹⁰	NA	ND-0.112	NA	NA	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2016	60	NA	34.6	24.4 - 46.3	32.84 33.95	NA	25.1	11.6 - 41.3	No	By-product of drinking water disinfection
Mercury (ppm)	2015	0.002	0.002	0.00007210	0.000071- 0.000075 ¹⁰	NA	NA	NA	NA	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands
Methyl tert butyl ether (ppb)	2015	70	NA	NA	NA	0.16	NA	NA	NA	No	By-products of industrial petroleum production
Nitrate (ppm)	2016	10	10	2.77 Tested in 2015	2.6-2.9 Tested in 2015	0.284	ND - 0.284	NA	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Trihalomethanes [TTHMs] (ppb)	2016	80	NA	49.7	34.4 - 67.6	<u>42.24</u> 50.65	NA	40.75	24 - 67.9	No	By-product of drinking water disinfection
Total Organic Carbon ⁶ (ppm)	2016	Monthly avg of treated water <2.0 mg/L	NA	NA	NA		(min) (max)	NA	NA	No	Naturally present in the environment
Turbidity ⁷ (NTU)	2016	TT=1 NTU	NA	NA	NA		verage) nighest)	NA	NA	No	Soil runoff
Turbidity ⁷ (Lowest monthly % of samples meeting limit)	2016	TT=95% of samples <0.3 NTU	NA	NA	NA	99.70%	NA	NA	NA	No	Soil runoff
Uranium (pCi/L)	2015	30	O ¹	2.6910	ND-2.69 ¹⁰	NA	NA	NA	NA	No	Erosion of natural deposits

Lead and Copper Contaminants Montclair Water Bureau					Glen Ridge Water				NJDWSC						
Substance (Unit of Measure)	AL	MCLG	Year Sampled	Your Water	# of sites found above AL		Year Sampled	Your Water	# of sites found above AL		Year Sampled	Your Water	# of sites found above AL		Likely Source of Contamination
Copper (ppm) (90th percentile)	1.3	1.3	2016	0.0855	0/35	No	2016	0.0979	0/22	No	2016	0.130	0	No No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90th percentile)	15	0	2016	<2	0/35	No	2016	<2	0/22	No	2016	0.00230	0	Yes No	Corrosion of household plumbing systems; erosion of natural deposits

Secondary Substances Montclair Water Bureau NJDWSC

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ABS / LAS (ppm)	2016	500	NA	NA	<0.021	NA	Naturally present in the environment
Alkalinity (ppm)	2016	NS	139 ¹⁰	122-172 ¹⁰	43.9	NA	Naturally present in the environment
Aluminum (ppb)	2016	200	< 0.1510	NA	0.045	NA	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2016	250	174.3 ¹⁰	155-202 ¹⁰	77.2	NA	Runoff/leaching from natural deposits
Color (units)	2016	10	3 ¹⁰	3-310	2	NA	Naturally occurring organic materials
Copper (ppm)	2016	1.0	0.055	0.02 - 0.1154	0.009	NA	Naturally present in the environment
Corrosivity (ppm)	2016	Non-corrosive	0.33410	0.273-0.42810	NA	NA	Corrosion of distribution system pipes
Foaming Agents (ppm)	2016	0.5	0.02510	0.024-0.02810	NA	NA	Detergents/similar substances when water is agitated
Hardness [as CaCO3] (ppm)	2016	250	34810	332-36010	71.7	NA	Naturally occurring
Iron (ppm)	2016	0.3	0.036	NA	0.0059	NA	Naturally present in the environment
Manganese (ppm)	2016	0.05	0.0034	NA	0.0021	NA	Naturally present in the environment
Odor (TON)	2016	3	1.010	<1.0 - 1.010	< 1.0	NA	Naturally present in the environment
pH (units)	2016	6.5-8.5	7.810	7.75-7.8310	7.98	NA	Naturally occurring
Sodium (ppm)	2016	50	38.010	35.1-41.9 ¹⁰	41.9	NA	Naturally occurring
Sulfate (ppm)	2016	250	36.010	22.5-60.910	10.3	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2016	500	548 ¹⁰	508-584 ¹⁰	186	NA	Runoff/leaching from natural deposits
Zinc (ppm)	2016	5	< 0.2511	NA	0.008	NA	Naturally present in the environment

Initial Distribution System Evaluation (ID	SE) ⁸	Montclair W	ater Bureau	Glen Ridg	ge Water	
Substance (Unit of Measure)	Year Sampled	Amount Detected	Range	Amount Detected	Range	Likely Source of Contamination
Haloacetic Acids [HAAs] – IDSE Results (ppb)	2008	23.17	6.0-29.9	27.9	14.0-37.3	By-product of drinking water disinfection
Total Trihalomethanes [TTHMs] – IDSE Results (ppb)	2008	40.66	2.2-65.3	44.5	38.6-47.3	By-product of drinking water disinfection

Unregulated Contaminant Monitoring Rule 3 (UCMR3) – Montclair Water Bureau ⁹										
Substance (Unit of Measure)	Year Sampled	Average	Range	Likely Source of Contamination						
1,4-dioxane (ppb)	2015	0.037	ND-0.11	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos						
Chlorate (ppb)	2015	49.5	32-82	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide						
Chromium-6 (ppb)	2015	0.0267	ND-0.24	Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation						
Hexavalent Chromium (ppb)	2015	0.0618	0.03-0.13	Oxidation of naturally occurring chromium present in igneous geologic formations.						
Perfluoroheptanoic Acid (PFHpA) (ppb)	2015	ND	ND	Manmade chemical; used in products to make them stain, grease, heat and water resistant						
Perfluorooctanoic Acid (PFOA) (ppb)	2015	0.017	ND-0.043	Perfluorinated aliphatic carboxylic acid; used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films						
Strontium (ppb)	2015	419.9	ND-2900	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions						
Vanadium (ppb)	2015	0.6	ND-2.5	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst						

Microbiological Cont	taminant	s		Montclair Water Bureau	NJDWSC*	Glen Ridge Water		
Substance	Year Sampled	MCL	MCLG	Amount Detected	Amount Detected	Amount Detected	Violation Yes/No	Likely Source of Contamination
Cryptosporidium, Oocysts/L	2016	NA	NA	NA	0-0.1	NA	No	Microbial Pathogens found in surface water throughout the United States
Giardia, Cysts/L	2016	NA	NA	NA	0-0.1	NA	No	Microbial Pathogens found in surface water throughout the United States
Total Coliform Bacteria	2016	0	<5% of monthly total sample	2.08% (August, 2016) / 0.00% (remainder of year)**	0.00%	0.00%	No	Naturally present in the environment.

^{*}The NJDWSC treatment plant, based on serving a current non-transient population of 150 persons, is required to collect one Total Coliform sample per month of its Finished Water per NJDEP.

- 1 Under a waiver granted on December 30, 1998, by the State of New Jersey Department of Environmental Protection, our system does not have to monitor for synthetic organic chemicals/pesticides because several years of testing have indicated that these substances do not occur in our source water. The SDWA regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals and asbestos.
- Monthly average.
- 3 Running quarterly average.
- Measurement at OTP location.
- 5 Measurement at Administration Building.
- 6 Total Organic Carbon (TOC) has no health effect. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels
- of pathogens. By-products of disinfection include trihalomethanes (THM) and haloacetic acids (HAA), which are reported elsewhere in this report.
- 7 Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU (and no sample may exceed 1 NTU).
- 8 Water systems were required by the U.S. EPA to conduct evaluations of their distribution systems. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in the distribution systems that have elevated disinfection by-product concentrations. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.
- 9 The 1996 Safe Drinking Water Act (SDWA) amendments require that once every five years the EPA issues a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs).

The first Unregulated Contaminant Monitoring Rule (UCMR 1) was published on September 17, 1999, the second (UCMR 2) was published on January 4, 2007 and the third (UCMR 3) was published on May 2, 2012. This monitoring provides a basis for future regulatory actions to protect public health. At present, no health standards (for example, MCLs) have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

- 10 Tested in 2014.
- 11 Tested in 2015.

^{**} In August one sample came back positive. When resampled including upstream and downstream, the results were all negative. All other samples throughout the year were negative.