

Annual Drinking Water Quality Report

Borough of Woodbury Heights Water Department

For the Year 2019 Results from the Year 2018

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is a Potomac Raritan Magothy Aquifer well which is approximately 150 feet deep, and we purchase water from New Jersey American Water Company. Gas chlorine is used for disinfection purposes to remove or reduce harmful contaminants that may come from the source water.

We are pleased to report that our drinking water meets all federal and state safety requirements.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available 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 your public water system to obtain information regarding your water system's Source Water Assessment. This water system's source water susceptibility ratings and a list of potential contaminant sources is attached.

If you have any questions about this report or concerning your drinking water, please contact the water dept. by calling (856)-848-2832 or by writing to this address: 500 Elm Avenue, Woodbury Heights, NJ 08097. We want our valued customers to be informed about their water utility. You can attend Regular Mayor and Council meetings on the third Wednesday of each month at 7:30 p.m., in the Borough Hall located at 500 Elm Avenue. The Borough of Woodbury Heights Water Department is committed to providing our customers with the highest quality of water and service. We believe in education and strongly urge our employees to attend various classes and seminars on water treatment processes and distribution operations. All licensed water operational personnel are mandated to continue training under the Safe Drinking Water Act Regulations.

DEFINITIONS

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal -The "Goal"(MCLG) is 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 contamination

Secondary Contaminant- Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Recommended Upper Limit (RUL) - Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RUL's are recommendations, not mandates.

Local Running Annual Average (LRAA) The running average for a specific sample point.

The Borough of Woodbury Heights Water Department routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2018. The state allows us to monitor for some contaminants less than once per year because the concentration of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Borough of Woodbury Heights Water Department Test Results						
Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCL G	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total coliform Bacteria 2018	N	0 positive samples		0	0 positive monthly samples	Naturally present in the environment
Radioactive Contaminants						
Gross Alpha Test results 9/17/18	N	4.7	pCi/l	0	15	Erosion of natural deposits
Combined Radium 228 & 226 Test results. 9/17/18	N	1.03	pCi/l	0	5	Erosion of natural deposits
Uranium 228 Test results 9/17/18	N	<1.0	Mg/l	0	30	Erosion of natural deposits
Inorganic Contaminants:						
Arsenic Test Results 9/17/18	N	<0.001	ppm	n/a	5	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium Test results 9/17/18	N	0.101	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper Test results 2017	N	0.174 No samples exceeded the action level	Mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride Test results 9/17/18	N	0.670 Naturally occurring	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Test results 2017	N	0.0032 1 samples exceeded the action level 90 th percent .0032	Mg/l	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits
Selenium Test results 9/17/18	N	<0.00076	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Volatile Organic Contaminants						
TTHM Total Trihalomethanes Test results Yr. 2018	N	Range = 19-47 I.D. #1 LRAA= 17 I.D. #2 LRAA= 27	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test results Yr. 2018	N	Range = 4.3-10.2 I.D. #1 LRAA= 5 I.D. #2 LRAA= 5	ppb	N/A	60	By-product of drinking water disinfection
Regulated Disinfectants		Level Detected	MRDL		MRDLG	
Chlorine 2018		0.36- 0.59	4.0 ppm		4.0 ppm	
Secondary Contaminant	Level Detected	Units of Measurement			RUL	

Sodium Test results 9/17/18	27.4 mg/l	ppm	50
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Lead If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Clayton 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 second to 2 minutes before using water for drinking and 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 <http://www.epa.gov/safewater/lead>.

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 storm water 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 storm water 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 storm water 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 ensure 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 regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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. Our system received monitoring waivers for asbestos and synthetic organic chemicals.

Hydrant flushing is normally done in April and October. We do this to check the hydrants to make sure they are working properly. It is also done for taste and odor control of our system.

We at the Borough of Woodbury Heights Water Department work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions.

A lead level of *94.6 ppb (.0946mg/l)* was reported for 1 sample collected during the cycle of samples. That result is greater than the lead action level of 15 parts per billion. However, the 90th percentile value for our water system was below the lead action level at (3.2ppb or .0032mg/l.)

What Does This Mean?

Under the authority of the Safe Drinking Water Act, EPA set the action level for lead in drinking water at 15 ppb. This means utilities must ensure that water from the customer's tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). The action level is *the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow*. If water from the tap does exceed this limit, then the utility must take certain steps to correct the problem. Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is *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*.

The lead level may be due to conditions unique to that site, such as the presence of lead solder or brass faucets, fittings and valves that may contain lead. Our system works to keep the corrosivity of our water as low as possible (corrosive water can cause lead to leach from plumbing materials that contain lead) there are actions that can be taken to reduce exposure. We strongly urge you to take the steps below to reduce your exposure to lead in drinking water.

Woodbury Heights Water Utility- PWSID # 0823001

Woodbury Heights Water Utility is a public community water system consisting of 1 well(s), 0 wells under the influence of surface water, 0 surface water intake(s), 4 purchased ground water source(s), and 0 purchased surface water source(s).

This system's source water comes from the following aquifer(s) and/or surface water body(s) (if applicable): upper Potomac-Raritan-Magothy aquifer

This system purchases water from the following water system(s) (if applicable): WOODBURY CITY WD, WEST DEPTFORD TWP, DEPTFORD TWP, NJAWCO

Susceptibility Ratings for Woodbury Heights Water Utility Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M), or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of Source Water Assessment Program, radionuclides are more of a concern for ground water than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, DEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct Precursors		
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 1			1			1			1			1		1				1			1			1
GUDI - 0																								
Surface water intakes - 0																								

- **Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- **Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- **Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
- **Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.
- **Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.
- **Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- **Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to <http://www.nj.gov/dep/rpp/radon/index.htm> or call (800) 648-0394.
- **Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

Western System - PWSID NJ 0327001

2018 Data Table of Detected Contaminants

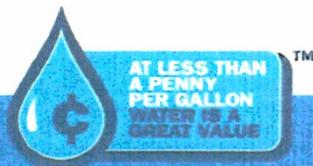
Towns Served by this System: Audubon, Audubon Park, Barrington, Bellmawr in part, Beverly, Burlington Twp in part, Camden (11th & 12th wards, Cramer Hill), Cherry Hill in part, Cinnaminson, Clementon, Delanco, Delran, Edgewater Park, Elk Twp in part, Gibbsboro, Gloucester Twp in part, Haddonfield, Haddon Heights, Haddon Twp in part, Hi-Nella, Laurel Springs, Lawnside, Lindenwold, Magnolia, Maple Shade in part, Mt Ephraim, Mt Laurel in part, Oaklyn, Palmyra, Pennsauken in part, Riverside, Riverton, Runnemede, Somerdale, Stratford, Voorhees

Regulated contaminants not listed in this table were not found in the treated water supply.

In addition to local ground water, the Western System receives treated surface water from the Delaware River Regional Water Treatment Plant. 2018 data is presented below.

Regulated Substances

Parameter	Units	Compliance Achieved	MCLG	MCL	Highest Compliance	Range Detected	Typical Source
Inorganics							
Barium (2017) ⁵	ppm	Yes	2	2	0.1	ND to 0.1	Discharge of drilling watses; discharge from metal refineries; erosion of natural deposits
Nickel (2017) ^{1,5}	ppb	Yes	NA ¹	NA ¹	64	ND to 64	Erosion of natural deposits
Nitrate	ppm	Yes	10	10	1.52	ND to 1.52	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Turbidity							
Turbidity	NTU	Yes	NA	TT = 1 NTU	0.08	0.04 to 0.08	Soil runoff
	%	Yes	NA	TT = % of samples <0.3 NTU	100% ²	NA	Soil runoff
Treatment Byproducts Precursor Removal							
Total Organic Carbon (TOC)	%	Yes	NA	TT ≥35% Removal	41% ³	41% to 69%	Naturally present in the environment.
Ratio of Actual / Required TOC Removal	Ratio	Yes	NA	TT: Running Annual Average ≥ 1.0	1.16 ³	1.16 to 1.96	Naturally present in the environment.
Disinfectants							
Chlorine (Surface Water)	ppm	Yes	NA	TT = ≥ 0.20	0.51 ⁴	0.51 to 1.08	Water additive used to control microbes
Chlorine (Distribution System)	ppm	Yes	MRDLG = 4	MRDL = 4	0.69 ⁶	0.05 to 1.58	Water additive used to control microbes
Disinfection By-Products							
Total Trihalomethanes (TTHMs)	ppb	Yes	NA	80	43.3 ⁷	4.7 to 56.0	By-product of drinking water disinfection
Five Haloacetic Acids (HAA ₅)	ppb	Yes	NA	60	22.8 ⁷	ND to 21.9	By-product of drinking water disinfection
Radiologicals							
Alpha Emitters	pCi/L	Yes	0	15	5.1 ⁷	3.78 to 4.8	Erosion of natural deposits
Combined Radium (226/228)	pCi/L	Yes	0	5	1 ⁷	ND to 1.49	Erosion of natural deposits
Lead and Copper Monitoring Program - At least 50 tap water samples were collected at customers' taps in 2018							
Contaminant / Monitoring Period	Units	Compliance Achieved	MCLG	Action Level (AL)	90th Percentile	Homes Above Action Level	Typical Source
Lead - 6/1/2018 to 9/30/2018	ppb	Yes	0	15	2	1	Corrosion of household plumbing systems
Copper - 6/1/2018 to 9/30/2018	ppm	Yes	1.3	1.3	0.228	0	Corrosion of household plumbing systems
When a total coliform positive bacteria sample is collected, the Ground Water Rule states that all raw water wells contributing to that location must be sampled. All required sampling was conducted, but the reporting of these raw water samples were late. As a result, a reporting violation was issued. The system returned to compliance once the results were uploaded.							
Footnotes							
¹ Nickel monitoring is required. Currently there is no established MCL or MCLG							
² 100% of the turbidity readings were below the treatment technique requirement of 0.3 NTU. Turbidity is a measure of the cloudiness of the water and a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.							
³ Data represents the lowest removal of Total Organic Carbon (TOC)							
⁴ Data represents the lowest residual entering the distribution system from our surface water treatment plant							
⁵ The State of New Jersey allows us to monitor for certain contaminants less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative, are more than one year old.							
⁶ Data represents the highest monthly average of chlorine residuals measured throughout our distribution system.							
⁷ Data represents the highest locational running annual average calculated quarterly							



WE CARE ABOUT WATER. IT'S WHAT WE DO.™

Solutions to Stormwater Pollution

Easy Things You Can Do Every Day To Protect Our Water

A Guide to Healthy Habits for Cleaner Water

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 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's why we're 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's dirty.

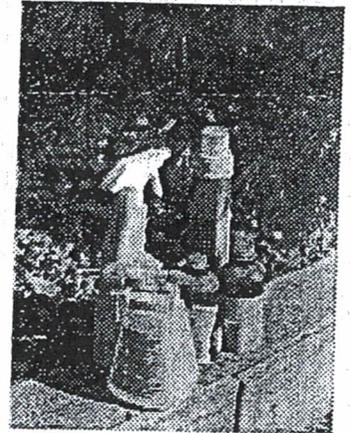
As part of New Jersey's initiative to keep our water clean and plentiful and to meet federal requirements, many municipalities and other public agencies including colleges and military bases must adopt ordinances or other rules prohibiting various activities that contribute to stormwater pollution. Breaking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



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

Limit your use of fertilizers and pesticides

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



Make sure you properly store or discard any unused portions.

Properly use and dispose of hazardous products

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

- If you have hazardous products in your home or workplace, make sure you store or dispose of them properly. Read the label for guidance.

Clean up after your pet

- Many municipalities and public agencies must enact and enforce local pet-waste rules.

- Use natural or less toxic alternatives when possible.

- Recycle used motor oil.

- Contact your municipality, county or facility management office for the locations of hazardous-waste disposal facilities.

- An example is requiring pet owners or their keepers to pick up and properly dispose of pet waste dropped on public or other people's property.

- Make sure you know your town's or agency's requirements and comply with them. It's the law. And remember to:

- Use newspaper, bags or pooper-scoopers to pick up wastes.

- Dispose of the wrapped pet waste in the trash or unwrapped in a toilet.

- Never discard pet waste in a storm drain.



Dispose of yard waste properly

- Keep leaves and grass out of storm drains.

- If your municipality or agency has yard waste collection rules, follow them.

- Use leaves and grass clippings as a resource for compost.

- Use a mulching mower that recycles grass clippings into the lawn.



Keep pollution out of storm drains

- Municipalities and many other public agencies are required to mark certain storm drain inlets with messages reminding people that storm drains are connected to local waterbodies.

Don't feed wildlife

- Do not feed wildlife, such as ducks and geese, in public areas.

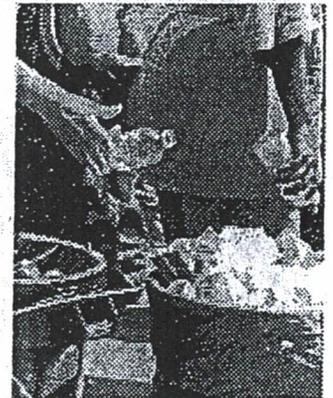
- Many municipalities and other public agencies must enact and enforce a rule that prohibits wildlife feeding in these areas.

Don't litter

- Place litter in trash receptacles.

- Recycle. Recycle. Recycle.

- Participate in community cleanups.



Contact information

For more information on stormwater related topics, visit www.njstormwater.org or www.nonpointsource.org

Additional information is also available at U. S. Environmental Protection Agency Web sites www.epa.gov/npdes/stormwater or www.epa.gov/nps

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Nonpoint Pollution Control
Municipal Stormwater Regulation Program
(609) 633-7021



www.cleanwaternj.org



- Do not let sewage or other wastes flow into a stormwater system.