

TOWN OF BOONTON

100 WASHINGTON STREET, BOONTON,
NEW JERSEY 07005

ANNUAL WATER QUALITY REPORT TO CUSTOMERS

PWS ID# NJ1401001

**Town of Boonton Water Department, Morris County, New Jersey
For the Year 2023, Results from 2022**

Dear Customer:

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of 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.

The Town of Boonton Water Department continually monitors and reports on the quality of our drinking water in an effort to meet or exceed all State and Federal water quality standards. The table in this report shows the results of our monitoring for the period of January 1 to December 31, 2022. We are pleased to report that our drinking water meets all Federal and State water quality standards.

Informed consumers are our best allies in maintaining safe drinking water. Please read this report carefully and if you have any questions, please call us at (973) 402-9460. We encourage public interest and participation in our community's decisions affecting drinking water. Meetings of our Governing Body that deal with decisions about our water are held monthly. The schedule of these meetings is posted in the municipal building. Please plan to attend one soon.

WHERE DOES MY WATER COME FROM?

The Town of Boonton is supplied with up to 21 million gallons of surface water per month from the Taylortown Reservoir. We also withdraw up to 40 million gallons of groundwater per month from four (4) wells set in the Stratified Drift Formation. These sources supply different sections of our water system and at times, are blended in the system to meet the daily demands of the system.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued a Source Water Assessment Report and Summary for this public water systems, which is available at www.state.nj.gov/dep/watersupply/swap/index.html or by contacting NJDEP, Bureau of Safe Drinking Water at (609) 292-5550 or watersupply@dep.nj.gov. You may also contact the Town of Boonton Water Department at (973) 402-9460.

The Town of Boonton's drinking water system susceptibility ratings and a list of potential sources of contamination are attached. Please note, a high rating reflects only the potential for contamination as determined by the NJDEP based on surrounding land uses, well depth, water source, etc. A high rating does not indicate existing contamination.

SECURITY

In light of the terrorist attacks of September 11, 2001, and in response to the State's Domestic Security Preparedness Act, the Town of Boonton Water Department has completed a vulnerability assessment, strengthened existing security measures, and reviewed operations to include a greater emphasis on security issues. We maintain close contact with State and Federal authorities to coordinate security measures and to assist in the protection of the water supply.

WHAT'S IN THE SOURCE WATER BEFORE WE TREAT IT?

In general, 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 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, 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.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. 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 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 (800) 426-4791.

PLEASE CONSERVE WATER

Water conservation measures are important to protect our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. Here are a few suggestions:

Conserving water inside your home:

- ~ Repair leaking toilets. A leaky toilet can waste up to 200 gallons of water per day.
- ~ Repair leaking faucets and pipes. A slow steady drip can waste 350 gallons of water per month.
- ~ If upgrading appliances or plumbing fixtures, choose those that conserve water.
- ~ Run washing machines only when full and on the proper load size selection.
- ~ Take shorter showers or a shower instead of a bath.
- ~ Turn off water while shaving or brushing your teeth.
- ~ Run the dishwasher only when full.

Conserving water outdoors:

- ~ Water the lawn and garden in the early morning or evening.
- ~ Don't water on windy days.
- ~ Use mulch around plants and shrubs.
- ~ Repair leaks in faucets and hoses.
- ~ Use water-saving nozzles.
- ~ Use water from a bucket to wash your car; save the hose for rinsing.

Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/publicoutreach/index.html. You can also visit the NJDEP web site <http://www.njdrought.org> for up-to-date information on drought information, including reservoir levels, current rainfall statistics, and water conservation practices.

ADDITIONAL 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 Town of Boonton 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 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>. Call us at 973-420-9460 to find out how to get your water tested for lead. Testing is essential because you cannot see, taste, or smell lead in drinking water.

VARIANCES AND EXEMPTIONS

The Safe Water Drinking Act regulations allow monitoring waivers, which give permission to not meet a MCL or a treatment technique under certain conditions. The Town of Boonton Water Department was granted a waiver from the New Jersey Department of Environmental Protection to reduce testing for synthetic organic compounds and pesticides. The waiver was granted based on three years of testing with negative results for synthetic organic compounds and pesticides.

Boonton Water Department - PWSID# NJ1401001

The Town of Boonton Water Department is a public community water system consisting of 4 wells, 1 surface water intake, and 1 emergency purchase ground water source. The system's groundwater source comes from a glacial sand and gravel aquifer in the Stratified Drift Formation. None of the wells are under the influence of surface water. The system's surface water source is the Taylortown Reservoir. The Town of Boonton Water Department has an emergency interconnection to the Denville Water Department. Water is not regularly purchased by the Boonton Water Department from this source.

Susceptibility Ratings for Boonton Water Department Sources

The Source Water Assessment Report and Summary for this public water system is available at www.state.nj.us/dep/swap or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

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.

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 - 5		5		5				5				5			5	5			3	2		1	4	
GUDI - 0																								
Surface water intakes - 1	1				1				1		1			1				1			1	1		

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 manmade. Examples include nitrogen and phosphorus.

Volatile Organic Compounds: Manmade chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.

Pesticides: Manmade 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 manmade. Examples include arsenic, asbestos, copper, lead, and nitrate.

Radionuclides: Radioactive substances that are both naturally occurring and manmade. 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.

TEST RESULTS

WATER QUALITY TABLE

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 (800-426-4791).

READING THE WATER QUALITY TABLE

The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The EPA or the State requires us to monitor for over 80 contaminants. We monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Table of Detected Contaminants

Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants:						
¹ Turbidity Test results Yr. 2022	Y	Highest Detect = 1.99 Highest Monthly Average = 0.089 98.68% < 0.3	NTU	N/A	TT No more than 5% monthly samples >0.3NTU	Soil runoff
Inorganic Contaminants :						
Copper Test results Yr. 2022 Result at 90 th Percentile	N	0.284 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
² Lead Test results Yr. 2022 Result at 90 th percentile	N	4.48 No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) Test results Yr. 2022	N	Range = <0.05– 0.616 Highest detect =0.616	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic Test results Yr. 2022	N	<0.001 No samples exceeded the action level	ppb	0	10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium Test results Yr. 2022	N	0.0065 No samples exceeded the action level	ppm	2	2	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits.

¹ 98.68% of the samples were below the TT value of 0.3 NTU. The MCL for 9ty requires no more than 5% of monthly samples may exceed 0.3 NTU and no sample may exceed 1 NTU. Turbidity is a measure of the cloudiness of the water. We monitor as a requirement and because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Fluoride Test results Yr. 2022	N	<0.1 No samples exceeded the action level	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Cyanide Test results Yr. 2022	N	<0.05 No samples exceeded the action level	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Synthetic Organic Compounds:						
Perfluorooctanoic Acid (PFOA)	N	Range = 4.4-8.2 ng/L Highest detect =8.2 ng/L	ng/L	N/A	14	Manufacturing process and waste storage and sites discharge
Perfluorooctane Sulfonic Acid (PFOS)	N	Range = 2.4-4.5 ng/L Highest detect =4.5 ng/L	ng/L	N/A	13	Manufacturing process and waste storage and sites discharge
Perfluorononanoic Acid (PFNA)	N	<2 ng/L	ng/L	N/A	13	Manufacturing process and waste storage and sites discharge
Disinfection Byproducts:						
3 TTHM Total Trihalomethanes Test results Yr. 2022	N	Range = 25.3-80 Highest LRAA = 67	ppb	N/A	80	By-product of drinking water disinfection
³ HAA5 Haloacetic Acids Test results Yr. 2022	N	Range = 3.61-29.2 Highest LRAA = 22.9	ppb	N/A	60	By-product of drinking water disinfection

³For Total Haloacetic Acids (HAA5s) and Total Trihalomethanes (TTHMs), which are disinfection byproducts, MCL compliance is based on a Locational Running Annual Average (LRAA), calculated at each monitoring location. The LRAA calculation is based on four completed quarters of monitoring results. Some people who drank water containing TTHM in excess of the maximum contaminant level over many years may experience some problems with their liver, kidneys, or central nervous system, and may not have an increased risk of getting cancer. Some people who drink water containing HAA5 in excess of the MCL over many years may have an increased risk of getting cancer.

Regulated Disinfectants	Level Detected	MRDL	MRDLG	Likely Source
Chlorine Test results Yr. 2022	Range = 0.46-0.57 ppm Average = 0.5 ppm	4 ppm	4 ppm	Water additive used to control microbes.

Important Drinking Water Definitions

MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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 contaminants.
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.
RAA	Running Annual Average: The average of four yearly quarters of sampling results.
mg/L	mg/L: number of milligrams of substance in one liter of water
ng/L	ng/L: number of nanograms of a substance in one liter of water
ppm	ppm: parts per million, or milligrams per liter
ppb	ppb: parts per billion, or micrograms per liter
ppt	ppt: parts per trillion, or nanograms per liter
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: not detected
NR	NR: monitoring not required, but recommended
NTU	NTU: Nephelometric turbidity unit
<	Less than
>	Greater than
LRAA	Locational Running Annual Average. The arithmetic average of analytical results for samples taken at a specific monitoring location during the previous four calendar quarters
MRL	Minimum Reporting Level, the lowest possible concentration at which a contaminant can reliably be measured.
RUL	Recommended Upper Level

Violations

Type	Explanation	Time Period	Health Effects	Compliance Value	TT Level or MCL
Lead and Copper Rule	Failure to submit all point of entry pH and orthophosphate results. Results submitted late.	07/07/2021-12/31/2021	N/A	N/A	N/A
TOTAL THM-HAA5	Running Annual Average for TTHM was in violation when taken from just 3 quarters. After taking average from all 4 quarters compliance was achieved and exceeded was rescinded.	01/01/2022-03/31/2022	N/A	N/A	N/A
Lead and Copper Rule	Failure to submit all point of entry pH and orthophosphate results. Results submitted late	01/01/2022-06/30/2022	N/A	N/A	N/A
Lead and Copper Rule	WQP results did not meet the optimal WQP control values set by the State 132 days in the 6-month monitoring period. Extensive review and update of water distribution, system operations, chemical feed rates, and procedures were made.	01/01/2022-06/30/2022	N/A	N/A	N/A
Lead and Copper Rule	Failure to submit all point of entry pH and orthophosphate results. Results submitted late	07/01/2022-12/31/2022	N/A	N/A	N/A

¹ 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 parasite that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

² Late data was due to handling and submission processes issues. Process and procedure have since been extensively review and revamped to ensure future compliance.

³ Despite the excursion of orthophosphate, Lead and Copper sampling conducted reveals levels of both Lead and Copper below standard. See Detected Contaminant table

FOR MORE INFORMATION PLEASE CONTACT:

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