Borough of Matawan Water & Sewer Department 201 Broad Street Matawan, New Jersey 07747

**OPEN IMMEDIATELY** 

ANNUAL DRINKING WATER REPORT

# Annual Drinking Water Quality Report

2024 (2023 Data)

Matawan Water Department PWSID# NJ1329001



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 of our water and services we deliver to you every day. Our continuous goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts Matawan Water Department makes to improve the water treatment process along with protecting our water resources. We are committed to ensuring the quality of your drinking water.

These health and safety standards are set by the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). We're at work 24 hours a day, 365 days a year to provide you and your family with top quality water. We regularly test water samples to be sure that your water meets the safety standards. All the test results are on file with the NJDEP, the agency that monitors and regulates drinking water quality in our state. Both the EPA and the NJDEP require water suppliers to send a Consumer Confidence Report (CCR) to customers on an annual basis.

## Landlord Distribution

Landlords must distribute this information to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section 3 of P.L. 2021, c. 82 (C.58:12A-12.4 et seq.).

### Lead Service Line Information

A copy of the Lead Service Line inventory can be found at https://www.matawanborough.com/ matawan/. If the service line at your address is listed as unknown, please give us a call at **732-290-2011** to find out more information on how to identify your service line material.

#### Where does my water come from?

Matawan's ground water treatment plant produces an average of 150 million gallons of water each year, and another 120 million gallons is purchased from New Jersey American Water. In the Table of Detected Contaminants, you will find contaminants that were identified in the water produced by the Matawan plant and purchased from New Jersey American. Customers wishing to view the entire New Jersey American Report can follow a link on <u>www.matawanborough.com</u> or go directly to New Jersey American's web page <u>https://www.amwater.com/ccr/coastalnorth.pdf</u>

The source of the ground water produced by the Matawan Water Plant is the Old Bridge Sands Strata of the Potomac-Raritan-Magothy (PRM) Aquifer. Water received from New Jersey American may be a blend of water taken from the PRM or surface water from the Manasquan or Swimming River Reservoirs.

We are pleased to report that during 2022 the water delivered to our customers from each of these sources met, or exceeded, all state and federal water quality standards.

#### How do drinking water sources become polluted?

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**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.

**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.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

#### Description of Water Treatment Process

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal, or other filters that remove even smaller particles. A small amount of chlorine or other disinfection method is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before it is stored and distributed to homes and businesses in the community.

Important Information About Your Drinking Water Matawan Water Department did not have any violations for 2023.

#### **Contact Information**

Contact information for all the members of Matawan's governing body and department heads may be found on the Matawan web site, <u>www.matawanborough.com</u>. If you would like to discuss issues in person, the regular meeting of the mayor and council typically takes place the first and third Tuesday of every month.

Specific questions or concerns about the water system can be directed to **Eric Frye. 732-290-2011** or eric.frye@matawanborough.com

#### Lead Notice

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. Matawan 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 or at http://www.epa.gov/safewater/lead.

However, for those served by a lead service line, flushing times may vary based on the length of the service line and plumbing configuration in your home. If your home is set back further from the street a longer flushing time may be needed. To conserve water, other household water usage activities such as showering, washing clothes, and running the dishwasher are effective methods of flushing out water from a service line.

Call us at **732-290-2011** 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.

#### Source Water Assessments

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 http://www.nj.gov/dep/watersupply/swap/ index.html, or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550 or <u>watersupply@dep.nj.gov</u>.

The table provides the number of wells that have either a high (H), medium (M), or low (L) susceptibility rating for each of eight contaminant categories.

If a water 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, the DEP may change existing monitoring schedules based upon susceptibility ratings.

**Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.

**Nutrients:** Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include nitrogen and phosphorus.

**Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.

**Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.

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

**Inorganics:** Mineral-based compounds that are both naturally occur-ring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.

**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 used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.

	Pat	hoge	ens	Nu	trien	ts	Pes	sticid	es	gar	atile ( iic Co ound:	m-	Ino	rgan	ics	Radi	onucli	ides	R	ador	1	Byp	nfecti produ curso	ct
Sources	Н	М	L	Н	Μ	L	Н	М	L	Н	М	L	Н	Μ	L	Н	М	L	Н	Μ	Γ	Н	Μ	L
Wells - 2			2			2			2			2			2		2				2			2

#### **People with Special Health Concerns**

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

	2023 Table of Detected Contaminants									
Matawan Borough Water Department NJ1329001										
Radioactive Contaminants	MCLG	MCL	Level Detected	Violation	Typical Source					
Combined Radium -226 & -228 Test Results Year 2018	0 pCi/L	5 pCi/L	Range: 1.5 – 1.5 Highest: 1.5	Ν	Erosion of natural deposits					
Lead and Cooper	Action Level	MCLG	Level Detected	Violation	Typical Source					
Copper Test Results Jan-Jun 2023	1.3 ppm	1.3 ppm	Detected at 90th percentile: 0.17 Sample > AL: 0 of 40	Ν	Corrosion of household plumbing					
Lead Test Results Jan-Jun 2023	15 ppb	0 ppb	Detected at 90th percentile: 0 Sample > AL: 0 of 40	Ν	Corrosion of household plumbing					
Copper Test Results Jul-Dec 2023	1.3 ppm	1.3 ppm	Detected at 90th percentile: 0.11 Sample > AL: 0 of 42	Ν	Corrosion of household plumbing					
Lead Test Results Jul-Dec 2023	15 ppb	0 ppb	Detected at 90th percentile 0.6 Sample > AL: 0 of 42	Ν	Corrosion of household plumbing					

Disinfectants	MRDL	MRDLG	Level Detected	Violation	Typical Source			
Chlorine	4 ppm	4 ppm	Range: 0.27-1.53	N	Water additive to control microbes			
Test Results Year 2023	т ррпі	т ррпі	Average: 1.00	IN				
Microbiologicals-Revised To- tal Coliform Rule (RTCR)	Number Required	Number Completed	Corrective Ac- tions Required	Corrective	Actions Completed			
Level 1 Assessment - Total Coli- form	0	0	0	0				
Total coliform bacteria are generall used as an indicator that other pot ples.	y not harmf entially harn	ul themselves. nful bacteria m	Coliforms are bacted and be present. Mat	eria which ar awan had 1 j	e naturally present in the environment and are positive results for coliform bacteria in 123 sam-			
Disinfection By-Products	MCL	MCLG	Level Detected	Violation	Typical Source			
Total Haloacetic Acids			Range: 5.82 - 58					
Test Results Year 2023	60 ppb	N/A	Highest LRAA: 24.59	Ν	Byproduct of drinking water disinfection			
Total Trihalomethanes			Range: 7.5 - 55.4					
Test Results Year 2023	80 ppb	N/A	Highest LRAA: 40.98	N	Byproduct of drinking water disinfection			
Inorganics	MCL	MCLG	Level Detected	Violation	Typical Source			
Cadmium	C	<b>F</b> wash	Range: 0.3 – 0.3	NI	Corrosion of galvanized pipes; Erosion of natu-			
Test Results Year 2021	5 ppb	5 ppb	Highest: 0.3	N	ral deposits; Discharge from metal refineries; Runoff from waste batteries and paints			
Synthetic Organic Com- pounds (SOC)	MCLG	MCL	Level Detected	Violation	Likely Source			
	ic Acid (PFOS	5). Perfluorocta	noic Acid (PEOA), an	d Perfluorono	nanoic Acid (PFNA) were non-detect in 2023.			
Secondary Contaminants		RUL	Level Found	Violation	Likely Source			
Aluminum			Range: 0.006-					
		0.2 ppm	0.006	Ν	Erosion of natural deposits			
Test Results Year 2021 Alkalinity			Highest: 0.006 Range: 36 - 80					
Test Results Year 2023		N/A	Highest: 80	Ν				
Chloride			Range: 7.5 – 7.5					
Test Results Year 2021		250 ppm	Highest: 7.5	Ν	Erosion of natural deposits			
Foaming Agents (Surfactants)		0.5 ppm	Range: 0.05 – 0.05	N	Surfactants from detergents and cleansers			
Test Results Year 2021		0.5 ppm	Highest: 0.05	IN	Surfactants from detergents and cleansers			
Hardness, Carbonate		250	Range: 96 - 96	N				
Test Results Year 2021		250 ppm	Highest: 96	Ν	Naturally present in the environment			
Sulfate		250 ppm	Range: 17.8 – 18	N	Erosion from natural deposits; Industrial			
Test Results Year 2021		230 ppm	Highest: 18	IN	wastes			
Manganese		0.05 ppm	Range: 0.01-0.01	Ν	Erosion of natural deposits			
Test Results Year 2023		· · · · · ·	Highest: 0.01					
Total Dissolved Solids (TDS) Test Results Year 2021		500 ppm	Range: 90 - 90	Ν	Erosion of natural deposits			
Zinc			Highest: 90 Range: 0.2 - 0.2					
Test Results Year 2021		5 ppm	Highest: 0.2	Ν	Erosion of natural deposits			
Unregulated Substances (U for which the EPA requires monitorin	ICMR5)	HRL	Level Detect- ed	Violation	Likely Source			
Lithium			Range: ND-12.2		Metal, pharmaceutical. Used as an anode in			
Test Results Year 2023		10 ppb	Average: 3.05	Ν	electrochemical cells & batteries; chemical in- termediate in organic syntheses			
Perfluorobutanoic Acid (PFBA)		n/a nnh	Range: ND-0.065	N	Manufactured chemical(s) used in household			
Test Results Year 2023		n/a ppb	Average: 0.016	IN	goods for stain, grease, heat, and water re- sistance.			
Perfluorohexanoic Acid (PFHxA)		n/a ppb	Range: ND- 0.0043	Ν	Manufactured chemical(s) used in household goods for stain, grease, heat, and water re-			
Test Results Year 2023			Average: 0.0030		sistance.			
Perfluorooctanoic Acid (PFOA)		0.004 ppb	Range: ND-0.006	Ν	Manufactured chemical(s) used in household goods for stain, grease, heat, and water re-			
Test Results Year 2023			Average: 0.0029		sistance.			
Perfluoropentanoic Acid (PFPeA) Test Results Year 2023		n/a ppb	Range: ND- 0.0041 Average: 0.0018	Ν	Manufactured chemical(s) used in household goods for stain, grease, heat, and water re- sistance.			
	6							
Inregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitor- ng is to assist the EPA and DEP in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted.								

Additional information about unregulated contaminants can be found at the following link, courtesy of the EPA: https://www.epa.gov/system/files/ documents/2022-02/ucmr5-factsheet.pdf

## NJ American Water - Swimming River TP #TP001003 data for 2023

Table of Detected Contamin	nants – 2023	Those regulated su	bstances not	listed in this table wer	re not found ir					
	DISIN	FECTANIS	- Collecte	ed at the Swimr		ertreatmer	nt Plants			
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compli- ance Result	Range Detected	Typical Source			
Chloramines (ppm) (Surface Water)	2023	Yes	N/A	TT: Results <u>&gt;</u> 0.2	1.30 <sup>1</sup>	1.30- 3.00	Water additive used to control microbes.			
- Data represents the lowest residual entering the distribution system from our surface water treatment plant. TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Swimming River Treatment Plant <sup>1</sup>										
Substance	Year Sampled	Compliance Achieved	MCLG	MCL	Lowest Compli- ance Result	Range Detected	Typical Source			
Total Organic Car- bon (TOC)	2023	Yes	N/A	TT: > 35% re- moval	26%	26% - 58%	Naturally present in the environ- ment.			
Ratio of Actual / Required TOC Re- moval	2023	Yes	N/A	TT: Running annual average > 1	1.0	1.0 - 1.65	Naturally present in the environ- ment.			
1 -Annual average of ratio removal compliance based on annual present of ratio removal. (Running annual average)										
	TU	<b>RBIDITY - Co</b>	ollected a	t the Swimmin		reatment F	Plant <sup>1</sup>			
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compli- ance Result	Range Detected	Typical Source			
	2023	Yes	N/A	TT: Results > 1 NTU	0.02	0.02 - 0.20	Soil runoff.			
Turbidity (NTU)	2022	Yes	N/A	TT: At least 95% of samples <0.3 NTU	100%	N/A	Soil runoff.			
inder the effectivene	ss of disinfe	ectants.			-		r of water quality. High turbidity car			
F	REGULAT	ED SUBSTA	NCES - C	ollected at the		ig River Fre	eatment Plant			
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compli- ance Result	Range Detected	Typical Source			
1,2,3 Trichloropropane (ppb)	2023	Yes	0.03	0.03	0.007	ND to 0.007	Halogenated alkane; used as an ingredient in paint, varnish remove solvents and degreasing agents.			
Nitrate (ppm)	2023	Yes	10	10	0.5	N/A	Runoff from fertilizer use; industria or domestic wastewater discharge erosion of natural deposits.			
Fluoride (ppm)	2023	Yes	N/A	2	0.72	ND - 0.72	Erosion of natural deposits; water additive that promotes strong teet			
PERFLUORINATED COMPOUNDS Collected at the Swimming River Treatment Plant										
Substance (with	Year Sampled	Compliance Achieved	MCL	Highest Compli	ance Re-	Range Detected	Typical Source			

units)	Sampled	Achieved	MCL	sult	Detected	Typical Source
Perfluorooctanoic Acid (PFOA) (ppt) <sup>1</sup>		Yes	14	5.9	5.0 to 5.9	Discharge from industrial, chemical, and manufacturing factories, re- lease of aqueous film forming foam.
Perfluoropentanoic Acid (PFOS) (ppt) <sup>2</sup>		Yes	13	3	2.2 to 3.0	Manmade chemical; used in prod- ucts for stain, grease, heat and water resistance

1- Some people who drink water containing PFOA in excess of the MCL over many years could experience problems with their blood serum cholesterol levels, liver, kidney, immune system, or, in males, reproductive system. Drinking water containing PFOA in excess of the MCL over many years may also increase the risk of testicular and kidney cancer. For females, drinking water containing PFOA in excess of the MCL over many years may cause developmental delays in a fetus and/or an infant.

2 - Some people who drink water containing PFOS in excess of the MCL over many years could experience problems with their immune system, kidney, liver, or endocrine system. For females, drinking water containing PFOS in excess of the MCL over many years may cause developmental effects and problems with the immune system, liver, or endocrine system in a fetus and/or an infant. Some of these developmental effects can persist through childhood.

OTHE	OTHER SUBSTANCES OF INTEREST - Collected at the Swimming River Treatment Plant												
Substance (with	Year	Compliance	MCLG	Recommended	Highest	Range	Comments						
units)	Sampled	Achieved	WICLG	Limit	Result	Detected	Comments						
Aluminum <sup>1</sup> (ppm)	2023	N/A	N/A	0.2	0.02	ND - 0.02	Erosion of natural deposits						
Iron <sup>1, 2</sup> (ppm)	2023	N/A	N/A	0.3	ND	N/A	Naturally Occuring						
Manganese <sup>1, 3</sup> (ppm)	2023	N/A	N/A	0.05	ND	NA	Naturally Occuring						
Sodium <sup>₄</sup> (ppm)	2023	N/A	N/A	50	33.2	28.2 to 33.2	Erosion of natural deposits and road salt						
Chloride (ppm)	2023	NA	NA	250	60.5	57.8 to 60.5	Naturally present in the environ- ment and road salt						
Total Hardness (as CaCO3) (ppm)	2023	NA	NA	250	76	N/A	Naturally Occuring						

1 - Substances with Secondary MCLs do not have MCLGs and are not legally enforceable; these limits are primarily established to address aesthetic concerns.

2 - The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

3 -The recommended upper limit for iron is based on unpleasant taste of the water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

4 - 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 of concern to individuals on a sodium restricted diet.

USEPA's Health Advisories are non-enforceable and provide technical guidance to states agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination

UNREGULATED CHEMICALS (UCMR 5) Collected at the Swimming River Treatment Plant 2023												
Parameter	Year Sampled	Average Amount Detected	Range Low-High	Proposed U.S. EPA MCL	Hazard In- dex Calculati on	Typical Source						
Perfluorooctanoic acid (PFOA)	2023	5.4 ppt	4.7 to 6.5 ppt	4.0 ppt	N/A	Manufactured chemical(s) used						
Perfluorohexanoic acid (PFHxA)	2023	4.1 ppt	3.6 to 4.6 ppt	NA	N/A	in household goods for stain,						
	2023	3.6 ppt	3.0 to 4.1 ppt	NA	N/A	grease, heat, and water resistance.						
Lithium	2023	2.55 ppb	ND to 10.2 ppb	NA	N/A	Naturally occur- ring with multiple commercial uses						

PFAS chemicals are unique, so two PFAS chemicals at the same level typically do not present the same risk. Therefore, you should not compare the results for one PFAS chemical against the results of another.

			Definitions		
ppm ppb ppt	Parts Per Million: equivalent of one second in 12 days Parts Per Billion: equivalent of one second in 32 years Parts Per Trillion: equivalent of one second in 32,000 years	5	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drink- ing water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.	MRDL	Maximum Residual Disinfection Level The highest level of a disinfect- ant allowed in drinking water. There is convincing evidence that the addi- tion of a disinfectant is necessary for control of microbial contaminants.
NA RUL ND	Not Applicable Recommended Upper Limit Not Detected	MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.	MRDLG	Maximum Residual Disinfection Level Goal The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefit of the use of disinfectants to control microbial contamination.
RAA LRAA	Running Annual Average Locational Running Annual Average	AL	Action Level The concentration of a contami- nant which, if exceeded, triggers treatment or other requirements which a water system must follow.	regulation related.	Standards: Federal drinking water ons for substances that are health- Water suppliers must meet all primary water standards.
π	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking wa- ter.	CU pCi/L	Color Unit Picocuries Per Liter: equivalent of one second in 32 million years	measure have an thetic qu ance. Se	ary Standards: Federal drinking water ements for substances that do not impact on health. These reflect aes- ualities such as taste, odor and appear- econdary standards are recommenda- ot mandates.