

2022 ANNUAL WATER QUALITY REPORT

PUBLIC WATER SYSTEM
PWS ID No. 1309001
NAVAL WEAPONS STATION EARLE
COLTS NECK, NEW JERSEY
MAY 2023



This is your annual Public Water System Water Quality, *Consumer Confidence Report*. It has been compiled from water quality data collected in 2022 and is being provided to allow you to make personal health-based decisions regarding drinking water consumption. To comply with State and Federal regulations, Naval Weapons Station Earle issues this report annually describing the quality of your drinking water. The report provides the sampling data and information regarding the health concerns for each contaminant detected in the Earle water system as well as our supplier, NJ American Water Company. If you have any questions concerning data presented in this report please call the Water Program Manager, Gregg Barkley, at (732) 866-2216.

Is My Water Safe?

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).

Occasionally your water may be discolored reddish brown. This is typically due to rust (oxidized iron) particles that break free from sediment inside corroded iron or steel pipes. On its own, rust in water is not a sign of harmful bacteria or lead. In fact, the limits set by the EPA for iron in drinking water are based on aesthetics (taste, odor, color), not safety concerns.

Though rusty water may look and taste unpleasant—and possibly stain sinks and clothing—it is not a health concern. You'll know the problem is in the house or building piping, not the water supply if rust appears only in hot water, comes only from certain faucets, or clears after running for a short time. If the water does not clear after running continuously for several minutes, please contact the Facility Management Specialist for your building.

Where Does My Water Come From?

Naval Weapons Station Earle purchases water from the New Jersey American Water Company (NJAW) who provide complete treatment at one of several treatment facilities they own. They draw their water from a blend of sources that may include: Ground water from the Potomac-Raritan-Magothy Aquifer (PRM), Surface water from the Glendola Reservoir, the Manasquan River/Reservoir, the Shark River, and the Swimming River/Reservoir as part of the Shrewsbury area of their Coastal North System. See the NJAW 2022 Water Quality Report for additional information on the water sources and the Source Water Assessment.

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 commercial stormwater runoff, domestic wastewater discharges, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agricultural, commercial stormwater runoff and residential areas.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which can come from gas stations, commercial stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring.

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.

Water Quality Testing Results

Water sampling and testing is conducted by the New Jersey American Water Company as the water supplier. The results of this testing is contained in their report, which is attached. Due to the size and population served, NWS Earle is classified as a public water distribution system and as such must also perform sampling and testing for certain contaminants. The following table summarizes the testing results from sampling of the NWS Earle distribution system.

Only those substances tested in the treated water supply are listed on this table.

Regulated Substances ¹							
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 advise about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)							
Contaminant	Units	MCL	MCLG	Range Detected from Individual Tests	Running Annual Average Highest Level Detected	Compliance Achieved?	Typical Source
Treatment By-Products							
Total Trihalomethanes [TTHMs] (2 samples - each quarter)	ppb	80	NA	19.8 to 44.3	54.3 ³	Yes	By-product of drinking water disinfection
Total Haloacetic Acids [THAA ₆] (2 samples - each quarter)	ppb	60	NA	8.7 to 17.7	13.0 ³	Yes	By-product of drinking water disinfection
Disinfectants							
Chlorine (5 samples - each month)	ppm	MRDL = 4	MRDLG = 4	0.3 to 1.1	0.70 ²	Yes	Water additive used to control microbes
Tap water samples were collected from commercial and residential building interior fixtures for lead and copper analysis.							
Contaminant	Units	Action Level	MCLG	Amount Detected (90th%tile)	Homes Above Action Level	Compliance Achieved?	Typical Source
Copper ⁴	ppm	1.3	1.3	0.49	none	Yes	Corrosion of household plumbing systems
Lead ⁴	ppb	15	0	6	none	Yes	Corrosion of household plumbing systems

FOOTNOTES

¹ Under a waiver granted 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 from the NJ American Water Company. The Safe Drinking Water Act (SDWA) regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals.

² This level represents the highest annual quarterly average.

³ This level represents the highest Locational Running Annual Average calculated for the data collected.

⁴ Lead & Copper testing is required every 3 years. Data is from 2022.

⁵ People who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. If you have health concerns seek advice from your health care provider.

The following definitions will help you to understand the information being presented.

ppm = parts per million (mg/l) (is like one cent in \$10,000) **ppb** = parts per billion (ug/l) (is like one cent in \$10,000,000)

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as is feasible using the best available treatment technology.

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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

Lead Education Statement

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. NWS Earle is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components by contractors. 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 wish to have your water tested, contact us at (732) 866-2216. Testing is essential because you cannot see, taste, or smell lead in drinking water.



2022 Annual **WATER QUALITY REPORT**

SYSTEM NAME : Coastal North
PWS ID: NJ1345001

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.).

QUALITY. ONE MORE WAY WE KEEP LIFE FLOWING.



**NEW JERSEY
AMERICAN WATER**

WE KEEP LIFE FLOWING®

What is a Consumer Confidence Report (CCR)

Once again, we proudly present our Annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). CCRs let consumers know what contaminants, if any, were detected in their drinking water as well as related potential health effects. CCRs also include details about where your water comes from and how it is treated. Additionally, they educate customers on what it takes to deliver safe drinking water and highlight the need to protect drinking water sources.

We are committed to delivering high quality drinking water service. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, environmental compliance, sustainability and community education while continuing to serve the needs of all our water users.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-800-272-1325.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al 1-800-272-1325.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau peb ntawm 1-800-272-1325.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電 **1-800-272-1325** 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया **1-800-272-1325** र हमें काल करें।

Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону 1-800-272-1325.

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa 1-800-272-1325.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số 1-800-272-1325.

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A message from **New Jersey American Water's President**



MARK K MCDONOUGH

President, New Jersey
American Water

To Our Valued Customers:

I am pleased to share with you our 2022 Water Quality Report, which is a testament to the hard work and dedication of our employees. As you read through this information, you will see that we continue to supply high quality drinking water service to help keep your life flowing.

We know that at the end of every water pipe there's a family depending on us to provide this essential service safely and reliably. New Jersey American Water has the expertise of more than 850 experienced professionals, the right technologies in use, and a demonstrated commitment to upgrading our infrastructure to continue to provide you with clean, safe and reliable water service.

QUALITY: We have an exceptional track record when it comes to drinking water regulatory compliance. We test for about 100 regulated compounds, including PFAS, as required by state and federal drinking water standards, as well as unregulated compounds. We are recognized as an industry leader and work cooperatively with the US EPA and the NJ DEP so that implementation of existing standards and development of new regulations produce benefits for our customers. Additionally, five of our water treatment plants have been nationally recognized with Directors Awards from the U.S. EPA's Partnership for Safe Water program for surpassing federal and state drinking water standards.

SERVICE: Last year, we invested more than \$575 million to upgrade our water and wastewater systems in the communities we serve. These investments allowed us to improve water quality, pressure and service reliability for our customers. And while our water meets standards, we are committed to removing all lead and galvanized piping from service lines and estimate that the overall effort will be completed prior to 2031 as required by the state's lead service line legislation.

VALUE: While costs to provide water service continue to increase across the country, our use of technologies and economies of scale help us provide high quality service at an exceptional value, as water remains one of the lowest household utility bills.

We hope our commitment to you and our passion for water shines through in this report detailing the source and quality of your drinking water in 2022. We will continue to work to help keep your life flowing – today, tomorrow and for future generations.

Proud to be your local water service provider,

A handwritten signature in black ink that reads "Mark K McDonough". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark K McDonough
New Jersey American Water

This report contains important information about your drinking water. Translate it or speak with someone who understands it at 1-800-272-1325, Monday-Friday, 7 a.m. to 7 p.m.



**ATTENTION:
Landlords and
Apartment Owners**

Please share a copy of this notice with your tenants. It includes important information about their drinking water quality.

Mark of Excellence



EVERY STEP OF THE WAY.

Our team monitors and tests your water at multiple points throughout our process of drawing it from its source, treating it to meet drinking water standards, and distributing it through our pipeline systems. **In fact, American Water performs over one million tests annually for about 100 regulated contaminants, nationwide.**



EXPERTISE. RECOGNIZED AT THE HIGHEST LEVEL.

American Water is an expert in water quality testing, compliance and treatment and has established industry-leading water testing facilities. Our dedicated team of scientists and researchers are committed to finding solutions for water quality challenges and implementing new technologies. American Water is recognized as an industry leader in water quality and works cooperatively with the EPA so that drinking water standards and new regulations produce benefits for customers and public water suppliers. American Water has earned awards from the EPA's Partnership for Safe Water as well as awards for superior water quality from state regulators, industry organizations, individual communities, and government and environmental agencies.



WATER QUALITY. DOWN TO A SCIENCE.

Our team also has access to American Water's Central Laboratory in Belleville, Illinois, which conducts sophisticated drinking water testing and analysis. American Water scientists refine testing procedures, innovate new methods, and set new standards for detecting potentially new contaminants—even before regulations are in place.



MAINTAINING QUALITY FOR FUTURE GENERATIONS.

Just as New Jersey American Water is investing in research and testing, we also understand the importance of investing in the infrastructure that provides high-quality water service to you. Last year alone, **we invested more than \$432 million to improve our water and wastewater treatment and pipeline systems.**

NOT JUST MEETING DRINKING WATER STANDARDS— SURPASSING THEM.

The EPA regulates about 100 potential contaminants and sets stringent standards for each one. **New Jersey American Water takes water quality so seriously that:**

- **Five of our seven water treatment plants, including the treatment plant serving your area, have been nationally recognized with Directors Awards** from the EPA's Partnership for Safe Water program for surpassing federal and state drinking water standards.





About Your Drinking Water Supply

WHERE YOUR WATER COMES FROM

Shrewsbury area of system-Groundwater from the Potomac-Raritan-Magothy Aquifer (PRM) and surface water from the Glendola Reservoir, the Manasquan River/Reservoir, the Shark River, and the Swimming River/Reservoir.

Lakewood/Howell area of system-14 wells, 1 surface water supply. This systems source water comes from the Englishtown aquifer, Kirkwood-Cohansey aquifer, Mount Laurel-Wenonah aquifer, Potomac-Raritan-Magothy aquifer, upper Potomac-Raritan-Magothy aquifer, and Vincentown aquifer.

Ocean County area of system-5 wells and 1 purchased ground water source. This systems source water comes from the Englishtown aquifer system, Potomac-Raritan-Magothy aquifer, and upper Potomac-Raritan-Magothy aquifer. Also, bulk transfer of surface water from Jumping Brook Treatment Plant. Ortley Beach/Pelican Island area of the system can purchase water from the Lavallette Water Department and Seaside Heights Water Department. Also, bulk transfer of surface water from Jumping Brook Treatment Plant.

Coastal North System also purchases treated water from New Jersey American Water's Shorelands System for less than 10 customer connections. Shorelands Water system consists of 7 wells. Learn more about local waterways at <https://mywaterway.epa.gov/>.

Source Water Assessment Reports and Summaries are available for public water systems at www.state.nj.us/dep/swap/ or by contacting the NJDEP's Bureau of Safe Drinking Water at (609) 292-5550.



QUICK FACTS ABOUT THE COASTAL NORTH SYSTEM

Water Source:

Your water comes from a public community water system consisting of 19 wells, 2 surface water intakes and 1 surface water source (Manasquan River/Reservoir) purchased from New Jersey Water Supply Authority

Average amount of water supplied to customers on a daily basis:
46.3 million gallons per day

Disinfection treatment:

Groundwater supplies are disinfected with chlorine and surface water supplies are treated with chloramines to maintain water quality in the distribution system.



What are the Sources of Contaminants?

To provide tap water that is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) 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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, aquifers and/or groundwater. 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.

SPECIAL HEALTH INFORMATION

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/Centers for Disease Control and Prevention (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).

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 storm water runoff, and residential uses.
Organic Chemical Contaminants	including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
Radioactive Contaminants	which can be naturally occurring or be the result of oil and gas production and mining activities.

Protecting Your Water Sources

WHAT IS S.W.A.P.

The Source Water Assessment Program (SWAP) is a program of the New Jersey Department of Environmental Protection (NJDEP) to study existing and potential threats to the quality of public drinking water sources throughout the state. Sources are rated depending upon their contaminant susceptibility.

SUSCEPTIBILITY RATINGS FOR COASTAL NORTH

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. Source Water Assessment Reports and Summaries 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 watersupply@dep.nj.gov.

CONTAMINANT CATEGORIES

The NJDEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of the SWAP, 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 a low rating was assigned.

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, the NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

Source water protection is a long-term dedication to clean and safe drinking water. It is more cost effective to prevent contamination than to address contamination after the fact. Every member of the community plays an important role in source water protection. The NJDEP recommends controlling activities and development around drinking water sources, whether it is through land acquisition, conservation easements or hazardous waste collection programs. We will continue to keep you informed of SWAP's progress and developments.

SUSCEPTIBILITY CHART DEFINITIONS

- **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 By-product Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection by-products are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

Protecting Your Water Sources

Susceptibility Chart

		Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection By-product Precursors		
Area	Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
	Shrewsbury Area	Wells - 10			10			10			10			10	8	2		9	1				10	8	2
GUDI - 0																									
Surface water intakes - 5		5			1	4		2	3		5			3	2				5			5	5		
Lakewood Area	Wells - 14		1	13	4		10			14	4		10	4	6	4	1	6	7		5	9	1	13	
	GUDI - 0																								
	Surface water intakes - 1	1				1			1			1			1				1			1	1		
Ocean County Area	Wells - 5			5			5			5			5	4	1			3	2			5		5	
	GUDI - 0																								
	Surface water intakes - 0																								



Protecting Your Drinking Water Supply

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect our shared water resources. This includes utilities, businesses, residents, government agencies and organizations. Everyone who lives, works, and plays in the area has a role and stake in clean water supplies.

WHAT CAN YOU DO?

Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Properly dispose of pharmaceuticals, household chemicals, oils and paints. Materials can impact waterways if poured down the drain, flushed down the toilet, or dumped on the ground.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using an absorbent material like cat litter. Sweep up the material and put it in a sealed bag. Check with the local refuse facility for proper disposal.
- Clean up after your pets and limit the use of fertilizers and pesticides.
- Take part in watershed activities.

Report any spills, illegal dumping or suspicious activity to NJ DEP Hotline here: 1-877-WARNDEP (1-877-927-6337)

FOR MORE INFORMATION

To learn more about your water supply and local activities, visit us online at newjerseyamwater.com, select **Water Quality**, and click on **Source Water Protection**.

WHAT ARE WE DOING?

Our priority is to provide reliable, quality drinking water service for customers. The source of supply is an important part of that mission. We work to understand and reduce potential risks to your drinking water supply. We have developed a Source Water Protection Plan under the Pennsylvania Source Water Protection Technical Assistance Program (SWPTAP). This is a voluntary program to identify and address potential threats to drinking water supplies. Stakeholder involvement is an important part of the program. We partner with DEP to host annual meetings to review progress on the plan with stakeholders. We also welcome input on the plan or local water supplies through our online feedback form.

Here are a few of the efforts underway to protect our shared water resources:



Community Involvement: We have a proactive public outreach program to help spread the word and get people involved. This includes school education, contests, and other community activities.



Environmental Grant Program: Each year, we fund projects that improve water resources in our local communities.



Protect Our Watersheds Art Contest: Open to sixth graders, the contest encourages students to use their artistic skills to express the importance of protecting our water resources.



Educational Resources: We offer a plethora of educational videos on our YouTube Channel, along with a comprehensive Water Learning Center on our website.



Six Simple Steps to Save Water



Fix any leaking faucets.

One drop every 2 seconds from a leaky faucet wastes 2 gallons of water every day. That's water — and money — down the drain.



Don't let faucets run when brushing, shaving, or washing the dishes.

Just turning off the water while you brush can save 200 gallons a month.



Run washing machines and dishwashers only when they are full, or select the properly-sized wash cycle for the current laundry load.



Install water-saving shower heads and faucet aerators

in the bathroom and kitchen (available at most home improvement stores and some supermarkets).



Don't wash your car at home. A car wash uses much less water and often recycles it, too.



Turn off automatic lawn and garden sprinklers

when it's raining outside and at the end of the growing season.

10

Every Drop Counts

About 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. New Jersey American Water 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 <http://www.epa.gov/safewater/lead>.

UTILITY-OWNED VS. CUSTOMER-OWNED PORTION OF THE SERVICE LINE



Please note: This diagram is a generic representation. Variations may apply.

The most common source of lead in tap water is from the customer's plumbing and their service line.

The utility-owned water mains are not made of lead; however, the water service line that carries the water from the water main in the street to your home could be. Homeowners' service lines may be made of lead, copper, galvanized steel or plastic. You can assess your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve.

MINIMIZING YOUR POTENTIAL EXPOSURE

You cannot see, smell or taste lead, and boiling water will not remove lead. Here are steps you can take to reduce your potential exposure if lead exists in your home plumbing.

WE'RE COMMITTED TO REPLACING ALL LEAD AND GALVANIZED SERVICE LINES BY THE YEAR 2031.

Visit newjerseyamwater.com/leadfacts to learn how to identify your service line material, then scan the QR code to the right to self-report your service line material.



1. Flush your taps. The longer the water lies dormant in your home's plumbing, the more lead it might contain. If the water in your faucet has gone unused for more than six hours, flush the tap with cold water for 30 seconds to two minutes before drinking or using it to cook. To conserve water, catch the running water and use it to water your plants.



2. Use cold water for drinking and cooking. Hot water has the potential to contain more lead than cold water. If hot water is needed for cooking, heat cold water on the stove or in the microwave.



3. Routinely remove and clean all faucet aerators.



4. Look for the "Lead Free" label when replacing or installing plumbing fixtures.



5. Follow manufacturer's instructions for replacing water filters in household appliances, such as refrigerators and ice makers, as well as home water treatment units and pitchers. Look for NSF 53 certified filters.



6. Flush after plumbing changes. Changes to your service line, meter, or interior plumbing may result in sediment, possibly containing lead, in your water supply. Remove the strainers from each faucet and run the water for 3 to 5 minutes.

Determining Your Service Line Material

Homeowners' service lines are most commonly made of lead, copper, galvanized steel or plastic. Homes built before 1930 are more likely to have lead plumbing systems.

There are different ways that you can determine if you have a lead service line.

- You can access your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve and identify the pipe material using the chart on the right.
- A licensed and insured plumber can inspect your pipes and plumbing.
- Lead test kits can be purchased at local hardware and home improvement stores. These kits are used to test paint, but can also be used to test pipe – not the water inside. Look for an EPA recognized kit. Wash your hands after inspecting plumbing and pipes.

TYPES OF PIPE

	• Galvanized: A dull, silver-gray color. Use a magnet - strong magnets will typically cling to galvanized pipes.
	• Copper: The color of a copper penny.
	• Plastic: Usually white, rigid pipe that is jointed to water supply piping with a clamp. Note: It can be other colors, including blue and black.
	• Lead: A dull, silver-gray color that is easily scratched with a coin. Use a magnet - strong magnets will <u>not</u> cling to lead pipes.

YOUR SERVICE LINE MATERIAL

At New Jersey American Water, providing safe, reliable water service is our top priority. In July 2021, the state of New Jersey enacted legislation that requires all water providers to share with customers the material of the utility-owned and customer-owned service lines that lead to their property, notify customers with service lines that are lead or galvanized steel, and replace them.

To support this initiative, New Jersey American Water has created an interactive map to help our customers learn or identify their service line material and the next steps they can take to support this initiative. To access the inventory map, please visit newjerseyamwater.com/leadfacts and to self-identify your service line, visit newjerseyamwater.com/survey.

Please note if your service lines contain lead, it does not mean you cannot use water as you normally do. New Jersey American Water regularly tests for lead in drinking water and our water meets state and federal water quality regulations, including those set for lead.

For added protection and to comply with the new legislation, we will be removing lead and lead/galvanized piping from service lines over time. For more information on lead in drinking water, please visit newjerseyamwater.com/leadfacts.



Important Information About Drinking Water

CHLORAMINES

Chloramines are a New Jersey and federally approved alternative to free chlorine for water disinfection. Chloramines can reduce disinfection by-product formation and may help reduce concerns related to taste. Chloramines are also used by many American Water systems and many other water utilities nationally.

Chloramines have the same effect as chlorine for typical water uses with the exception that chloramines must be removed from water used in kidney dialysis and fish tanks or aquariums.

Treatments to remove chloramines are different than treatments for removing chlorine. Please contact your physician or dialysis specialist for questions pertaining to kidney dialysis water treatment. Contact your pet store or veterinarian for questions regarding water used for fish and other aquatic life.

You may visit newjerseyamwater.com, Select **Water Quality** and click **Chloramines** for more information. Customers can also contact our Customer Service Center at 1-800-272-1325 for more chloramine information.

RADON

Radon is a radioactive gas that occurs naturally in some groundwater. It may pose a health risk when the gas is released from water into air, as occurs while showering, washing dishes and performing other household activities. Radon can move up through the ground and into a home through cracks in the foundation.

Compared to radon entering the home through soil, radon entering through tap water is, in most cases, a small source of radon in indoor air. Inhalation of radon gas has been linked to lung cancer; however, the effects of radon ingested in drinking water are not yet clear.

FLUORIDE

Fluoride is a naturally occurring substance. It can be present in drinking water from two sources:

1. **By nature** when groundwater comes into contact with fluoride-containing minerals naturally present in the earth; or
2. **By a water purveyor** through addition of fluoride to the water they are providing in the distribution system.

The Coastal North System has naturally-occurring fluoride in the groundwater and also receives fluoridated water from the Swimming River treatment plant and the Jumping Brook treatment plant year-round. Beginning January 1, 2022, the fluoride levels at Swimming River treatment plant and Jumping Brook treatment plant were adjusted to achieve an optimal fluoride level of 0.7 parts per million (ppm) and a control range of 0.0 ppm to 2.0 ppm to comply with the state's Water Fluoridation Standards. The naturally-occurring fluoride levels in the Lakewood, Howell and Ocean County groundwater sources range is 0.0 to 0.3 ppm. The fluoride levels in the entire system are consistent year-round.

If you have any questions on fluoride, please visit newjerseyamwater.com, Select **Water Quality** and click on **Fluoride**. You may also call our Customer Service Center at 1-800-272-1325.





Important Information About **Drinking Water**

CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

NITRATES

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Important Information About **Drinking Water**



PFAS

Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in many household products including nonstick cookware (e.g., Teflon™), stain repellants (e.g., Scotchgard™), and waterproofing (e.g., GORE-TEX™). They are also used in industrial applications such as in firefighting foams and electronics production. There are thousands of PFAS chemicals, and they persist in the environment. Two well-known PFAS chemicals are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). These were phased out of production in the United States and replaced by hexafluoropropylene oxide-dimer acid (commonly known as GenX), perfluorobutane sulfonic acid (PFBS) and others.

As a leader in the industry, New Jersey American Water has been proactive in our approach to addressing PFAS, in many cases, ahead of New Jersey regulations.

New Jersey American Water has successfully piloted cutting-edge treatment strategies to effectively remove PFAS from several groundwater stations within its service territory. In fact, the company's PFAS removal projects were recognized with three awards, including a Governor's Environmental Excellence Award, and Alliance for Action's Leading Infrastructure Award, and s Commerce and Industry Association of NJ 2021 Environmental Award. To date, New Jersey American Water has installed PFAS treatment at eight groundwater stations within its service territory.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

The EPA created the Unregulated Contaminants Monitoring Rule (UCMR) to assist them in determining the occurrence of unregulated contaminants in drinking water and whether new regulations are warranted.

The first Unregulated Contaminants Monitoring Rule (UCMR1) testing was completed in 2003 for a list of contaminants specified by the EPA. Unregulated contaminants are those for which the EPA has not established drinking water standards. UCMR2 testing was conducted between November 2008 and August 2009, and UCMR3 assessment monitoring was conducted between January 2013 and December 2016. The fourth list of contaminants to monitor as part of the UCMR was published by the EPA in December 2016. UCMR4 testing began in 2018 and was completed in 2020. The results from the UCMR monitoring are reported directly to the EPA.

The results of this monitoring are incorporated in the data tables in this report as appropriate. For more information, contact our Customer Service Center at 1-800-272-1325.



American Water has a history of leading research to understand contaminants that can make their way through the environment. Our dedicated scientists work with leaders in the water community to develop methods to detect, sample, measure and address these contaminants. Because investment in research is critical to address PFAS, American Water actively assesses treatment technologies that can effectively remove PFAS from drinking water.

Lauren A. Weintrich, Ph.D.
Principal Scientist



Water Quality Results

WATER QUALITY STATEMENT

We are pleased to report that during calendar year 2022, the results of testing of your drinking water complied with all state and federal drinking water requirements.

For your information, we have compiled a list in the table below showing the testing of your drinking water during 2022. The New Jersey Department of Environmental Protection allows us to monitor for some contaminants less than once per year because the concentration of the contaminants does not change frequently. Some of our data, though representative, are more than one year old.

The data presented in the Table of Detected Contaminants is the same data collected to comply with EPA and New Jersey state monitoring and testing requirements. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the levels set by the EPA to protect public health. To assure high quality water, individual water samples are taken each year for chemical, physical and microbiological tests. Tests are done on water taken at the source, from the distribution system after treatment and, for lead and copper monitoring, from the customer's tap. Testing can pinpoint a potential problem so that preventative action may be taken.



MONITORING WAIVERS

We hope the report will raise your understanding of drinking water issues and awareness of the need to protect your drinking water sources.

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 (SOCs). The Coastal North system was denied a waiver for asbestos and will be monitoring for asbestos within the 2020-2028 compliance period. The system monitored for asbestos in 2022, and asbestos was not detected in the drinking water. The system has been granted waivers for synthetic organic chemicals in the 2020 to 2022 monitoring periods.

Definition of Terms

These are terms that may appear in your report.

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that a water system must follow.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

LRAA: Locational Running Annual Average

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. See also Secondary Maximum Contaminant Level (SMCL).

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 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.

MFL: Million fibers per liter.

micromhos per centimeter ($\mu\text{mhos/cm}$): A measure of electrical conductance.

NA: Not applicable

ND: Not detected

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of the water.

pH: A measurement of acidity, 7.0 being neutral.

picocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

parts per billion (ppb): One part substance per billion parts water, or micrograms per liter.

parts per million (ppm): One part substance per million parts water, or milligrams per liter.

parts per trillion (ppt): One part substance per trillion parts water, or nanograms per liter.

Secondary Maximum Contaminant Level (SMCL): Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

TON: Threshold Odor Number

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

%: Percent

MEASUREMENTS

Parts Per Million



in a 10 gallon fish tank

Parts Per Billion



in a 10,000 gallon swimming pool

Parts Per Trillion



in 35 junior size Olympic pools

Water Quality Results

New Jersey American Water conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in, 2022 certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see the “Definition of Terms Used in This Report” on the previous page. Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information

HOW TO READ THIS TABLE (FROM LEFT TO RIGHT)

- Starting with **Substance (with units)**, read across.
- **Year Sampled** is usually in 2022 but may be a prior year.
- A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements.
- **MCLG/MRDLG** is the goal level for that substance (this may be lower than what is allowed).
- **MCL/MRDL/TT/Action Level** shows the highest level of substance (contaminant) allowed.
- **Highest, Lowest or Average Compliance Result** represents the measured amount detected.
- **Range** tells the highest and lowest amounts measured.
- **Typical Source** tells where the substance usually originates.

Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

Vulnerable Populations Statement

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 (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial pathogens are available from the Safe Drinking Water Hotline (1-800-426-4791).

Water Quality Results

Towns Served by this system:

Shrewsbury area of system-Aberdeen | Allenhurst | Asbury Park | Bradley Beach | Colts Neck in part | Deal | Eatontown | Elberon | Fair Haven | Highlands Borough | Holmdel | Interlaken | Little Silver | Loch Arbor | Long Branch | Middletown | Monmouth Beach | Neptune | Neptune City | Ocean Grove | Oceanport | Ocean Township | Red Bank | Rumson | Sea Bright | Shrewsbury Borough | Shrewsbury Township | Tinton Falls | Wanamassa | West Long Branch | Lakewood/Howell area of system-Freehold in part | Howell Township | Lakewood | Ocean County area of system-Bay Head | Brick Township in part | Dover in part | Lavallette in part | Mantoloking | Ortley Beach | Pelican Island

Coastal North Water System – Table of Detected Contaminants – 2022

Note: Regulated contaminants not listed in this table were not found in the treated water

PRIMARY REGULATED SUBSTANCES

LEAD AND COPPER MONITORING PROGRAM - At least 50 tap water samples collected at customers' taps annually								
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90 th Percentile	No. of Homes Sampled	Homes Above Action Level	Typical Source
Lead (ppb) ¹	2022	Yes	0	15	4	51	0	Corrosion of household plumbing systems.
Copper (ppm) ²	2022	Yes	1.3	1.3	0.18	51	0	Corrosion of household plumbing systems.

1- Compliance with the MCL is based on the results reported as the 90th percentile of samples taken. None of the sample sites exceeded the action level of 15 ppb

2- Compliance with the MCL is based on the results reported as the 90th percentile of samples taken. None of the sample sites exceeded the action level of 1.3 ppm.

REVISED TOTAL COLIFORM RULE - At least 180 samples collected each month in the distribution system						
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Percentage OR Highest No. of Samples	Typical Source
Total Coliform	2022	Yes	0	*TT = Less than 5% OR TT = No more than 1 positive monthly sample	1%	Naturally present in the environment.
E. Coli	2022	Yes	0	TT = No confirmed samples	0	Human and animal fecal waste.

NOTE: Coliforms are bacteria that are naturally present in the environment and are used as an indicator of the general bacteriological quality of the water. We are reporting the highest percentage of positive samples / highest number of positive samples in any month.

Water Quality Results

PRIMARY REGULATED SUBSTANCE

TABLE OF TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant

	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Bromate (ppb)	2022	Yes	NA	10	ND	NA	By-product of drinking water disinfection.

DISINFECTANTS - Collected in the Distribution System and at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Compliance Result	Range Detected	Typical Source
Chloramine (ppm) (Distribution System) ¹	2022	Yes	NA	MRDL = 4	1.63	0.12 to 2.94	Water additive used to control microbes.
Chloramine (ppm) (Surface Water – Entry Point) ²	2022	Yes	MRDLG = 4	TT: Results \geq 0.20	0.86	0.86 to 2.99	Water additive used to control microbes.

1 – Compliance Result represents the highest monthly average of chlorine residuals measured throughout our distribution system & range detected lowest & highest detection during the monitoring year from individual sampling location.

2 – Compliance Result represents the lowest residual entering the distribution system from our surface water treatment plant.

DISINFECTANTS - Collected in the Distribution System and at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Compliance Result	Range Detected	Typical Source
Chlorite (ppm) (Howell Distribution System) ^{1, 2}	2022	Yes	0.8	1	0.86	0.11 to 0.86	Water additive used to control microbes.
Chlorine Dioxide (ppb) (Oak Glen Surface water – Entry Point) ^{3, 4}	2022	Yes	MRDLG = 800	MRDL=800	800	72 to 800	Water additive used to control microbes.

1 - Data represents the highest monthly chlorite measured in our Howell distribution system.

2 - Some infants and young children who drink water containing chlorite in-excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in-excess of the MCL. Some people may experience anemia.

3 - Data represents the highest residual entering the distribution system from our Oak Glen surface water treatment plant.

4 - Some infants and young children who drink water containing Chlorine Dioxide in-excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in-excess of the MCL. Some people may experience anemia.

Water Quality Results

PRIMARY REGULATED SUBSTANCE

TABLE OF DISINFECTION BYPRODUCTS – At least 12 samples Collected each quarter in the distribution system

Sample Location	Year	Compliance Achieved	MCLG	MCL	LRAA 1	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb) 2							
DBP2-1	2022	Yes	NA	80	56	31 to 62	By-product of drinking water disinfection.
DBP2-2	2022	Yes	NA	80	53	37 to 51	By-product of drinking water disinfection.
DBP2-3	2022	Yes	NA	80	63	34 to 53	By-product of drinking water disinfection.
DBP2-4	2022	Yes	NA	80	64	35 to 74	By-product of drinking water disinfection.
DBP2-5	2022	Yes	NA	80	43	20 to 37	By-product of drinking water disinfection
DBP2-6	2022	Yes	NA	80	57	29 to 50	By-product of drinking water disinfection
DBP2-7	2022	Yes	NA	80	51	37 to 54	By-product of drinking water disinfection
DBP2-8	2022	Yes	NA	80	46	3 to 74	By-product of drinking water disinfection
DBP2-9	2022	Yes	NA	80	59	35 to 55	By-product of drinking water disinfection
DBP2-10	2022	Yes	NA	80	54	24 to 45	By-product of drinking water disinfection
DBP2-11	2022	Yes	NA	80	54	30 to 53	By-product of drinking water disinfection
DBP2-12	2022	Yes	NA	80	50	30 to 48	By-product of drinking water disinfection

NOTE: 1. Compliance is based on the running annual average at each location. The Highest Compliance Result reflects the highest average at any location and the Range Detected reflects all samples from this year used to calculate the running annual average.

2 - Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems, and may have an increased risk of getting cancer.

Water Quality Results

PRIMARY REGULATED SUBSTANCE

TABLE OF DISINFECTION BYPRODUCTS – At least 12 samples Collected each quarter in the distribution system

Sample Location	Year	Compliance Achieved	MCLG	MCL	LRAA ¹	Range Detected	Typical Source
Haloacetic Acids (HAAs) (ppb)							
DBP2-1	2022	Yes	NA	60	17	9 to 21	By-product of drinking water disinfection.
DBP2-2	2022	Yes	NA	60	15	10 to 21	By-product of drinking water disinfection.
DBP2-3	2022	Yes	NA	60	8	5 to 13	By-product of drinking water disinfection.
DBP2-4	2022	Yes	NA	60	11	7 to 16	By-product of drinking water disinfection.
DBP2-5	2022	Yes	NA	60	22	15 to 28	By-product of drinking water disinfection.
DBP2-6	2022	Yes	NA	60	15	4 to 15	By-product of drinking water disinfection.
DBP2-7	2022	Yes	NA	60	14	10 to 20	By-product of drinking water disinfection.
DBP2-8	2022	Yes	NA	60	11	0 to 18	By-product of drinking water disinfection.
DBP2-9	2022	Yes	NA	60	11	5 to 16	By-product of drinking water disinfection
DBP2-10	2022	Yes	NA	60	21	10 to 20	By-product of drinking water disinfection
DBP2-11	2022	Yes	NA	60	14	10 to 21	By-product of drinking water disinfection
DBP2-12	2022	Yes	NA	60	15	9 to 20	By-product of drinking water disinfection

NOTE: 1. Compliance is based on the running annual average at each location. The Highest Compliance Result reflects the highest average at any location and the Range Detected reflects all samples from this year used to calculate the running annual average.

Water Quality Results

PRIMARY REGULATED SUBSTANCE

TABLE OF TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant

	Year Sampled	Compliance Achieved	MCLG	MCL	Lowest Compliance Result	Percent (%) Removal	Typical Source
Total Organic Carbon 1	2022	Yes	NA	TT = \geq 35 % removal	35%	35% to 63%	Naturally present in the environment.
Ratio Actual Required TOC Removal 1	2022	Yes	NA	TT = Running annual average \geq 1	1.0	1.0 to 1.83	Naturally present in the environment.

1 – System meeting at least one of the alternative compliance criteria in the rule are not required to meet the % removal and can use opt out option.

TABLE OF 2022 TURBIDITY - Collected at the Treatment Plant

Substance	Units	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Turbidity¹	NTU	Yes	0	TT = 1 NTU	0.25	0.02 to 0.25	Soil runoff.
	%	Yes	NA	TT: At least 95% of samples $<$ 0.3 NTU	100%	NA	Soil runoff.

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

TABLE OF DETECTED REGULATED SUBSTANCES - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Nitrate (ppm)¹	2022	Yes	10	10	1.72	ND to 1.72	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Fluoride (ppm)²	2022	Yes	2	2	0.80	ND to 0.80	Erosion of natural deposits; water additive which promotes strong teeth

1 - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

2 - Fluoride is added to the water (Monmouth and Ocean County areas of Coastal North System).

Water Quality Results

PRIMARY REGULATED SUBSTANCE

TABLE OF REGULATED RADIOLOGICAL SUBSTANCES- Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Alpha Emitters (pCi/L) 1, 2	2017-2022	Yes	0	15	14.9	ND to 14.9	Erosion of natural deposits
Combined Radium 226 & 228 (pCi/L) 3	2017-2022	Yes	0	5	4.18	ND to 4.18	Erosion of natural deposits

1 - Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

2 - Alpha Emitters highest compliance results reported for last five years. 2021 highest compliance result is 3.45 pCi/L

3 - Combined Radium 226 & 228 highest compliance result reported for last five years. 2020 highest compliance result is 1.05 pCi/L

PERFLUORINATED COMPOUNDS

Substance (with unit) (ppt)	Year sampled	Compliance Achieved	MCLG	MCL	Highest Compliance results	Range Detected	Typical Source
Perfluorooctanoic Acid (PFOA) 1	2022	Yes	NA	14	2.3	ND to 7.6	Discharge from industrial, chemical factories, release of aqueous film Forming foam
Perfluoropentanoic Acid (PFOS) 2	2022	Yes	NA	13	0.74	ND to 3.8	Discharge from industrial, chemical factories, release of aqueous film Forming foam

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.

Water Quality Results

TABLE OF DETECTED SECONDARY SUBSTANCES OF INTEREST - Collected at the Treatment Plant^{1, 5}

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Recommended Limit	Highest Result	Range Detected	Comments
Aluminum (ppm)	2020-2022	NA	NA	0.2	0.1	ND to 0.1	Erosion of natural deposits
Chloride (ppm)	2020-2022	NA	NA	250	113	4 to 113	Erosion of natural deposits
Sodium (ppm) ²	2020-2022	NA	NA	50	60	3.6 to 60	Erosion of natural deposits
Iron (ppm) ³	2020-2022	NA	NA	0.3	0.31	ND to 0.31	Erosion of natural deposits
Manganese (ppm) ⁴	2020-2022	NA	NA	0.05	0.067	ND to 0.067	Erosion of natural deposit
Hardness(ppm)	2020-2022	NA	NA	250	140	76 to 140	

1 - Substances with Secondary MCLs do not have MCLGs and are primarily established to address aesthetic concerns.

2 - 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.

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 - The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from high levels which would be encountered in drinking water.

5 - The state of New Jersey allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, is more than one year old.

Water Quality Results

UNREGULATED CONTAMINANT MONITORING

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

TABLE OF DETECTED UNREGULATED CONTAMINANT - Water Leaving the Treatment Facility) 2018-2019

Parameter	Units	Average Result	Range Detected	Typical Source
Bromochloroacetic Acid	ppb	1.87	0.4 to 4.1	By-product of drinking water disinfection
Bromodichloroacetic acid	ppb	1.22	ND to 3.6	By-product of drinking water disinfection
Chlorodibromoacetic acid	ppb	0.43	ND to 2.5	By-product of drinking water disinfection
Dibromoacetic Acid	ppb	0.29	ND to 0.95	By-product of drinking water disinfection
Dichloroacetic Acid	ppb	5.1	0.64 to 20	By-product of drinking water disinfection
Monobromoacetic Acid	ppb	0.38	ND to 0.55	By-product of drinking water disinfection
Total Haloacetic Acids	ppb	9.2	ND to 22	By-product of drinking water disinfection
Total Haloacetic Acids - Br	ppb	3.4	ND to 8.3	By-product of drinking water disinfection
Total Haloacetic Acids-UCMR4	ppb	12.3	0.64 to 27	By-product of drinking water disinfection
Trichloroacetic Acid	ppb	4.0	ND to 11	By-product of drinking water disinfection
2-Methoxyethanol	ppb	ND	NA	Used as a solvent in varnishes, dyes, resins, airplane deicing solutions. It is also used in organometallic chemistry synthesis.
Manganese*	ppb	15.1	ND to 73	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.
Germanium	ppb	0.007	ND to 0.32	Naturally-occurring elemental metal; a byproduct of zinc ore processing; used in infrared optics, fiber-optic systems, electronics and solar applications

* Manganese has a Secondary MCL of 50 ppb.

TABLE OF DETECTED UNREGULATED CONTAMINANTS 1,4 Dioxane – Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
1,4 Dioxane (ppb)	2022	NA	NA	NA	0.26	ND to 0.26	Used as a solvent in manufacturing and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos.

Water Quality Results

Cryptosporidium

Cryptosporidium is a protozoan found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, people with severely weakened immune systems have a risk of developing a life-threatening illness. We encourage such people to consult their doctors regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease. It can also be spread through means other than drinking water. For additional information regarding cryptosporidiosis and how it may impact those with weakened immune systems, please contact your personal health care provider.

The U.S. EPA issued a rule in January 2006 that requires systems with higher Cryptosporidium levels in their source water to provide additional treatment. To comply with this rule, New Jersey American Water once again began conducting 24 consecutive months of monitoring for Cryptosporidium in our raw water sources starting in 2015. The monitoring to date indicates the presence of these organisms in the source water. The samples were collected from the source before the water was processed through our treatment plants. We continued monitoring until April 2017. The data collected is presented in the Source Water Monitoring table below.

Source Water Monitoring					
Substance (2015 -2017)	Units	Swimming River	Jumping Brook	Oak Glen	Typical Source
Cryptosporidium	Oocysts/L	ND to 0.100	ND	ND	Microbial pathogens found in surface waters throughout the United States.
Giardia	Cysts/L	ND to 0.558	ND to 0.089	ND to 0.558	Microbial pathogens found in surface waters throughout the United States.

Water Quality Results

PURCHASED WATER-NEW JERSEY AMERICAN WATER SHORELANDS NJ1339001 RESULTS

PRIMARY REGULATED SUBSTANCE

PRIMARY REGULATED SUBSTANCES - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Nitrate (ppm) ¹	2021	Yes	10	10	ND	ND	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Fluoride (ppm) ²	2020	Yes	2	2	ND	ND	Erosion of natural deposits; water additive which promotes strong teeth

1 - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

2. The state of New Jersey allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, is more than one year old.

SECONDARY DETECTED SUBSTANCES OF INTEREST

SECONDARY DETECTED SUBSTANCES OF INTEREST - Collected at the Treatment Plant^{1, 4}

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Recommended Limit	Highest Result	Range Detected	Comments
Aluminum (ppm)	2020	NA	NA	0.2	0.05	ND to 0.05	Erosion of natural deposits
Chloride (ppm)	2020	NA	NA	250	48	11 to 48	Erosion of natural deposits
Sodium (ppm) ²	2020	NA	NA	50	45	7 to 45	Erosion of natural deposits
Iron (ppm) ³	2020	NA	NA	0.3	0.19	ND to 0.19	Erosion of natural deposits
Hardness(ppm)	2020	NA	NA	250	80	52 to 80	

1 - Substances with Secondary MCLs do not have MCLGs and are primarily established to address aesthetic concerns.

2 - 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.

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- The state of New Jersey allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, is more than one year old.

Water Quality Results

PURCHASED WATER-NEW JERSEY AMERICAN WATER SHORELANDS NJ1339001 RESULTS

UNREGULATED CONTAMINANT MONITORING

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

UNREGULATED CONTAMINANT - Water Leaving the Treatment Facility)2019-2020				
Parameter	Units	Average Result	Range Detected	Typical Source
Bromochloroacetic Acid	ppb	1.15	ND to 2.2	By-product of drinking water disinfection
Bromodichloroacetic acid	ppb	0.73	ND to 1.5	By-product of drinking water disinfection
Chlorodibromoacetic acid	ppb	0.44	ND to 1.2	By-product of drinking water disinfection
Dibromoacetic Acid	ppb	0.29	ND to 0.68	By-product of drinking water disinfection
Dichloroacetic Acid	ppb	3.29	0.64 to 9	By-product of drinking water disinfection
Monobromoacetic Acid	ppb	ND	ND	By-product of drinking water disinfection
Total Haloacetic Acids	ppb	6.78	6.4 to 15	By-product of drinking water disinfection
Total Haloacetic Acids - Br	ppb	2.61	ND to 4.5	By-product of drinking water disinfection
Total Haloacetic Acids-UCMR4	ppb	9.11	0.64 to 18	By-product of drinking water disinfection
Trichloroacetic Acid	ppb	3.21	ND to 5.8	By-product of drinking water disinfection
2-Methoxyethanol	ppb	ND	NA	Used as a solvent in varnishes, dyes, resins, airplane deicing solutions. It is also used in organometallic chemistry synthesis.
Manganese*	ppb	1.35	ND to 2.6	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.

* Manganese has a Secondary MCL of 50 ppb.



NEW JERSEY AMERICAN WATER FACTS AT A GLANCE

- COMMUNITIES SERVED**
 190 communities in 18 counties. We also provide water service to 30 additional communities through bulk purchase water agreements.
- CUSTOMERS SERVED**
 Approx. 662,000 water customers (91% residential, 7% commercial and industrial); 58,600 wastewater service customers
- EMPLOYEES**
 More than 850
- TREATMENT FACILITIES**
Water: Seven surface water treatment plants with a combined capacity of 384 million gallons of water a day (MGD). 266 wells with a combined capacity of 173 MGD

Wastewater: 21 sewer treatment plants with a combined capacity of 4.9 MGD
- MILES OF PIPELINE**
 9,293 miles of water main and 523 miles of sewer main
- STORAGE AND TRANSMISSION**
 162 water storage tanks;
 132 water booster pumping stations and 68 sewer lift stations
- SOURCE OF SUPPLY**
 74% surface water,
 24% groundwater and
 2% purchased water
- VALVES**
 202,167
- FIRE HYDRANTS**
 47,557

About Us

New Jersey American Water, a subsidiary of American Water, is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.8 million people. For more information, visit newjerseyamwater.com and follow us on Twitter, Facebook, Instagram and YouTube.

With a history dating back to 1886, **American Water (NYSE: AWK)** is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs approximately 6,500 dedicated professionals who provide regulated and regulated-like drinking water and wastewater services to an estimated 14 million people in 24 states. American Water provides safe, clean, affordable, and reliable water services to our customers to help keep their lives flowing.



How to Contact Us

If you have any questions about this report, your drinking water, or service, please contact New Jersey American Water's Customer Service Center Monday to Friday, 7 a.m. to 7 p.m. at 1-800-272-1325.

WATER INFORMATION SOURCES

New Jersey American Water
www.newjerseyamwater.com

New Jersey Department of Environmental Protection Bureau of Safe Drinking Water
www.nj.gov/dep/watersupply/

New Jersey Department of Environmental Protection Water Resource Management
www.nj.gov/dep/wrm/

New Jersey Board of Public Utilities
www.state.nj.us/bpu
1-800-624-0241

United States Environmental Protection Agency (USEPA):
<https://mywaterway.epa.gov/>

Safe Drinking Water Hotline: (800) 426-4791

Centers for Disease Control and Prevention: www.cdc.gov

American Water Works Association: www.awwa.org

Water Quality Association: www.wqa.org

National Library of Medicine/National Institute of Health:
www.nlm.nih.gov/medlineplus/drinkingwater.html

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-800-272-1325.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at 1-800-272-1325.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al 1-800-272-1325.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau peb ntawm 1-800-272-1325.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電 **1-800-272-1325** 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया **1-800-272-1325** र हमें काल करें।

Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону 1-800-272-1325.

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa 1-800-272-1325.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số 1-800-272-1325.