



# 2023 Annual **WATER QUALITY REPORT**

**TWIN LAKES SYSTEM**  
PWS ID: NJ1803002

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 pab 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 2023 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 860 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 \$507 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 2023. 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.

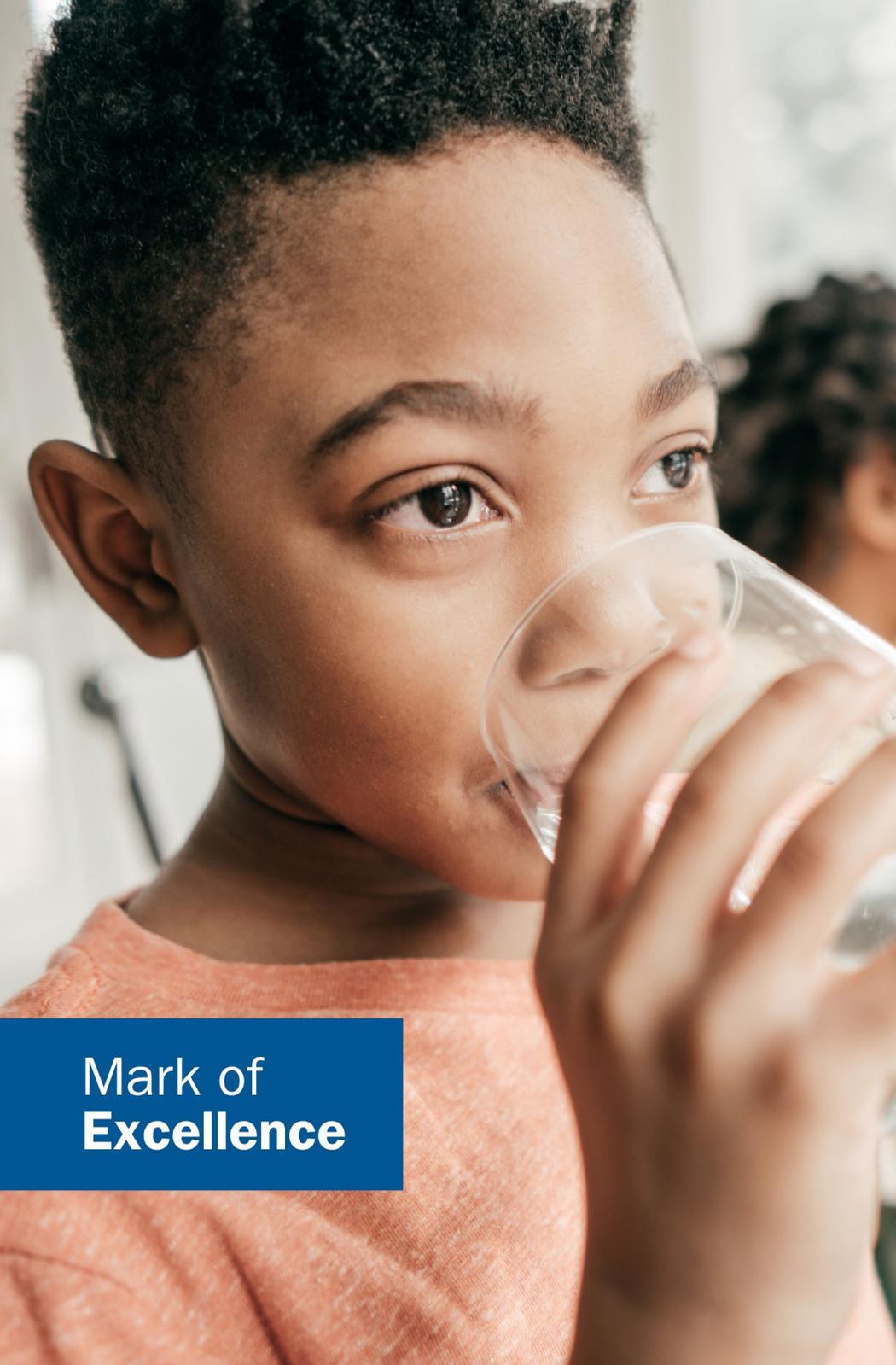
Mark K McDonough  
New Jersey American Water

**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 \$507 million to improve our water and wastewater treatment and pipeline systems.**

# About Your Drinking Water Supply

## WHERE YOUR WATER COMES FROM

The Twin Lakes System drinking water supply is the New Jersey American Water - Short Hills System. The Short Hills system is a public community water system consisting of 25 wells, 4 surface water intakes, 12 purchased ground water sources, and 3 purchased surface water sources.

Source water comes from the following aquifers and/or surface water bodies: Passaic River, Canoe Brook, Brunswick aquifer, glacial sand and gravel, igneous and metamorphic rocks.

This system purchases water from the following water systems: Orange, Verona, Southeast Morris County Utilities Authority (SMCMUA), Passaic Valley Water Commission (PVWC), Newark, Montclair, Madison, Livingston Water, New Jersey American Water Raritan System, and Chatham Water Department.

**Average amount of water supplied to customers on a daily basis:** 0.037 million gallons per day

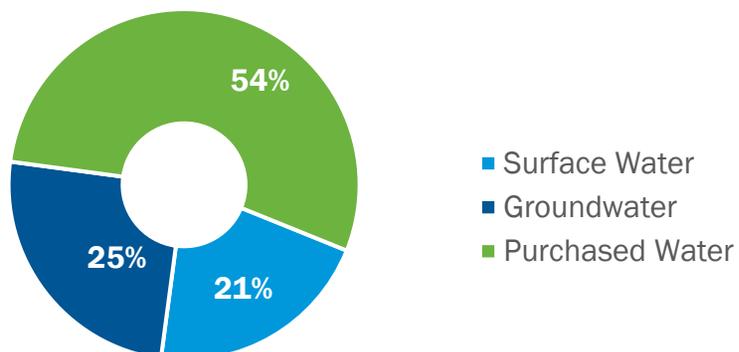
**Disinfection treatment:** Groundwater supplies are disinfected with chlorine and surface water supplies are treated with chlorine or chloramines to maintain water quality in the distribution system.

## COMMUNITIES SERVED

Twin Lakes is a small community within the town of Bernardsville

## SOURCE WATER ASSESSMENT

The New Jersey Department of Environmental Protection (NJDEP) has completed a Source Water Assessment Report and Summary for the Short Hills System to meet Federal requirements of the Safe Drinking Water Act. The study looked at the drainage area and ranked its vulnerability to contamination. The water supplies are considered vulnerable to agricultural and urban activities. To get a copy of the assessment, contact the NJDEP, Bureau of Safe Drinking Water at (609) 292-5550 or visit: <http://www.nj.gov/dep/watersupply/swap/index.html>.





# 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:

<b>Microbial Contaminants</b>	such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
<b>Inorganic Contaminants</b>	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.
<b>Pesticides and Herbicides</b>	which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
<b>Organic Chemical Contaminants</b>	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.
<b>Radioactive Contaminants</b>	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 NEW JERSEY AMERICAN WATER

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](mailto: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.

Sources	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection Byproduct Precursors			
	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	
Wells - 25	1	21	3	13	12			6	19	17		8	10	11	4			25		25			3	22	
GUDI - 0																									
Surface Water Intakes - 4	4			2	2			2	2		4		4					4			4	4			



# 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](http://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. At New Jersey American Water, we are working to implement voluntary source water protection plans for many of our water supplies. 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.



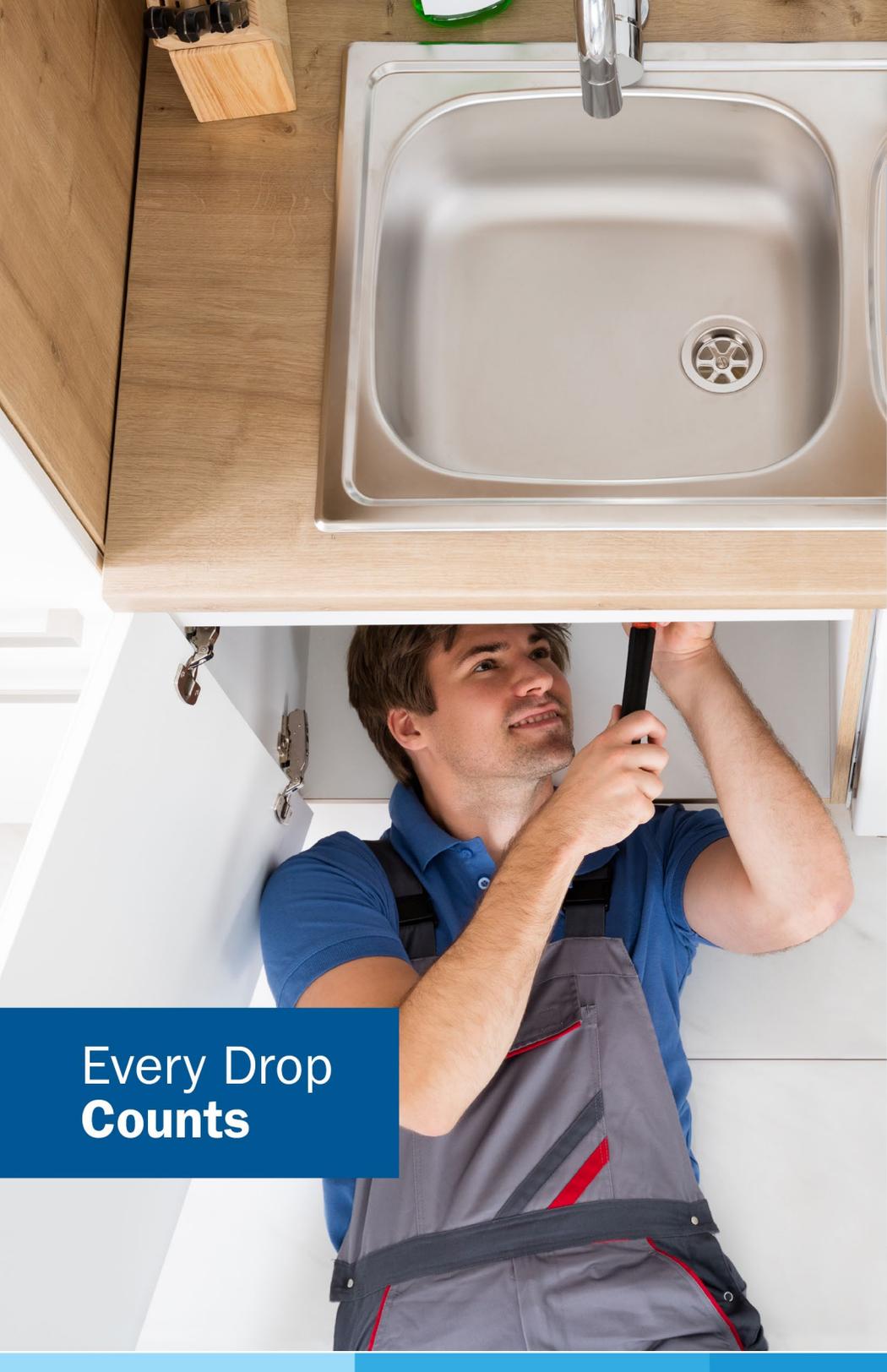
**Protect Our Watersheds Art Contest:**

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.



Every Drop  
Counts

## 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.

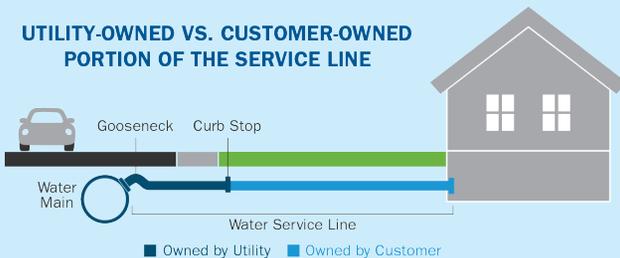


**Turn off automatic lawn and garden sprinklers** when it's raining outside and at the end of the growing season.

# 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. 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](http://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 created an interactive map and a robust website to help our customers learn or identify their service line material and the next steps they can take to support this initiative. To learn more about the program and to view the inventory map please visit [newjerseamwater.com/leadfacts](https://www.newjerseamwater.com/leadfacts).

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 replacing lead and/or galvanized steel piping from service lines over time. For more information on lead in drinking water, please visit [newjerseamwater.com/leadfacts](https://www.newjerseamwater.com/leadfacts).



# Important Information About **Drinking Water**

## **CHLORINE**

Chlorine is added to water for the customers' protection. It is used as a disinfectant to ensure that harmful organisms, such as bacteria and viruses, are destroyed in the treatment process.

In addition, the New Jersey Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (EPA) require New Jersey American Water to maintain low levels of this disinfectant to be present in the water at the furthest point of the distribution system. Our company complies with these minimum levels as the water travels from our treatment facility to your home. Consequently, customers who live or work closest to the facility might experience higher levels of chlorine. We make every attempt to minimize this level, and we frequently perform monitoring at various locations within our system.

New Jersey American Water continues to meet the drinking water standards related to chlorine use in your drinking water set by EPA and DEP in all of its systems.

## **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. If you are concerned about radon in your home, tests are available to determine the total exposure level. The EPA is developing regulations to reduce radon in drinking water. Radon in the air is inexpensive to test and easy to correct. For additional information call EPA's Radon Hotline at 1-800-SOS-RADON.

## **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 New Jersey American Water Twin Lakes System does not contain naturally-occurring fluoride in the groundwater. New Jersey American Water does not add fluoride to the water they are providing to Twin Lakes in Bernardsville.

If you have any questions on fluoride, please visit [newjerseyamwater.com](http://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. UCMR4 testing began in 2018 and was completed in 2020. UCMR5 requires sample collection for 30 chemical contaminants between 2023 and 2025.

The results from the UCMR monitoring are reported directly to the EPA. More information on the UCMR process, which at this time includes monitoring for 29 PFAS analytes and lithium, is available at <https://www.epa.gov/dwucmr>.

The results of this monitoring are incorporated in the data tables in this report as appropriate. If you are interested in examining the results, please contact New Jersey American Water's Customer Service Center Monday to Friday, 7a.m. to 7p.m. 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. Weinrich, Ph.D.**  
Principal Scientist



# Water Quality Results

## **WATER QUALITY STATEMENT**

We are pleased to report that during calendar year 2023, 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 2023. 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.

## **OTHER INFORMATION**

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. The Twin Lakes system was granted a waiver for asbestos in the 2020-2028 monitoring period. The Twin Lakes system has been granted a waiver for synthetic organic chemicals in the 2020 to 2022 monitoring period.

# 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 2023, 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” 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.

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 healthcare 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).

## TABLE OF DETECTED CONTAMINANTS

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

### PRIMARY REGULATED SUBSTANCES

LEAD AND COPPER MONITORING PROGRAM - At least 5 tap water samples collected at customers' taps every three years								
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	No. of Premises Sampled	Premises Above Action Level	Typical Source
Lead (ppb)	2022	Yes	0	15	1	7	0	Corrosion of household plumbing systems.
Copper (ppm)	2022	Yes	1.3	1.3	0.6	7	0	Corrosion of household plumbing systems.

DISINFECTION BYPRODUCTS - Collected in the Distribution System							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Result	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb)							
SITE 1	2023	Yes	NA	80	58	NA	By-product of drinking water disinfection.
SITE 2	2023	Yes	NA	80	61	NA	By-product of drinking water disinfection.
Haloacetic Acids (HAAs) (ppb)							
SITE 1	2023	Yes	NA	60	3	NA	By-product of drinking water disinfection.
SITE 2	2023	Yes	NA	60	4	NA	By-product of drinking water disinfection.

# PRIMARY REGULATED SUBSTANCES

DISINFECTANTS - Collected in the Distribution System and at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MRDLG	MRDL	Compliance Result <sup>1</sup>	Range Detected <sup>2</sup>	Typical Source
Chlorine (ppm) (Surface Water)	2023	Yes	MRDLG = 4	TT: Results $\geq$ 0.20	0.5	0.04 to 0.5	Water additive used to control microbes.
Chloramine (ppm) (Surface Water)	2022	Yes	MRDLG = 4	TT: Results $\geq$ 0.20	0.5	0.5 to 4	Water additive used to control microbes.

1 - Data represents the lowest residual entering the distribution system from our water treatment plant.

2 - Data represents the highest quarterly running average of chlorine residuals measured throughout our distribution system.

TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	NJ American Water Canoe Brook WTP NJ0712001	NJ American Water Raritan Millstone WTP NJ2004002	Typical Source
Total Organic Carbon (TOC)	2023	Yes	NA	TT = % Removal or Ratio	% Removal 45% to 65% (35-45 required)	% Removal 29% to 65% ( $\geq$ 25 required)	Naturally present in the environment.

PRIMARY REGULATED SUBSTANCES - Perfluorinated Compounds							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Perfluorooctanoic Acid (PFOA) (ppt) <sup>3</sup>	2023	Yes	NA	14	7	ND to 7	Discharge from industrial, chemical, and manufacturing factories, release of aqueous film forming foam.
Perfluorooctanesulfonic Acid (PFOS) (ppt) <sup>4</sup>	2023	Yes	NA	13	4	ND to 4	Discharge from industrial, chemical factories, release of aqueous film forming foam.

3 - 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.

4 - 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.

# PRIMARY REGULATED SUBSTANCES

TURBIDITY - Continuous Monitoring at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	NJ American Water Canoe Brook WTP NJ0712001	NJ American Water Raritan Millstone WTP NJ2004002	Typical Source
Turbidity (NTU)	2023	Yes	0	TT: Single result >1 NTU	Highest Detected Level and Range (low to high)		Soil runoff.
					0.27 (0.03 to 0.27)	0.5 (0.03 to 0.50)	
	2023	Yes	NA	TT: At least 95% of samples <0.3 NTU	Lowest Monthly Percentage of Samples Meeting Turbidity Limits		Soil runoff.
					100	98	

5 - Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

OTHER REGULATED SUBSTANCES - Collected at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL/SMCL	Highest Compliance Result	Range Detected	Typical Source
Bromate (ppb)	2023	Yes	NA	10	1	ND to 1	Byproduct of drinking water disinfection.

PRIMARY REGULATED SUBSTANCES - Collected at the Treatment Plant							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
1,2,3-Trichloropropane (ppt)	2023	Yes	30	30	20	ND to 20	Halogenated alkane; used as an ingredient in paint, varnish remover, solvents and degreasing agents.
Barium (ppm)	2023	Yes	2	2	0.006	ND to 0.006	Discharge from metal refineries and erosion of natural deposits
Nitrate (ppm) <sup>1</sup>	2023	Yes	10	10	2	ND to 2	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Gross Alpha (pCi/L) <sup>2</sup>	2023	Yes	0	15	0.6	ND to 0.6	Erosion of natural deposits
Combined Radium 226 and 228 (pCi/L) <sup>3</sup>	2023	Yes	0	5	1	ND to 1	Erosion of natural deposits

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 - 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.

3 - Some people who drink water containing combined Radium -226 & -228 in excess of the MCL over many years may have an increased risk of getting cancer.

# SECONDARY SUBSTANCES

Secondary SUBSTANCES - Collected at the Treatment Plant <sup>1</sup>							
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	SMCL	Highest Compliance Result	Range Detected	Typical Source
Aluminum (ppm)	2023	Yes	NA	0.2	0.03	0.01 to 0.03	Erosion of natural deposits
Chloride (ppm)	2023	NA	NA	250	86	78 to 86	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Manganese (ppb)	2023	NA	NA	50	46	ND to 46	Erosion from naturally occurring deposits.
Sodium (ppm) <sup>2</sup>	2023	NA	NA	50	44	30 to 44	Erosion from naturally occurring deposits: Used in water softener regeneration.
Total Hardness (ppm)	2023	NA	NA	250	159	89 to 159	Naturally occurring.
Zinc (ppm)	2023	NA	NA	5	0.2	ND to 0.2	Erosion from naturally occurring deposits.

1 - Substances with Secondary MCLs do not have MCLGs; these limits 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.

## UNREGULATED CONTAMINANT MONITORING RULE

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. If you are interested in examining the results, please contact New Jersey American Water's Customer Service Center Monday to Friday, 7a.m. to 7p.m. at 1-800-272-1325. More information on the UCMR process, which at this time includes monitoring for 29 PFAS analytes and lithium, is available at <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule>

The UCMR 5 analytical results are publicly available through the EPA's UCMR 5 Data Finder. The table below provides information on the unregulated contaminants that were detected in the water system.

UNREGULATED CONTAMINANTS						
Parameter	Year Sampled	Average Amount Detected	Range Low-High	Proposed U.S. EPA MCL	Hazard Index Calculation	Typical Source
Perfluorohexane sulfonic acid (PFHxS)	2023	0.1 ppt	ND to 4 ppt	Calculated Value: 1 (unitless)	0.02	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX chemicals)	2023	0 ppt	ND			
Perfluorobutanesulfonic acid (PFBS)	2023	0 ppt	ND			
Perfluorononanoic acid (PFNA)	2023	0 ppt	ND			
Perfluoropentanoic acid (PFPeA)	2023	0.2 ppt	ND to 28 ppt	N/A	N/A	
Perfluorobutanoic acid (PFBA)	2023	0.5 ppt	ND to 6 ppt	N/A	N/A	
Perfluorohexanoic acid (PFHxA)	2023	1 ppt	ND to 40 ppt	N/A	N/A	
Perfluorooctanoic acid (PFOA)	2023	2 ppt	ND to 88 ppt	4.0 ppt	N/A	
Perfluorooctanesulfonic acid (PFOS)	2023	0.3 ppt	ND to 6 ppt	4.0 ppt	N/A	Naturally occurring with multiple commercial uses
Lithium	2023	3 ppb	ND to 28 ppb	N/A	N/A	Naturally occurring with multiple commercial uses

In 2023, U.S. EPA proposed drinking water standards for six PFAS chemicals – PFOA (4 ppt), PFOS (4 ppt) and GenX, PFBS, PFNA, and PFHxS as a group using a Hazard Index of 1. For more information on the U.S. EPA's proposed PFAS drinking water standards, including the Hazard Index, please visit <https://www.epa.gov/pfas>.

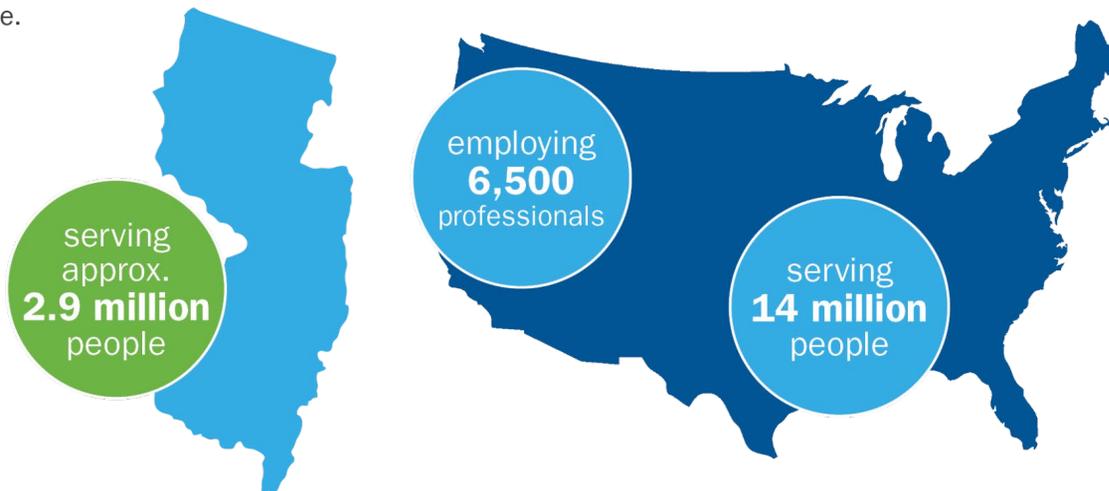
PFAS chemicals are unique, so two PFAS chemicals at the same level typically do not present the same risk. Therefore, you should not compare the results for one PFAS chemical against the results of another.



## About Us

**American Water (NYSE: AWK)** is the largest regulated water and wastewater utility company in the United States. With a history dating back to 1886, We Keep Life Flowing® by providing safe, clean, reliable and affordable drinking water and wastewater services to more than 14 million people with regulated operations in 14 states and on 18 military installations. American Water's 6,500 talented professionals leverage their significant expertise and the company's national size and scale to achieve excellent outcomes for the benefit of customers, employees, investors and other stakeholders.

**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 wastewater services to approximately 2.9 million people. For more information, visit [newjerseyamwater.com](http://newjerseyamwater.com) and follow us on X, Facebook, Instagram and YouTube.



## NEW JERSEY AMERICAN WATER FACTS AT A GLANCE

- **COMMUNITIES SERVED**  
More than 190 communities in 18 counties. We also provide water service to 30 additional communities through bulk purchase water agreements.
- **CUSTOMERS SERVED**  
Approx. 668,000 water customers (91% residential, 7% commercial and industrial); 64,200 wastewater service customers
- **EMPLOYEES**  
More than 860
- **TREATMENT FACILITIES**  
**Water:** Seven surface water treatment plants and 222 wells  
**Wastewater:** 21 sewer treatment plants
- **MILES OF PIPELINE**  
9,353 miles of water main and 579 miles of sewer main
- **STORAGE AND TRANSMISSION**  
198 water storage tanks; 206 water booster pumping stations and 74 sewer lift stations
- **SOURCE OF SUPPLY**  
75% surface water, 21% groundwater and 4% purchased water
- **VALVES**  
178,600
- **FIRE HYDRANTS**  
48,529

# 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](http://www.newjerseyamwater.com)

**New Jersey Department of Environmental Protection Water Resource Management**  
[www.nj.gov/dep/wrm/](http://www.nj.gov/dep/wrm/)

**New Jersey Board of Public Utilities**  
[www.state.nj.us/bpu](http://www.state.nj.us/bpu)  
1-800-624-0241

**United States Environmental Protection Agency (USEPA):**  
[www.epa.gov/safewater](http://www.epa.gov/safewater)

**Safe Drinking Water Hotline:** (800) 426-4791

**Centers for Disease Control and Prevention:** [www.cdc.gov](http://www.cdc.gov)

**American Water Works Association:** [www.awwa.org](http://www.awwa.org)

**Water Quality Association:** [www.wqa.org](http://www.wqa.org)

**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.