

2020 Annual

Water Quality Report

Harrison System
PWS ID: NJ0808001



A Message from President of New Jersey American Water

To Our Valued Customers:

New Jersey American Water is proud to be your local water service provider, and I am pleased to share some very good news about the quality of your drinking water. As you read through our Annual Water Quality Report, you will see that we continue to supply water that meets or surpasses all state and federal water quality standards. Additionally, the price you pay for this high-quality water service remains a great value as one of the lowest household utility bills.

We never forget that at the end of every water pipe there's a family depending on us to provide life's most critical resource, and we are committed to ensuring the water we treat and deliver is the best it can be. New Jersey American Water has the expertise of more than 800 experienced professionals, the right technologies in use, and a demonstrated commitment to replacing and upgrading our infrastructure so that you can be assured that your drinking water is clean, safe and reliable.

Our team of experts continuously monitors, maintains and upgrades our facilities to ensure that they operate efficiently and meet all regulatory standards. This requires investing millions of dollars each year in our infrastructure, including treatment plants, tanks, pump stations, pipes, fire hydrants and metering equipment. We do this because we care about our customers as much as we care about water. Statewide, we invested more than \$375 million in 2019 alone to improve our water treatment and delivery systems.

Additionally, in 2020, during the COVID-19 public health emergency, New Jersey American Water activated business continuity plans to strengthen our ability to provide reliable, high-quality service to our customers, continue to deliver water and wastewater services and protect our employees and customers. According to the U.S. Environmental Protection Agency (U.S. EPA) based on current research, the risk to water supplies is low. The U.S. EPA has also relayed that Americans can continue to use and drink water from their tap as usual.

New Jersey American Water remains committed to the delivery of safe, reliable water. That includes continued operation of drinking water treatment barriers, which provide an added layer of protection that includes filtration and disinfection of our surface water supplies (e.g., those from lakes, reservoirs or rivers) and disinfection of our groundwater sources (e.g., underground wells).

We have an exceptional track record when it comes to water quality and drinking water regulatory compliance. In fact, we take water quality so seriously that five of our surface 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.

Please take the time to review this report. It provides details about the source and quality of your drinking water, using the data from water quality testing conducted for your local system between January and December 2019. If you have any questions, I encourage you to visit the Water Quality page of our website at www.newjerseyamwater.com, or call our Customer Service Center at 800-272-1325.

Sincerely,

Cheryl Norton

President, New Jersey American Water



This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

છાત્ર લુધાલ માં લમારા પોલાના પાણ હિત્રે જાગત્પ ની ભાગમરી જાાપવા માં જાતી છે જોને અનુવાદ કરો એવળા જેને સમજણ પડી એમ તેની આપે લાત કરો

이 보고서에는 귀하께서 사용하고 계시는 식수에 관한 정보가 들어있습니다. 만약에 이해를 못하시면 누군가에게 번역을 의뢰하십시오.

本报告与您的饮用水有关。 如果您不了解其内容,应请别人为您翻译解说。

Our Commitment to Quality

Once again, we proudly present our annual water quality report, which details the results of water quality testing completed from January to December 2019. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Included in this report are details about where your water comes from, what it contains, and how our water quality results compare to federal and state standards.

We are pleased to tell you that we had no Safe Drinking Water Act violations again in 2019. We are committed to delivering high quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of our water users.

We want you to be informed about your drinking water. For more information about this report, or for any questions relating to your drinking water, please contact our 24-hour Customer Call Center toll-free at 1-800-272-1325.

Share This Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their location who are not customers. Additional copies of this report are available by contacting customer service at 1-800-272-1325.

About New Jersey American Water

New Jersey American Water, a subsidiary of American Water (NYSE: AWK), 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.

About American Water

With a history dating back to 1886, American Water is the largest and most geographically diverse U.S. publicly traded water and wastewater utility company. The company employs more than 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to 15 million people in 46 states. American Water provides safe, clean, affordable and reliable water services to our customers to make sure we keep their lives flowing. For more information, visit amwater.com and follow American Water on Twitter, Facebook and LinkedIn.

How to Contact Us

Thank you... for allowing us to continue to provide you with quality drinking water this year. We ask that all our customers protect our water sources. Please call our Customer Call Center toll-free at 1-800-272-1325 if you have questions.

New Jersey American Water 1 Water St, Camden, NJ 08102

amwater.com



Water Information Sources

New Jersey Department of Environmental Protection, Bureau of Safe Drinking Water:

(609) 292-5550 • www.state.nj.us/dep

New Jersey Board of Public Utilities:

(800) 624-0241 • 44 S. Clinton Ave, Trenton, NJ 08625

Division of Customer Relations:

1-800-624-0241 • www.state.nj.us/bpu

US Environmental Protection Agency: www.epa.gov/safewater

Safe Drinking Water Hotline: 1-800-426-4791

American Water Works Association: www.awwa.org

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

Public Participation

How You Can Get Involved

Customers can participate in decisions that may affect the quality of water by:

- Reading the information provided in bill inserts and special mailings
- Contacting the company directly with questions or to discuss issues
- Responding to company requests for participation in focus groups and roundtables
- Attending open houses conducted by the company
- Responding to survey requests

Where Your Water Comes From

Harrison System - PWSID NJ0808001

New Jersey American Water – Harrison System is a public community water system consisting of 5 wells in the Potomac-Raritan-Magothy Aquifer and treated surface water from the Delaware River.

Partnership for Safe Water

The Delaware River Regional Water Treatment Plant participates in the Partnership for Safe Water, receiving Director's Award recognition again in 2018 and are awaiting confirmation for 2019. In 2015, our treatment facilities were awarded the prestigious "Fifteen Year Director's Award" under the Partnership for Safe Water program administered by the U.S. EPA, New Jersey Department of Environmental Protection, and other water related organizations. The award honors water utilities for achieving operational excellence, by voluntarily optimizing their treatment facility operations and adopting more stringent performance goals than those required by federal and state drinking water standards. We are proud to report that we continue to maintain those quality standards.





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.

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.

NJAW - Harrison	I	Pathogen			Nutrient	5	!	Pesticide			atile Org		I	norganic		Ra	dionuclio	les		Radon			ction By Precursor	
Sources	Н	M	L	Н	M	L	H	M	L	Н	M	L	Н	M	L	Н	M	L	H	M	L	H	M	L
Wells- 5		5			5			5			5		5			5				5		5		
GUID - 0																								
Surface water intakes - 1	1			1				1			1		1					1			1	1		



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.

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 conducted 24 consecutive months of monitoring for Cryptosporidium in our raw water sources from 2015 to 2017. We detected the organism in the Delaware River during this testing, but samples were collected prior to treatment. The results of our Cryptosporidium monitoring indicates that no additional treatment is required to comply with the U.S. EPA regulation. For additional information regarding cryptosporidiosis and how it may impact those with weakened immune systems, please contact your personal health care provider.

Lead in Drinking Water

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.

We take steps to reduce the potential for lead to leach from your pipes into the water. This is accomplished by adding a corrosion inhibitor to the water leaving our treatment facilities. There are steps that you can take to reduce your household's exposure to lead in drinking water. For more information, please review our Lead and Drinking Water Fact Sheet at https://amwater.com/njaw/water-quality/lead-and-drinking-water.

What's in the Source Water Before We Treat It?

In general, the sources of drinking water (both tap 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 can pick up substances resulting from the presence of animals or from human activities.

Substances That May Be Present in Source Water Include:

Microbiological Contaminants: such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.

Inorganic Contaminants: such as salts and metals which can be naturally occurring or may 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 stormwater runoff and residential uses.

Organic Chemical Contaminants: including synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.

Radioactive Contaminants: which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.



What is 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.

Do I Need to Take Special Precautions?

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

How Do I Read the Table of Detected Contaminants?

First, determine which table you should read by finding your town in the Towns Served by this System. Starting with the Contaminant, read across from left to right. A "Yes" under Compliance Achieved means the amount of the substance met government requirements. The column marked MCLG, Maximum Contaminant Level Goal, is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. The shaded column marked MCL, Maximum Contaminant Level, is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. The column marked Highest Level Detected shows the highest test results during the year. The column marked Range Detected shows the highest and lowest test results for the year. Typical Source shows where this substance usually originates. Compare the detected values with the MCL column. To be in compliance, the Highest Level Detected must be lower than the MCL standard. Those substances not listed in the table were not found in the treated water supply. The footnotes and the definitions below will help you interpret the data presented in the Table of Detected Contaminants.

Table Definitions

90th Percentile Value: Of the samples taken, 90% of the values of the results were below the level indicated in the table.

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

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of 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.

NA: not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfection.

ND (Not Detected): Laboratory analysis indicates that the constituent is not present

ppb (parts per billion): Corresponds to one-part substance in one billion parts of water.

ppm (parts per million): Corresponds to one-part substance in one million parts of water.

pCi/L (Picocuries per Liter): A measure of the radioactivity in water.

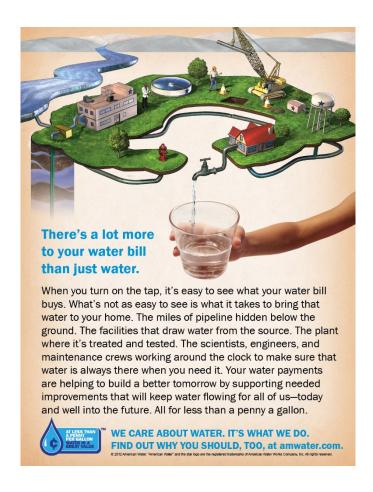
RUL: Recommended Upper Limit

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



Water Quality Statement

To comply with NJDEP and EPA regulations, New Jersey American Water issues a report annually describing the quality of your drinking water. The purpose of this report is to provide you an overview of last year's (2019) drinking water quality. It includes details about where your water comes from and the results of our testing. 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. Our system has received monitoring waivers for synthetic organic chemicals.



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 guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial pathogens are available from the Safe Drinking Water Hotline at 1-800-426-4791.



Harrison System PWSID NJ0808001

2019 Table of Detected Contaminants

 $\textbf{Towns Served By This System:} \ \mathsf{Mullica \ Hill} \ \& \ \mathsf{Harrison \ Township \ in \ part}.$

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

In addition to local ground water, Harrison System receives treated surface water from the Delaware River Regional Water Treatment Plant. 2019 data is presented below.

Regulated Substances										
Parameter	Units	Compliance Achieved	MCLG	MCL	Highest Compliance	Range Detected	Typical Source			
Inorganics										
Nitrate	e ppm Yes		10	10	0.28	0.28	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits			
Volatile Organics										
Xylene (total)	ppb	Yes	10	1000	3.3 ¹	ND to 3.3	Occurs in small quantities in crude oil and fuels. Produced mainly as part of aromatics compounds.			
Treatment Byproducts										
Five Haloacetic Acids (HAA ₅)	ppb	Yes	NA	60	16.4 ¹	4.5 to 18.7	By-product of drinking water disinfection			
Total Trihalomethanes (TTHM)	ppb	Yes	NA	80	53.4 ¹	13 to 59.8	By-product of drinking water disinfection			
Disinfectants										
Chlorine	ppm	Yes	MRDLG = 4	MRDL = 4	0.79 ²	0.06 to 1.01	Water additive used to control microbes			
Lead and Copper Monitori	ng Program -	January to Jur	ne 201 9							
Lead & Copper Monitoring	Units	Compliance Achieved?	MCLG	Action Level	90th Percentile	Homes Above AL/Total Sites	Typical Source			
Copper	ppm	Yes	1.3	1.3	0.185	0 / 46	Corrosion of household plumbing systems			
Lead	ppb	Yes	0	15	1	0 / 46	Corrosion of household plumbing systems			
Lead and Copper Monitoring Program - July to December 2019										
Lead & Copper Monitoring	Units	Compliance Achieved?	MCLG	Action Level	90th Percentile	Homes Above AL/Total Sites	Typical Source			
Copper	ppm	Yes	1.3	1.3	0.156	0 / 43	Corrosion of household plumbing systems			
Lead	ppb	Yes	0	15	1	0 / 43	Corrosion of household plumbing systems			
Footnotes										

Data represents the highest monthly average of chlorine residuals measured throughout our distribution system

Secondaries										
Contaminant	Units	Typical Source	RUL	Highest Level Detected	Range Detected	Typical Source				
Sodium	ppm	Naturally Occurring	50	91.4	13 to 91.4	Naturally occurring				

In 2019 this system had sodium detections above the RUL. Groundwater with naturally elevated sodium is blended with low sodium sources in order to minimize the sodium levels in your drinking water. 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 a concern to individuals on a sodium restricted diet.



Data represents the highest locational running annual average calculated quarterly

Delaware River Regional Water Treatment Plant

2019 Data Table of Detected Contaminants

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

Regulated Substances										
Parameter	Units	Compliance Achieved?	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source			
Inorganics										
Nitrate	ppm	Yes	10	10	1.17	NA	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits			
Turbidity										
	NTU	Yes	NA	TT = 1 NTU	0.08	0.06 to 0.08	Soil runoff			
Turbidity ¹	%	res		TT = % of samples <0.3 NTU	100%	NA	5011 (1010)1			
Treatment Byproducts	Treatment Byproducts Precursor Removal									
Total Organic Carbon (TOC)	%	Yes	NA	TT ≥35% Removal	49% ²	49% to 71%	Naturally present in the environment.			
Ratio of Actual / Required TOC Removal	Ratio	Yes	NA	TT: Running Annual Average ≥ 1.0	1.40 ²	1.40 to 2.02	naturally present in the environment.			
Disinfectants										
		Yes	Yes NA		0.60 ³	0.60 to 1.22				
Chlorine	ppm	Yes	MRDLG = 4	MRDL = 4	1.22 ³	U.6U TO 1.22	Water additive used to control microbes			
Footnotes										

^{100%} of the turbidity readings were below the treatment technique requirement of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Unregulated Contaminants Monitoring Rule (UCMR4)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. The fourth Unregulated Contaminant Monitoring Rule (UCMR 4) was published in the Federal Register on December 20, 2016. UCMR 4 requires monitoring for 30 chemical contaminants between 2018 and 2020 using analytical methods developed by EPA and consensus organizations. This monitoring provides a basis for future regulatory actions to protect public health.

For general information on UCMR4, visit https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule or contact EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Delaware River Regional Water Treatment Plant								
Unregulated Contaminants Monitoring (UCMR4)								
Parameter	Units	Average Result	Range Detected	Typical Source				
Manganese*	ppb	1.02	ND to 1.8	Naturally-occuring elemental metal; largely used in aluminum alloy production. Essential dietary element.				
Manganese is regulated as a secondary contaminant with a secondary maximum contaminant level of 50 ppb								



Data represents the lowest removal of Total Organic Carbon (TOC)

³ Data represents the lowest & highest chlorine residuals entering the distribution system from our surface water treatment plant