



2016 Annual

Water Quality Report

Tewksbury Township Hunterdon County
CROSSROADS AT OLDWICK
PWS ID: NJ1024001



A Message from the New Jersey American Water President

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. **Better yet, the price you pay for this high-quality water service remains less than a penny per gallon.**

New Jersey American Water has 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 of the highest 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 2016.

Sincerely,

Robert G. MacLean

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

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.

આ અહેવાલ માં તમારા પીવાના પાણી વિષે
અગત્ય ની જાણકારી આપવા માં આવી છે.
એનો અનુવાદ કરો અથવા જેને સમજવો પડતો
હોય તેના સાર્થક બતાવો કરો

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。

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

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 2016. 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 2016. We are committed to delivering the best 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 all 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.

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 2.7 million people.

About American Water

American Water is the largest and most geographically diverse publicly traded U.S. water and wastewater utility company. Marking its 130th anniversary this year, the company employs 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting www.amwater.com.

How to Contact Us

Thank you... for allowing us to continue to provide your family 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

131 Woodcrest Road

P. O. Box 5079

Cherry Hill, NJ 08034

www.amwater.com/njaw

Water Information Sources

New Jersey Department of Environmental Protection,

Bureau of Safe Drinking Water:

(609) 292-5550 • www.nj.gov/dep

New Jersey Board of Public Utilities:

44 S. Clinton Avenue, Trenton, NJ 08625

1-800-624-0241 • www.nj.gov/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

Source Water Information

Customers of New Jersey American Water who live in the Crossroads @ Oldwick development receive water from three wells drilled, 422', 350' and 700' into an underground supply of water known as the Middle Proterozoic bedrock aquifer.

The wells are located within the development. New Jersey American Water controls the use of the land immediately surrounding the wells and restricts certain activities on that property.

Where Your Water Comes From

The water in the Crossroads system comes from an underground aquifer. Two submersible well pumps that run on a manually alternating basis pump water out of the ground. Each well pumps approximately 100 gallons per minute. Water is pumped out of the ground, passes through a turbine meter to measure flow in gallons and flows through an air stripper for radon removal. Then it is disinfected with hypochlorite solution, all before it reaches the water storage tank. The water distribution system pressure is maintained by a hydropneumatic booster pump system. The booster pump system draws water out of the storage tank and feeds the hydropneumatic tank located in the treatment building. The hydropneumatic tank contains a column of air and water to maintain pressure in the distribution system.

Protecting Your Water Source

What is S.W.A.P.?

SWAP (Source Water Assessment Program) is a result of the 1996 amendments to the Federal Safe Drinking Water Act (SDWA). Those amendments require all states to establish a program to assess the vulnerability of public water systems to potential contamination.

The New Jersey Department of Environmental Protection (NJDEP) is preparing Source Water Assessment Reports

and Summaries for all public water systems. Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP's source water assessment website at <http://www.nj.gov/dep/swap> or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550.

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 has an important role in source water protection. 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.

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

Please note that the NJDEP has not performed a Source Water Assessment on the Crossroads at Oldwick System. Once the assessment is performed, it will be included in this report and will be available on the NJDEP website.

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, this 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and Herbicides: This 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 may also come from gas stations, urban storm water runoff and septic systems.

Radioactive Contaminants: This 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 the EPA's Radon Hotline at 1-800-SOS-RADON.

Special Informational Statement for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

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?

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 **Range** shows the highest and lowest test results for the year. The column marked **Highest Level Detected** shows the highest test results during the year. **Major Sources in Drinking Water** shows where this substance usually originates. Compare the Highest Level 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.

As you can see from the table, our system had no MCL violations again this year. 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 percent 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.

Disinfection By-product: Disinfection by-products are formed when the disinfectants (usually chlorine) used to kill pathogens reacts with dissolved organic material (for example leaves) present in surface water.

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

None Detected (ND): Laboratory analysis indicates that the constituent is not present.

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

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

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

RUL: Recommended Upper Limit.

Water Quality Statement

The data presented in the Table of Detected Contaminants is the same data collected to comply with U.S. Environmental Protection Agency 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 well 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 completed 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.

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 and asbestos.

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 (1-800-426-4791).

Crossroads @ Oldwick System – PWS ID# NJ1024001

Table of Detected Contaminants - 2016

Regulated Substances

Contaminant	Unit	MCL	MCLG	Highest Level Detected	Range	Compliance Achieved	Major Sources in Drinking Water
Microbiological Contaminants							
Total Coliform Bacteria	positive monthly samples	5%	0	0% ¹	NA	Yes	Naturally present in the environment
Disinfectants							
Chlorine	ppm	MRDL = 4 ppm	MRDLG = 4	0.9 ²	0.5 – 1.4	Yes	Water additive used to control microbes
Disinfectant By-Products							
Total Trihalomethanes (TTHM)	ppb	80	NA	13	NA	Yes	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5)	ppb	60	NA	3	NA	Yes	By-product of drinking water disinfection
Inorganic Contaminants							
Arsenic	ppb	5	5	ND	NA	Yes	Occurs naturally in the environment; Runoff from agricultural and industrial activities
Barium	ppm	2	2	0.4	NA	Yes	Erosion of natural deposits
Fluoride	ppm	2	2	ND	NA	Yes	Erosion of natural deposits
Nitrate	ppm	10	10	2.3	NA	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Tap water samples were collected for lead and copper analysis from homes in the service area

Lead & Copper Monitoring	Units	Compliance Achieved	MCLG	Action Level ³	90th Percentile ⁴	Homes Above Action Level	Typical Source
Copper (2016) ⁽⁵⁾	ppm	Yes	1.3	1.3	0.09	0	Corrosion of household plumbing systems
Lead (2016) ⁽⁵⁾	ppb	Yes	0	15	1	0	Corrosion of household plumbing systems; erosion of natural deposits

¹ Maximum percentage of positive samples collected in any one month under total coliform rule until March 2016.

² Highest level detected is the maximum quarterly average. Range indicates the monthly averages detected.

³Action Level: The concentration of a contaminant which, if exceeded, triggers a treatment technique or other requirement, which a water system must follow.

⁴Ninety percent of the samples tested below the indicated value.

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

Unregulated Contaminant Monitoring Rule

New Jersey American Water participated in the 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 regulation is warranted. For testing conducted in the Raritan System, the following substances were found.

Contaminant	Unit	NJDEP Guidance Level	Highest Level Detected	Range Detected	Use or Environmental Source
Hexavalent Chromium (2015)	ppb	NA	ND	ND	Major sources of Hexavalent Chromium (Chromium-6) in drinking water are discharges from steel and pulp mills, and erosion of natural deposits of chromium-3. Hexavalent Chromium is not currently regulated as an individual substance. NJ American Water voluntarily performed this monitoring based on recommendations from USEPA. For more information on Hexavalent Chromium (Chromium-6), please visit our web site.

There's a lot more to your water bill than just water.

When you turn on the tap, it's easy to see what your water bill buys. What's not as easy to see is what it takes to bring that water to your home. The miles of pipeline hidden below the ground. The facilities that draw water from the source. The plant where it's treated and tested. The scientists, engineers, and maintenance crews working around the clock to make sure that water is always there when you need it. Your water payments are helping to build a better tomorrow by supporting needed improvements that will keep water flowing for all of us—today and well into the future. All for less than a penny a gallon.

AT LESS THAN A PENNY PER GALLON WATER IS A GREAT VALUE.

WE CARE ABOUT WATER. IT'S WHAT WE DO. FIND OUT WHY YOU SHOULD, TOO, at amwater.com.

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6 SIMPLE STEPS TO SAVE WATER...BECAUSE REMEMBER, EVERY DROP COUNTS

Due to much lower than normal rainfall, New Jersey's water supply is dwindling. You can do your part to help avoid a drought emergency by taking these six simple steps to save water.



Don't let faucets run when brushing your teeth, shaving, or washing the dishes. Just turning off the water while you brush can save 200 gallons a month.

1



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

2



Install water-saving showerheads and faucet aerators in the bathroom and kitchen (available at most home improvement stores and some supermarkets.)

3



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.

4



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

5



With the end of the growing season, be sure to turn off automatic lawn and garden sprinkler systems.

6



For more detailed information on how you can conserve water in and outside your home, visit njdrought.org.

Remember...every drop counts.