2017 Annual Water Quality Report

AWM Country Oaks System
PWS ID: NJ1427016

NEW JERSEY AMERICAN WATER

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 a great value as one of the lowest household utility bills.

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 2017.

Sincerely,

Robert G MacLean

Rob MacLean
President, New Jersey American Water
Sr. VP, Eastern Division, 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.

આ અહેવાલ માં તમારા પીવાના પાણી વિષે
અગત્ય ની જાણકારી આપવા માં આવી છે.
એનો અનુવાદ કરો અથવા જેને સમજણ પડતી
હોય તેની સાથે વાત 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 보고서에는 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 2017. 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 2017. 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.

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 2.7 million people. For more information, visit www.newjerseyamwater.com and follow New Jersey American Water on Twitter and Facebook.

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 6,900 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 46 states and Ontario, Canada. 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 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

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

Your water is 100% treated groundwater from a blend of sources that may include granite bedrock formations, igneous and metamorphic rocks, Jacksonburg limestone and the Kittatinny Aquifer.

AWM Country Oaks - PWSID # NJ1427016

New Jersey American Water – AWM Country Oaks System is a public community water system consisting of 2 wells.

Protecting Your Water Source

What is S.W.A.P.

SWAP (Source Water Assessment Program) 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 — AWM Country Oaks

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

Contaminant Categories

DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of the Source Water Assessment Program, 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, DEP 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 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.

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.

AWM Country Oaks

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radionuclides			Radon			Disinfection By-Product Precursors		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells - 2			2			2			2			2			2			2	2				2	
GUDI - 0																								
Surface Water Intakes - 0																								

Our Water Research Efforts

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. Researchers with American Water have developed a new, more accurate test for *Cryptosporidium* in water. For additional information regarding cryptosporidiosis and how it may impact those with weakened immune systems, please contact our customer service center at 1-800-272-1325 or speak with your personal health care provider.

Lead Education Statement

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. 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.

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.

During 2015 testing, radon was detected at 461 pCi/L in the drinking water for the AWM Country Oaks System. 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.

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 **Range Detected** shows the highest and lowest test results for the year. The column marked **Highest Level Detected** shows the highest test results during the year. **Typical Source** shows where this substance usually originates. Compare the Range 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% 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.

NA: Not applicable

ND (None 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

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 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. 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).

AWM Country Oaks System - PWS ID#NJ1427016

Table of Detected Contaminants - 2017

Towns Served By This System: Mt. Olive (Country Oaks)

Those substances not listed in this table were not found in the treated water supply.

Contaminant	Unit	MCL	MCLG	Range Detected	Highest Detected Level	Compliance Achieved	Typical Source
Disinfectant By-products							
Total Trihalomethanes (TTHM)	ppb	80	NA	NA	3.3 [1]	YES	By-product of drinking water disinfection
Total Haloacetic Acids (HAA5)	ppb	60	NA	NA	ND [1]	YES	By-product of drinking water disinfection
Inorganic Contaminants							
Nitrate	ppm	10	10	NA	3.2	YES	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Disinfectants							
Chlorine	ppm	MRDL = 4.0	MRDLG = 4.0	0.4 - 0.7	1.0 [2]	YES	Water additive used to control microbes
Radiological Contaminants							
Alpha Emitters [3]	pCi/L	15	0	NA	3.8	YES	Erosion of natural deposits
Lead and Copper	**Unit**	**Action Level**	**MCLG**	**Amount Detected (90th Percentile)**	**Compliance Achieved**	**Number of samples above action level**	**Typical Source**
Lead	ppb	15	0	1	YES	0	Corrosion of household plumbing systems
Copper	ppm	1.3	1.3	0.439	YES	0	Corrosion of household plumbing systems; Erosion of natural deposits

[1] Highest Detected Level is the maximum running annual average.
[2] Highest Detected Level is the maximum monthly average detected at the point of entry. Range indicates the values detected in the distribution system.
[3] The state of New Jersey allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Some of our data, though representative, is more than one year old.

NJDEP Water Conservation Message…Because Remember, Every Drop Counts