SHORELANDS WATER COMPANY
PWS ID #NJ1339001
Annual Drinking Water Quality Report
For the Year 2016
June 2017

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

Shorelands obtains its water supply from both surface and groundwater sources. Groundwater sources are primarily utilized during the months of May through September, which consist of wells located in the Old Bridge and Farrington aquifers. Shorelands also obtains treated surface water from New Jersey American Water Company the majority of which is utilized during the winter months. These sources are blended within the Shorelands Water Company distribution system. Since Shorelands receives a portion of its water supply from NJAW we have included information from NJAW on our Consumer Confidence Report.

This report gives you the consumer, the knowledge of our water quality and what it means.

Please note: Where a date follows a set of results, this indicates the most recent testing done in accordance with Federal and State regulations. **The State allows us to monitor for some contaminants less than once per year because the concentration of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.**

Shorelands Water Company Old Bridge & Farrington Aquifer Groundwater Supply
PWS ID #NJ1339001

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Table 1

Contaminant	Year	Units	MCL	MCLG	Range detected	Highest level detected	Violation	Possible Source
Treatment Byproducts Stage 2								
Total Trihalomethane (TTHM) Stage 2 Site # 5	2016	ppb	80	N/A	8.41 to 38.70	29.74_1	No	By-product of drinking water disinfection
Total Trihalomethane (TTHM) Stage 2 Site # 6	2016	ppb	80	N/A	1.25 to 29.79	14.64_1	No	By-product of drinking water disinfection
Total Trihalomethane (TTHM) Stage 2 Site # 8	2016	ppb	80	N/A	4.43 to 39.30	31.95_1	No	By-product of drinking water disinfection
Total Trihalomethane (TTHM) Stage 2 Site # 11	2016	ppb	80	N/A	26.00 to 75.84	51.41_1	No	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5) Stage 2 Site # 5	2016	ppb	60	N/A	2.20 to 39.34	22.07_1	No	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5) Stage 2 Site # 6	2016	ppb	60	N/A	2.07 to 25.57	15.70_1	No	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5) Stage 2 Site # 8	2016	ppb	60	N/A	5.05 to 35.13	23.75_1	No	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5) Stage 2 Site # 11	2016	ppb	60	N/A	14.88 to 35.14	22.97_1	No	By-product of drinking water disinfection

Inorganic Chemicals								
Fluoride	2016	ppm	4	4	N/D to 0.96	0.96	No	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate	2016	ppm	10	10	N/D to 0.66	0.66	No	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Chlorine/Chloramines Mixed	2016	ppm	MRDL=4	MRDL=4	0.22 to 2.22	1.09_2	No	Water additive used to control microbes
Tap water samples were collected for lead and copper analysis from homes in the service area								
Contaminant	**Year**	**Units**	**Action Level**	**MCLG**	**Amount Detected (90th%tile)**	**Highest level detected**	**Violation**	**Typical Source**
Copper	2016	ppm	1.3	1.3	0.067	0.094_3	No	Corrosion of household plumbing systems
Lead	2016	ppb	15	0	$<0.50_5$	1.20_4	No	Corrosion of household plumbing systems
(UCMR-3) Unregulated Contaminant								
Unregulated Contaminant Monitoring	**Year**	**Units**	**Range detected**	**Highest level detected**	**Use or Environmental Source**			
Strontium	2015	ppb	28-100	100_6	Naturally occurring element; commercial use of strontium has been in the faceplate of glass cathode-ray tube televisions to block x-ray emissions.			
Hexavalent Chromium	2015	ppb	0.03-0.12	0.12_6	Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation			
Chlorate	2015	ppb	ND-800	800_6	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide.			
Chromium	2015	ppb	ND-0.40	0.40_6	Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation			

FOOTNOTES:

1. Compliance with the MCL is based on the Locational Running Annual Average 4 quarters.
2. Calculated based on Chlorine/Chloramines Running Annual Average 4 quarters.
3. Compliance with the MCL is based on the results reported as the 90th percentile of samples taken. None of the sample sites exceeded the action level of 1.3 ppm.
4. Compliance with the MCL is based on the results reported as the 90th percentile of samples taken. None of the sample sites exceeded the action level of 15 ppb.
5. "<" (less than) means the contaminant cannot be accurately detected below the limit specified; the result can be considered zero.
6. Unregulated contaminants are those for which USEPA 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. EPA required us to participate in this monitoring.

Shorelands Water Company Old Bridge & Farrington Aquifer Groundwater Supply
PWS ID #NJ1339001

Table 2

Secondary Contaminants:

Contaminant	Year Sampled	(RUL) Units	Amount Detected
Sodium	2016	50 ppm	ND to 51.7
Iron	2016	0.3 ppm	ND to 0.130
Hardness	2016	250ppm	ND to 62.9
Chloride	2016	250 ppm	10.6 to 103.0

FOR SODIUM: 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.

New Jersey American Water Co - Monmouth System PWS ID# NJ1345001
Table of Detected Contaminants - 2016

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

Regulated Substances

Contaminant	Units	MCL	MCLG	Range Detected	Highest Level Detected	Violation	Typical Source
Inorganic Chemicals							
Fluoride	ppm	4	4	0.5 to 0.67	0.67	No	Erosion of natural deposits
Nitrate	ppm	10	10	0.07 to 0.31	0.31	No	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits
Turbidity							
Turbidity[2]	ntu	TT	NA	0.01 to 0.22	0.22	No	Soil runoff
Treatment Byproducts Precursor Removal							
Total Organic Carbon	ppm	TT	NA	1.20 to 2.62	2.62	No	Naturally present in the environment
Disinfectants							
Chloramines	ppm	MRDL = 4	MRDLG = 4	0.06 to 2.98	1.23 [3]	No	Water additive used to control microbes
Organic							
Carbon Tetrachloride	ppb	5	0	ND to 0.07	0.07	No	Discharge from chemical plants and other industrial activities

FOOTNOTES- New Jersey American Water Co.

1. Under a Waiver granted by the State of New Jersey Department of Environmental Protection, our system does not have to monitor for synthetic organic chemicals/pesticides because several years of testing have indicated that these substances do not occur in our source water. The SDWA regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for volatile organic chemicals and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals.
2. Turbidity is a measure of the cloudiness of the water. 100% of the turbidity readings were below the treatment technique requirement of 0.3 ntu. We monitor it because it is a good indicator of the effectiveness of our filtration system.
3. Calculated based on Chloramines Running Annual Average 4 quarters.

Definitions:

Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
ICR - Information Collection Rule.
Maximum Contaminant Level - The "Maximum Allowed" (MCL) 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.
Maximum Contaminant Level Goal -The "Goal"(MCLG) 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.
Maximum Residual Disinfectant Level – (MRDL) The highest level of a 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 contamination.
Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Non-Detects (N/D) - Laboratory analysis indicates that the constituent is not present.
Not Applicable (N/A) – Does not apply.
Parts per billion (ppb) or Micrograms per liter (ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Parts per million (ppm) or Milligrams per liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in $10,000.
Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.
Recommended Upper Limit (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RUL's are recommendations, not mandates.
Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

The Shorelands Water Company routinely monitors for contaminants in your drinking water according to Federal and State laws. The above tables show the results of our monitoring as well as monitoring performed by the New Jersey American Water Company for the period of January 1st to December 31st, 2016.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas projection, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally – occurring or be the result of oil and gas production and mining activities.

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

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 the 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 at 1-800-426-4791.

Waivers:
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 waivers for synthetic organic chemicals.

Special considerations regarding children, pregnant women, nursing mothers, and others:
Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

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. Shorelands Water Company 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 is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead

New Jersey American Water Company constantly monitors its water supply for various contaminants. They have reported to us at Shorelands Water Company that they have detected cryptosporidium, giardia and viruses in their source water. They detected cryptosporidium in the range of 0 to 397 organisms out of 100 liters tested, giardia in the range of 0 to 303 organisms out of 100 liters tested and viruses in the range of 0 to 1.02 organisms out of 100 liters tested. However, they did not detect these constituents in any of their finished water samples tested. We believe it is important for you to know that cryptosporidium may cause serious illness in 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. These people should seek advice from their health care providers.

Source Water Assessments
The New Jersey Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for all public water systems, which is available at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. We have a low-medium susceptibility rating on all our sources. You can obtain a copy on our web site www.shorelandswater.com or you may also contact Shorelands Water Company at (732) 264-5510.

We at Shorelands Water Company work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office at 732-264-5510 if you have questions or comments. There are no regularly scheduled open meetings for public participation so your calls are valuable to help Shorelands Water Co to provide quality water.