SPRING LAKE HEIGHTS WATER UTILITY **PWS ID: #NJ1349001**

2015 Drinking Water Quality Report

RESULTS FROM THE YEAR 2014

This report provides you with information about the water delivered to you by the Spring Lake Heights Water Utility. Most of our water is received from the Manasquan Water Treatment Plant owned by the Southeast Monmouth Municipal Utilities Authority and operated by the New Jersey Water Supply Authority. This water is taken from the Manasquan River in Wall Township and the Manasquan Reservoir in Howell Township. Additional water is provided by three wells located in the Borough which are between 400 and 500 feet deep and draw water from the Mount Laurel and Englishtown aquifers. The report prepared for the Manasquan Water Supply System is included.

We are proud to report that your drinking water meets all federal and state safety requirements.

The New Jersey Department of Environmental Protection (NJDEP) has issued Source Water Assessment Reports and Summaries for public water systems which are available online at **www.state.nj.us/dep/swap** or by contacting the NJDEP Bureau of Safe Drinking Water at (609) 292-5550. The report and summary is also available on the Spring Lake Heights website (www.SpringLakeHts.com). Source water susceptibility ratings and a list of potential contaminant sources are included in this report.

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 at (800) 426-4791.

The Spring Lake Heights Water Utility routinely monitors for contaminants in your drinking water as required by federal and state laws. The following table summarizes the results of monitoring for the January 1 - December 31, 2014 calendar year. Some contaminants are monitored less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative, is more than one year old**.**

Spring Lake Heights Water Utility Test Results – 2014 **PWS ID #NJ1349001**

Contaminant	Violation	Level Detected	Units of Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants:						
Gross Alpha Test Results Year: 2012	No	1.8	pCi/1	0	15	Erosion of natural deposits
Combined Radium 228 & 226 Test Results Year: 2012	No	2.3	pCi/1	0	N/A	Erosion of natural deposits
Inorganic Contaminants:						
Copper Test results Year: 2013 Result at 90th Percentile	No	0.1 No samples exceeded the action level.	Ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Test Results Year: 2013 Result at 90th Percentile	No	2 No samples exceeded the action level.	Ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) Test Results Year: 2014	No	0.3	Ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Disinfection Byproducts						
TTHM Total Trihalomethanes Test Results Year: 2014	No	Range = 14 - 48 Highest LRAA = 31	Ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test Results Year: 2014	No	Range = 17 - 74 Highest LRAA = 37	Ppb	N/A	60	By-product of drinking water disinfection
Regulated Disinfectants		**Level Detected**		**MRDL**		**MRDLG**
Chlorine		Average = 1.0 ppm		4.0 ppm		4.0 ppm

HAA5 and TTHM compliance is based on a Locational Running Annual Average (LRAA) calculated at each monitoring location. The LRAA calculation is based on four completed quarters of monitoring results.

DEFINITIONS - The above table includes many terms and abbreviations which may not be familiar to you. To help you better understand these terms the following definitions are provided:

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

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 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) - is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

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.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Picocuries per liter (pCi/L) - 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.

Secondary Contaminant - Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Total Organic Carbon (TOC) - We are required to remove a certain percentage of (TOC) from our drinking water on a monthly basis. Total Organic Carbon has no adverse health effects. However, TOC provides a medium for the formation of disinfection byproducts.

Turbidity - is a measure of the particulate matter or "cloudiness" of the water. High turbidity can hinder the effectiveness of disinfectants.

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 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 production, 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, Environmental Protection Agency (EPA) regulations 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 EPA Safe Drinking Water Hotline at (800) 426-4791.

SPECIAL HEALTH CONCERNS

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.

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.

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. The Spring Lake Heights Water Utility 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 **www.epa.gov/safewater/lead**.

Cryptosporidium: Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Cryptosporidium is usually removed through the filtration process and inactivated by other treatment processes such as ozonation. In order to check for the presence of Cryptosporidium, the USEPA issued the Long Term Enhanced Surface Water Treatment Rule in January 2006. As part of this rule sampling and testing for Cryptosporidium began in April 2008 and continued through its completion in March 2010. The sample results did not show any presence of Cryptosporidium.

If you have any questions about this Water Quality Report or the water testing performed by the Borough, please contact Licensed Operator Kevin Gerrity at 732-449-6849 or via email: utilities@SpringLakeHts.com.

The Spring Lake Heights Water Utility is operated by the Borough of Spring Lake Heights. Public meetings of the Mayor and Borough Council are held on the 2nd and 4th Mondays of each month beginning at 8:00 p.m. in the Municipal Building located at 555 Brighton Avenue.

Borough of Spring Lake Heights - PWSID #1349001

Borough of Spring Lake Heights is a public community water system consisting of 3 wells (1 inactive), 0 wells under the influence of surface water, 0 surface water intake(s), 0 purchased ground water source(s), and 1 purchased surface water source(s).

This system's source water comes from the following aquifer(s) and/or surface water body(s):

Englishtown aquifer system and the Mount Laurel-Wenonah aquifer

This system purchases water from the following water systems:

New Jersey Water Supply Authority / Manasquan Water Supply System

Inter-connections to the Wall Township and Spring Lake Borough water systems is also available for emergency supply if needed.

Susceptibility Ratings for Borough of Spring Lake Heights Sources

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.

The seven contaminant categories are defined at the bottom of this page. NJDEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category, For the purpose of 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 they all received a low rating.

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, NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct 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 - 3			3			3			3			3		2	1			3		1	2		3	
GUDI - 0																								
Surface water intakes - 0																								

- **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.ni.govldeplrpp/radonlindex.htm or call (800) 648-0394.
- **Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.

2015 WATER QUALITY REPORT

MANASQUAN WATER SUPPLY SYSTEM

PWSID 1352005

A division of the New Jersey Water Supply Authority, serving the customer communities of BRIELLE, SEA GIRT, SPRING LAKE, SPRING LAKE HEIGHTS and WALL TOWNSHIP.

The Manasquan Water Treatment Plant, located on Hospital Road in the Allenwood section of Wall Township, is owned by the Southeast Monmouth Municipal Utilities Authority and is operated by the New Jersey Water Supply Authority. The Manasquan Water Treatment Plant provides an average of 60% of the water used by the residents of the above customer communities. Raw water for this facility is taken from the MANASQUAN RIVER in Wall Township and the MANASQUAN RESERVOIR in Howell Township. The Manasquan Water Supply System also provides raw water to New Jersey American Water, for treatment and distribution to other communities in Monmouth and Ocean Counties.

The water produced by the Manasquan Water Treatment Plant is monitored for a large number of contaminants. The contaminants, which have been detected in monitoring from January 1st through December 31st, 2014, are listed in the **TEST RESULTS** table below.

For the complete monitoring schedule or for further information about this report, you can contact Operations Supervisor Donald LeRoy or System Manager Paul McKeon at the Manasquan Water Supply System. Telephone: 732-974-8383; Fax: 732-974-8607 or email: dleroy@njwsa.org or pmckeon@njwsa.org.

This report is available at http://www.njwsa.org/mwssccr.pdf

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 contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

TEST RESULTS TABLE

CONTAMINANT	HIGHEST LEVEL DETECTED	RANGE DETECTED	UNIT OF MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	VIOLATION
MICROBIOLOGICAL CONTAMINANTS							
TOTAL COLIFORM BACTERIA	0	0	%	0	5% OF SAMPLES POSITIVE	NATURALLY PRESENT IN THE ENVIRONMENT	NO
TOTAL ORGANIC CARBON (TOC)	ANNUAL AVERAGE REMOVAL 51	MONTHLY SAMPLES	%	N/A	TT AVERAGE RAW WATER TOC 35% TO 50% REQUIRED REMOVAL MINIMUM BASED ON RUNNING ANNUAL AVERAGE	NATURALLY PRESENT IN THE ENVIRONMENT	NO
	MINIMUM REMOVAL 38.5	38.5 – 73.1	%	N/A			
TURBIDITY FILTERED WATER	0.19	0.03 - 0.19	NTU	N/A	> 1 NTU	SOIL RUNOFF	NO
	99.95% of samples were <0.3NTU	0.03 - 0.19	%	N/A	TT = 95 % OF MONTHLY SAMPLES < 0.3 NTU	SOIL RUNOFF	NO

TEST RESULTS TABLE							
CONTAMINANT	**HIGHEST LEVEL DETECTED**	**RANGE DETECTED**	**UNIT OF MEASUREMENT**	**MCLG**	**MCL**	**LIKELY SOURCE OF CONTAMINATION**	**VIOLATION**
RADIOACTIVE CONTAMINANTS (RESULTS BASED ON DATA FROM 2011)							
GROSS ALPHA EMITTERS	0.96	048 – 1.25	pCi/L	0	15	EROSION OF NATURAL DEPOSITS	NO
RADIUM 228	<1	ND – 0.18	pCi/L	0	5	EROSION OF NATURAL DEPOSITS	NO
INORGANIC CONTAMINANTS							
BARIUM	0.026	0.026	PPM	2	2	EROSION OF NATURAL DEPOSITS	NO
FLUORIDE	0.15	0.15	PPM	4	4		
INORGANIC CONTAMINANTS							
NITRATE	0.447	0.447	Mg/l	10	10	RUNOFF FROM FERTILIZER USE; INDUSTRIAL AND DOMESTIC WASTE WATER DISCHARGES; EROSION OF NATURAL DEPOSITS	NO
ASBESTOS	<0.09	<0.09	MFL		$7x10^6$ fibers/l >10 um	EROSION OF NATURAL DEPOSITS	NO
DISINFECTANT/DISINFECTANT BY-PRODUCTS (BASED ON A RUNNING ANNUAL AVERAGE IN THE DISTRIBUTION SYSTEM)							
CHLORINE	1.30	0.90 – 1.56	PPM	4 MRDL GOAL	**4** MRDL	WATER ADDITIVE USED TO CONTROL MICROBES	NO
TTHM (TOTAL TRIHALOMETHANES)	HIGHEST AVG. 13.1	<0.5 – 22.3	PPB	N/A	ANNUAL SITE SAMPLING 80	BY-PRODUCTS OF DRINKING WATER CHLORINATION	NO
HAA5 (HALOCETIC ACIDS)	HIGHEST AVG. 7.2	<1.0 – 2.5	PPB	N/A	ANNUAL SITE SAMPLING 60	BY-PRODUCT OF DRINKING WATER CHLORINATION	NO

MONITORING 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. The NJDEP conducted monitoring of synthetic organic chemicals (SOC) during 2012 that included sampling during storm conditions at our surface water intake. Based on these results, a waiver for the 2011 - 2014 period was received.

SECONDARY CONTAMINANTS / WATER QUALITY PARAMETERS				
CONTAMINANT OR PARAMETER	**AVERAGE LEVEL DETECTED**	**UNIT OF MEASUREMENT**	**MCL (RUL)**	**LIKELY SOURCE OF CONTAMINATION**
IRON	<0.050	Mg/L	0.3	EROSION OF NATURAL DEPOSITS;
MANGANESE	0.020	Mg/L	0.05	EROSION OF NATURAL DEPOSITS;
HARDNESS	42.0	Mg/L	50 – 250	N/A
SODIUM	23	Mg/L	50	EROSION OF NATURAL DEPOSITS; ROADWAY ICE AND SNOW CONTROL
ZINC	0.15	Mg/L	5.0	CORROSION CONTROL ADDITIVE USED IN WATER TREATMENT ZINC - ORTHOPHOSPHATE
COPPER	0.001	Mg/L	1.3	EROSION OF NATURAL DEPOSITS;
ALUMINUM	<0.010	Mg/L	0.5	BASE ELEMENT OF ADDITIVE USED IN WATER TREATMENT;

Additional Inorganic Contaminates that could be the product or erosion or natural deposits:

Analysis	Result	Units	MCL
Antimony	<0.0004	mg/l	0.006
Arsenic	<0.0005	mg/l	0.005
Barium	0.026	mg/l	2.0
Beryllium	<0.0003	mg/l	0.004
Cadmium	<0.0005	mg/l	0.005
Chromium	<0.0005	mg/l	0.1
Cyanide	<0.0200	mg/l	0.2
Mercury	<0.0002	mg/l	0.002
Nickel	<0.002	mg/l	0.1
Selenium	<0.0025	mg/l	0.05
Sulfate	20	mg/l	250
Thallium	<0.0003	mg/l	0.002

The tables above provide information that is useful for certain home and industrial applications. Information on the hardness of water in “grains per gallon” can improve the function of dishwashers, cooling equipment, and other process applications. To convert the hardness value into grains per gallon, divide the hardness value shown in the table in milligrams per liter by 17.

The following is the Volatile Organic Compounds results required for the three year cycle of 2014 through 2016. These tests are from year 2014. There were no violations as a result of any of the chemical parameters exceeding an MCL.

Analysis	Result	Units	MCL
Dichlorodifluoromethane	<0.5	ug/l	
Chloromethane	<0.5	ug/l	
Vinyl Chloride	<0.5	ug/l	2
Bromomethane	<0.5	ug/l	
Chloroethane	<0.5	ug/l	
Trichlorofluoromethane	<0.5	ug/l	
1,1- Dichloroethylene	<0.5	ug/l	2
Methylene Chloride	<0.5	ug/l	3
Methyl tert-Butyl Ether	<0.5	ug/l	70
t-1, 2- Dichloroethylene	<0.5	ug/l	100
Isopropyl Ether	<0.5	ug/l	
1,1-Dichloropropane	<0.5	ug/l	50
2,2-Dichloropropane	<0.5	ug/l	
cis-1,2-Dichloroethylene	<0.5	ug/l	70
Chloroform	1.6	ug/l	
Bromochloromethane	<0.5	ug/l	
1,1,1-Trichloroethane	<0.5	ug/l	30
1,1-Dichloropropylene	<0.5	ug/l	
Carbon Tetrachloride	<0.5	ug/l	2
Benzene	<0.5	ug/l	1
1,2-Dichloroethane	<0.5	ug/l	2
Trichlorethylene	<0.5	ugl	1
1,2 Dichloropropane	<0.5	ug/l	5
Bromodichloromethane	2.5	ug/l	
Dibromomethane	<0.5	ug/l	
Toluene	<0.5	ug/l	1000
1,1,2-Trichloroethane	<0.5	ug/l	3
Tetrachloroethylene	<0.5	ug/l	1
1,3-Dichloropropane	<0.5	ug/l	
Dibromochloromethane	2.7	ug/l	
1,2- Dibromoethane	<0.5	ug/l	
Chlorobenzene	<0.5	ug/l	50
Ethylbenzene	<0.5	ug/l	700
1,1,1,2-Tetrachloroethane	<0.5	ug/l	
o-Xylene	<0.5	ug/l	1000
m&p-Xylene	<0.5	ug/l	1000
Xylenes, Total	<0.5	ug/l	1000
Styrene	<0.5	ug/l	100
Isopropyl Benzene	<0.5	ug/l	
Bromoform	<0.5	ug/l	
1,1,2,2-Tetrachloroethane	<0.5	ug/l	1
1,2,3-Trichloropropane	<0.5	ug/l	
n-Propyl Benzene	<0.5	ug/l	
Bromobenzene	<0.5	ug/l	

Analysis	Result	Units	MCL
1,3,5-Trimethyl Benezene	<0.5	ug/l	
2-Chlorotoluene	<0.5	ug/l	
4-Chlorotoluene	<0.5	ug/l	
tert-Butylbenzene	<0.5	ug/l	
1,2,4-Trimethylbenzene	<0.5	ug/l	
sec-Butylbenzene	<0.5	ug/l	
p-Isoprpyltoluene	<0.5	ug/l	
1,3-Dichlorobenzene	<0.5	ug/l	600
1,4-Dichlorobenzene	<0.5	ug/l	75
n-Butylbenzene	<0.5	ug/l	
1,2-Dichlorobenzene	<0.5	ug/l	600
1,2-Dibromo-3-chloropropane	<0.5	ug/l	
1,2,4-Trichlorobenzene	<0.5	ug/l	9
Hexachlorobutadiene	<0.5	ug/l	
Napthanlene	<0.5	ug/l	300
1,2,3-Trichlorobenzene	<0.5	ug/l	
cis-1,3-Dichloroproprylene	<0.5	ug/l	
trans-1,3-Dichloroprylene	<0.5	ug/l	
Tert-Butyl-Alcohol	<10.0	ug/l	

Other Parameters which were analyzed for in 2014:

PARAMETERS	RESULTS	UNITS
Bromate	ND	ug/L
Hexavalent Chromium	0.12	ug/L
Chromium Total	0.13	ug/L
Cobalt, Total	ND	ug/L
Molybdenum, Total	ND	ug/L
Strontium, Total	74.4	ug/L
Vanadium, Total	ND	ug/L
Bromochloromethane	ND	ug/L
Bromomethane	ND	ug/L
1,3-Butadiene	ND	ug/L
Chlorodifluoromethane	ND	ug/L
Chloromethane	ND	ug/L
1,1-Dicloroethane	ND	ug/L
1,2,3-Trichloropropane	ND	ug/L
1,4-Dixoane	0.18	ug/L
Bromate	ND	ug/L
Hezavalent Chromium	0.10	ug/L
Perfluorobutanesulfonic Acid	ND	ug/L
Perfluoroheptanoic Acid	ND	ug/L
Perfluorohexanesulfonic Acid	ND	ug/L
Perfluorononanoic Acid	ND	ug/L
Perfuloocatanesulfonic Acid	ND	ug/L
Perfluorooctanoic Acid	ND	ug/L

DEFINITIONS

In the preceding **Test Results** table you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not detectable above the minimum detection level for that analysis method.

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.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

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.

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

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

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.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant 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 contaminants.

Total Organic Carbon - Total Organic Carbon has no health effects. However, total organic carbon provides a medium for the formation of *Disinfection By-products*. The *Treatment Technique* for total organic carbon requires that 35% to 45% of the total organic carbon in the raw water is removed through the treatment processes.

Turbidity - Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity is measured as an indication of the effectiveness of the filtration process. The *Treatment Technique* for turbidity requires that no individual sample exceeds 1 *NTU* and 95% of the samples collected during a month must be less than 0.3 NTU.

TTHM - Total Trihalomethanes are carcinogenic compounds created when Chlorine is added to water as a disinfectant. The *MCL* for TTHM's requires that the average of four quarterly samples at any individual sampling location does not exceed 80 *parts per billion.*

Secondary Contaminant - Substances that do not have an impact on health. Secondary Contaminants affect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Recommended Upper Limit (RUL) – Recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as odor, taste or appearance. RULs are recommendations, not mandates.

Disinfection By-products - These compounds are by-products of the addition of chlorine or ozone employed in the disinfection of drinking water. These compounds are confirmed or suspected carcinogens for which *MCLs* have been set.

HAA5 - Haloacetic Acids are compounds created when Chlorine is added to water as a disinfectant. The MCL for HAA5's requires that the average of four quarterly samples at any individual sampling location does not exceed 60 *parts per billion*.

Monitoring Waiver - Permission from NJDEP or EPA to reduce or eliminate sampling for specific contaminants.

SPECIAL HEALTH CONCERNS

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.

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.

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 Water Supply Authority – Manasquan Water Treatment Plant 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.

Please note that the New Jersey Water Supply Authority is not responsible for lead testing within the customer communities. Consult the Consumer Confidence Report of your community water system for lead results.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Cryptosporidium is usually removed through the filtration process and inactivated by other treatment processes such as ozonation. In order to check for the presence of Cryptosporidium, USEPA issued the Long Term 2 Enhanced Surfaced Water Treatment Rule in January 2006. As part of this rule, the Manasquan System began monthly sampling and testing for Cryptosporidium in April 2008 and this testing continued through its completion in March 2010. The sample results did not show any presence of Cryptosporidium.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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.

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 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 stormwater run-off, 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

run-off and residential uses.

- Organic chemical contaminants, 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 run-off 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, the EPA prescribes regulations (MCL's) which limit the amounts of certain contaminants in water provided by public water systems. Further information about EPA safe drinking water regulations can be obtained over the Internet at EPA's drinking water website, http://www.epa.gov/safewater. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

The New Jersey Department of Environmental Protection (NJDEP) has completed Source Water Assessment Reports and Summaries for all the public water systems in New Jersey. A summary of the report for NJWSA/Manasquan is included below. A complete copy of the Source Water Assessment Report with appendices and a four-page summary are available on-line at the NJWSA website: http://www.njwsa.org/mwssrpt.pdf.

Further information on the Source Water Assessment Program can be obtained by logging onto NJDEP's source water web site at http://www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at 609-292-5550. You may also contact the Manasquan Water Supply System at 732-974-8383.

The New Jersey Department of Environmental Protection issues an individual Public Water System Identification Number (PWSID) to each water supply facility. The PWSID for the NJWSA/Manasquan Water Treatment Plant is **1352005.** You can use this PWSID number to assist you in obtaining local drinking water quality information on the Internet at the USEPA website at http://www.epa.gov/safewater/dwinfo/nj.htm or at the NJDEP Bureau of Safe Drinking Water website at http://www.state.nj.us/dep/watersupply/waterwatch/

Interested individuals may participate in discussions of the operation of the Manasquan Water Supply System by attending the regular monthly meetings of the New Jersey Water Supply Authority or Southeast Monmouth Municipal Utilities Authority.

- New Jersey Water Supply Authority: first working Monday of each month at the NJWSA headquarters, 1851 Route 31, Clinton, NJ 08809. Call 1-908-638-6121 for details. Information on the New Jersey Water Supply Authority can also be obtained over the Internet at http://www.njwsa.org.
- Southeast Monmouth Municipal Utilities Authority: first Thursday of each month in the Main Meeting Room, First Floor, Wall Township Municipal Complex, 2700 Allaire Road, Wall, NJ 07719. Call 1-732-449-8444 for specific meeting dates and times or e-mail ph805@optonline.net.

NJ Water Supply Authority - Manasquan System- PWSID # 1352005

NJ Water Supply Authority - Manasquan System is a public community water system consisting of 0 well(s), 0 wells under the influence of surface water, 2 surface water intake(s), 0 purchased ground water source(s), and 0 purchased surface water source(s).

This system's source water comes from the following aquifer(s) and/or surface water body(s): Manasquan Reservoir, Manasquan River

This system purchases water from the following water system(s) (if applicable):

Susceptibility Ratings for NJ Water Supply Authority - Manasquan System Sources

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.

The seven contaminant categories are defined at the bottom of this page. DEP considered all surface water highly susceptible to pathogens, therefore all intakes received a high rating for the pathogen category. For the purpose of 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 they all received a low rating.

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.

	Pathogens			Nutrients			Pesticides			Volatile Organic Compounds			Inorganics			Radio-nuclides			Radon			Disinfection Byproduct 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 - 0																								
GUDI - 0																								
Surface water intakes - 2	2				2			2			2			2				2			2	2		

- **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 Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.