

PWS 1915001
Annual Drinking Water Quality Report
Town of Newton Water Utility
For the year 2015

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 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 to protect our water resources. We are committed to ensuring the quality of your water.

WATER SYSTEM DESCRIPTION - PWS 1915001

Newton's water source is Morris Lake located in Sparta Township on top of Sparta Mountain. The NJ Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at 609-292-5550.

NEED ADDITIONAL INFORMATION?

This report shows our water quality and what it means. We want our valued customers to be informed about their water utility. If you have any questions about this report or concerning your water utility, please contact Thomas S. Russo, Jr., Town Manager at 973-383-3521 ext. 224. If you want to learn more, please attend any regularly scheduled Town Council meeting held at the Municipal Building, 39 Trinity Street, at 7:00pm on the second and fourth Monday of each month.

MONITORING PROGRAM AND RESULTS

The Newton Water Utility routinely monitors for constituents in your drinking water according to Federal and State laws. The enclosed table shows the results of the monitoring for the period of January 1 to December 31, 2015. All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. 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, or contact the web site at www.epa.gov/safewater. In order to ensure that tap water is safe to drink, the 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 contamination in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer who are 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 reduce the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

As you may know, the Town of Newton developed a two-phase approach for implementing improvements to the water supply system. Phase I involved the High Street Reservoir which was completed and has been integrated into Newton's water supply system. The second phase involved the construction of a water membrane filtration plant for the water supply at Morris Lake which was completed and has been integrated into Newton's water supply system.

Susceptibility Ratings for Newton Water & Sewer Utility 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 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) monitory schedules based on the susceptibility ratings.

Sources	<u>Pathogens</u>			<u>Nutrients</u>			<u>Pesticides</u>			<u>Volatile Organic Compounds</u>			<u>Inorganics</u>			<u>Radio-nuclides</u>			<u>Radon</u>			<u>Disinfection Byproduct Precursors</u>					
	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-1	1			1						1			1				1			1		1					
Surface water intakes-1																											

Special consideration regarding children, pregnant women, nursing mothers and others.

Children may receive a slightly higher amount of a contaminant present in water than do adults, based on body weight, because children may drink a greater amount of water per pound of body weight than do adults. Therefore, reproductive or developmental effects are used to calculate drinking water standards 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 such effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

The Newton Water Utility works hard to provide top quality water for every customer. In turn, we ask you, our customers, to protect our water resources.

Please call our office if you have questions at 973-383-2090.

DEFINITIONS

In the following table you will find term and abbreviations that might not be familiar. To help you better understand these terms, we've provided the following definitions:

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 two thousand years, or a single penny in \$10,000,000.

Action level – the concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.

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

Maximum Contaminant Level - The “maximum allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for 70 years to have a one-in-a million chance of having the described health effect. 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.

Secondary Maximum Contaminant Level – (SMCL) Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as odor, taste or appearance. Secondary standards are recommendations, not mandates.

Picocuries per liter – picocuries per liter is a measure of the radioactivity in water.

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 Goal (MRDLG) – 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.

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 received monitoring waivers for all these types of contaminants.

As you can see from the attached table, the Newton PWS 1915001 system had no violations. We have learned through monitoring and testing that some constituents have been detected, but the EPA has determined that your water IS SAFE at these levels.

****Haloacetic Acids: MCL=60 ppb**

1 st Quarter	Avg. 35.8 ppb	Range 28.9 – 42.6 ppb
2 nd Quarter	Avg. 50.6 ppb	Range 46.3 – 54.9 ppb
3 rd Quarter	Avg. 41.4 ppb	Range 31.6 -- 51.2 ppb
4 th Quarter	Avg. 42.9 ppb	Range 40.0 -- 45.7 ppb
YEARLY RUNNING AVERAGE – 45.0 ppb		

****Total Trihalomethanes: MCL=80 ppb**

1 st Quarter	Avg. 34.5 ppb	Range 27.5 – 41.4 ppb
2 nd Quarter	Avg. 53.4 ppb	Range 38.0 – 68.8 ppb
3 rd Quarter	Avg. 59.9 ppb	Range 53.0 – 66.9 ppb
4 th Quarter	Avg. 51.0 ppb	Range 44.0 – 57.0 ppb
YEARLY RUNNING AVERAGE – 51.0 ppb		

****Both are a byproduct of drinking water disinfection**

Gross Alpha, Combined Radium & Uranium

Result above detection limit but below half the maximum contaminant level (MCL). Sampling for radionuclides is due next in 2018.

<u>Sample Location</u>	<u>Sample Date</u>	<u>Gross Alpha (pCi/L)</u>	<u>Radium-226/228 (PCi/L)</u>	<u>Uranium (mg/L)</u>
TP001002	11-04-2014	<3	1.5	0.002

Inorganic Contaminants:

<u>Contaminant Source</u>	<u>Violation Y/N</u>	<u>Level Detected</u>	<u>Units of Measurement</u>	<u>MC LG</u>	<u>MCL AL</u>	<u>Likely</u>
Copper	No	0.12	ppm	1.3	AL=1.3	Corrosion of House-hold Plumbing systems; erosion of natural deposits.
SAMPLED 2015						
Fluoride	No	0.21	ppm	4.0	4.0	Fluoride is Added to the water to promote strong teeth. Other possible sources include erosion of natural deposits; discharge from fertilizer and aluminum factories.

Lead**	No	0.003	0 AL=.015 mg/L	Corrosion of household plumbing systems, erosion of natural deposits.
SAMPLED 2015				
Nitrate (as Nitrogen)	No	Average=<0.05	ppm	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.

The Town of Newton Water Utility did not have any e.coli positive water results. Also, no significant deficiencies, treatment technique violations and monitoring violations were cited by NJDEP Enforcement for 2015.

“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 Town of Newton 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 and/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.html>”