

Waldwick Water Department 19 Industrial Park Waldwick, NJ 07463

Neil H. Moses Water Department Supervisor PWSID # NJ0264001

Consumer Confidence Report 2016

(Testing Results are from 2015)

OVERVIEW

We are pleased to present to you with this year's Annual Quality Water Report. This report is designed to inform you about the quality of water and services that 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. We are committed to ensuring your quality of water.

The Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The table in this report shows the results of our monitoring for the period of January 1st thru December 31st, 2015. 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. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline at 1-800-426-4791.

Water is the most valuable resource we have. The Waldwick Water Department works 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@ future.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 (1-800-426-4791).

If you have any questions about this report or concerning your water utility, please contact the Water Department Supervisor Neil Moses at 201-652-5900. We want our valued customers to be informed about their water utility and its water quality. If you want to learn more, please attend any of our regularly scheduled Borough Council meetings at the Waldwick Administration Building at 63 Franklin Turnpike. Meetings are held on the second and fourth Tuesdays of each month at 7:30 p.m. Another great way of monitoring & keeping track of your water system is to log onto õWater Watchö on the state website. It has water sampling schedules as well as a host of other information specific to this system.

DEFINITIONS

In this table you will find many 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 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 (ug/l) - 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.

Action Level - The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that 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 Goal (MCLG) - The õGoalö 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 Contaminant Level (MCL) - The õMaximum Allowedö 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.

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.

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 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.

MCL's 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 a lifetime to have a one-in-a-million chance of having the described health effect.

Regulated Disinfectants	Level Detected	MRDL	MRDLG
Chlorine	Average = 0.18	4.0 ppm	4.0 ppm

The 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, is more than a year old.

Sodium

We have one well (Well #2) that continually tests high for Sodium. The other wells and points throughout the distribution system, have been sampled in the past with sodium levels below the õMCLö set by the EPA. When the water is mixed and combined with the other wells that were not high, the sodium level is within the normal range. The one well that tested high for sodium is constantly being sampled for Sodium more frequently as directed by EPA. For healthy individuals the sodium intake from water is not important, because a much greater amount of sodium comes from salt in the diet. However, sodium levels above the Recommended Upper Limit (RUL) may be a concern to individuals on a high sodium restricted diet.

Perfluorooctanoic Acid (PFOA)

This past year, Perfluorooctanoic Acid has been discussed in the media. It has been found to be a likely human carcinogen, and has been found in õsomeö water systems throughout the Country. The EPA has <u>not</u> yet set MCL or any action levels for this chemical, nor do they require water departments to test for the chemical. The Waldwick Water Department decided to be proactive and test for PFOA prior to be required to do so; however, we do not have any data *(levels)* yet from EPA to compare our results. When we are mandated by EPA to sample for PFOA, the Waldwick Water Department will notify you of the results.

Nitrate

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 Waldwick Water Department is responsible for providing high quality drinking water, but can not 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 cooking. If you are concerned about lead in your water, you may wish to have your water tested (privately). 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.

Arsenic

While your drinking water meets EPA standard for arsenic, it does contain low levels. EPA standard balances the current understanding of possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause skin cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

SOME QUICK FACTS ABOUT OUR "LIQUID ASSET"

- Only 1/3 of people on earth have safe and reliable drinking water available to them on a daily basis!
- At a fraction of a penny per gallon, tap water provides safety, convenience and freedom.
- Less than 1% of the average personøs total personal income is spent on water and wastewater services, but it is something we use all day long!
- An 8oz glass of water can be refilled approximately 15,000 times for the same price as a six pack of soda and it is a lot healthier for you!
- Your water bill pays for a lot more than simply water. You get sophisticated water treatment, frequent testing and monitoring, and a vast underground infrastructure that delivers safe, plentiful water right at your tap.
- Studies show that bottled water is no purer than tap water, yet bottled water costs about 1,900% more.
- The water you get from your tap is subject to more testing and stricter qualities/standards than bottled water.
- American water utilities monitor for more than 100 contaminants and must meet close to 90 regulations for water safety and quality.
- Our water system as well as all community water supplies are tested every day, far more frequent testing than for bottled water.

The following table is a list of sampling results from the year 2015. As directed by the EPA and/or DEP, some years we are required to sample for more contaminants then others.

C.C.R. Water Sampling Results For 2016 (Data is from 2015)

					1		
	Violation		Unit of	Level			
Contaminant	Y/N	MCL	Measurement	Detected	Range	Likely Source of Contamination	
Copper						Corrosion of household plumbing systems,	
	NO	1.3	mg/L	0.112	.05266	Erosion of natural deposits, Leaching from wood	
						preservatives	
Haloacetic Acids (Haa5)				•	•		
Total Haa5	NO	60	ug/L	2.25	2.00-2.51	Byproduct of drinking water disinfection	
Inorganic Contaminants	•		Ü	•		, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	
Arsenic	NO	5	ug/l	1.83	.890-3.29	Naturally present in the environment	
		-	- 9			Discharge of drilling wastes, discharge from metal	
Barium	NO	2	mg/L	0.353	.221417	refineries	
			<u>.</u>	0.000		Discharge from steel and pulp mills. Erosion of	
Chromium	NO	100	ug/L	0.651	.651 (x6)	natural deposits	
Nickel	NO	100	ug/L	0.595	.595 (x6)	Naturally present in the environment	
Sulfate	NO	250	mg/L	21.4	14.7-34	Natural soil deposits	
Lead	NO	15	ug/L	2.73	2-8.11	Corrosion of household plumbing systems	
Nitrates	1.10	10	ug/L	2.70	1880-		
	NO	10,000	ug/L	3100	4570	Runoff from fertilizer use, Leaching from septic tanks, sewage, erosion of natural deposits	
<u>Nitrites</u>		1,000	ug/L	25	n/a	Runoff from fertilizer use, Leaching from septic	
	NO					tanks, sewage, erosion of natural deposits	
Radioactive Contaminants		_	_	_	_	<u>-</u>	
Gross Alpha	NO	15	pCi/L	8.08	n/a		
Combined Radium 228 & 226	NO	5	pCi/L	1	n/a	Erosion of natural deposits	
Uranium	NO	30	ug/L	2.11	n/a		
Sodium	39.2						
Well # 2 & dist. System	NO	50	nnm	133	31.7-321	Natural soil deposits, Roadway de-icing	
Secondary Contaminants	140	30	ppm	133	31.7-321		
Alkalinity	n/a	n/a	mg/L	159.3	136-173	Naturally present in the environment	
Chloride	NO	250	mg/L	223.4	81.5-629	Natural soil deposits	
Total Hardness	n/a	50-250	mg/L	382	227-638	Naturally present in the environment	
Manganese	NO	0.05	mg/L	0.04	n/a	Natural soil deposits	
pH level	NO	6.5-8.5	su	7.77	7.23-8.14	Natural soil deposits	
Silver	NO	0.1	mg/L	0.08	n/a	Naturally present in the environment	
Total Dissolved Solids	NO	500	mg/L	636	360-1349	Natural soil deposits	
Zinc	NO	5	mg/L	0.25	n/a	Natural soil deposits	
Total Coliforms (Bacteria)	NO	0	n/a	none	n/a	Naturally present in the environment	
Trihalomethanes (THM)			1.74	110110	1.74	1	
Total THM(s)	NO	80	uc/I	13.65	13.4-13.9	Puproduct of dripking water disinfection	
Volatile Organic Compounds (VOC)			ug/L			Byproduct of drinking water disinfection	
TOTAL OT GATHE COMPOUNDS (FOC)	NO	n/a	ug/L	undetected	n/a	Naturally present in the environment	

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos and synthetic organic chemicals. Our system received monitoring waivers for both of these types of contaminants.

BACKGROUND

Our six wells draw their water from the Brunswick Aquifer. Our wells range in depth from 170 to 250 feet deep. The New Jersey 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 Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system to obtain information regarding your water system Source Water Assessment. The water system source water susceptibility ratings and a list of potential contaminant sources is attached.

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.

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 the 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, 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.

The water supplied by the Waldwick Water Department, as in all õground waterö systems, tends to be very hard. This is a characteristic of pumping water out of the ground as opposed to pumping water from a lake or reservoir õsurface waterö systems, and are more vulnerable to contamination by outside sources. The only way to help to change the hardness of the water supplied to you, is to install a water softener as some of our customers have done in the past.

The water that we supply is under the guidelines of EPA, and is more rigid than bottled water you may purchase at the store. Bottled water is under the guidelines of the FDA and is not as rigid as the guidelines of the EPA.

PLEASE HELP TO KEEP WATCH OVER <u>OUR</u> VALUABLE RESOURCE. IF YOU SHOULD SEE ANYONE USING A FIRE HYDRANT THAT IS NOT AN OFFICIAL BOROUGH VEHICLE OR A FIRE TRUCK, OR IF YOU ARE NOT SURE, PLEASE DON'T HESITATE IN CALLING THE POLICE DEPARTMENT. HELP US PROTECT OUR RESOURCE. YOU ARE OUR EYES OUT IN THE FIELD!

Throughout the year, Waldwick Water Department customers may occasionally experience discolored or cloudy water, some of the causes of this could be:

- Fire Hydrant usage due to Fire Department activity
- Fire Hydrant flushing (conducted yearly in the Spring and Fall)
- Water main breaks or shut downs due to leaks

If you experience this, let the water run before you use it. If it continues, please call the Waldwick Water Department at (201) 652-5300 ext.240 during regular business hours 8:30am to 4pm, or after hours contact the Waldwick Police Department at (201) 652-5700.

- Do not let the water run while shaving or brushing teeth.
- Take short showers instead of baths, even try not running water while soaping up or shampooing.
- Never use your toilet as a wastebasket.
- Keep drinking water in the refrigerator instead of letting the faucet run until the water is cool.
- Wash fruits & vegetables in a basin. Use a vegetable brush.
- Do not use water to defrost frozen foods; thaw in the refrigerator overnight.
- Scrape rather than rinse dishes before loading into the dishwasher; wash only full loads.
- Add food wastes to your compost pile instead of using the garbage disposal.
- Wash only full loads of laundry or use the appropriate water level or load size selection on the washing machine.
- Consider purchasing high-efficiency toilets or place a plastic container filled with water in the tank of your conventional toilet.
- Install low-flow faucet aerators and showerheads.
- Consider purchasing a high efficiency washing machine that can save over 50% in laundry water as well as less energy use.
- Repair any and all leaks as soon as possible. A toilet can waste over 200 gallons per day. To detect leaks in toilet, add food coloring to the tank water. If the colored water appears in bowl the toilet is leaking.
- Water the lawn or garden during the coolest part of the day (early morning is best). Do not water on windy days.
- Water trees and shrubs, which have deep root systems longer and less frequently than shallow-rooted plants that require smaller amounts of water more often.
- Set sprinklers to water lawn or garden ó not the sidewalk or street.
- Use soaker hoses or trickle irrigation systems for trees and shrubs.
- Install moisture or rain sensors on sprinkler systems.
- Use mulch around shrubs and garden plants to reduce evaporation.
- Remove thatch and aerate turf to encourage movement of water to the root zone.
- Raise your lawn mower cutting height ólonger grass blades help shade each other, reduce evaporation and inhibit weed growth.
- Minimize or eliminate fertilizing, which promotes new growth needing additional watering.
- When there are water restrictions, use the water from dehumidifiers or air condition condensers to water plants or gardens.
- Sweep driveways, sidewalks & steps instead of hosing them off.
- Get your car washed at a car wash instead of doing it yourself; most of them now recycle their water.
- Avoid purchasing recreational water toys that require a constant stream of water.
- Use a pool cover to reduce evaporation when pool is not being used.
- Do not install or use ornamental water features unless they recycle the water.
- And the number one use of our most valuable resource is: **LANDSCAPE IRRIGATION** in the growing season can account for **75** % of your water use.