



BOROUGH OF PARK RIDGE BOARD OF PUBLIC WORKS ANNUAL WATER QUALITY REPORT JUNE 2014 (2013 SAMPLING DATA)

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The Park Ridge Water Department is pleased to present this year's Annual Water Quality Report. This report details the results of our water quality testing performed in 2013. It is designed to inform you about the quality water and services we provide to you every day. Our goal is to provide you with a safe and dependable supply of potable drinking water.



Ridge and Woodcliff Lake. This has been the consistent goal since the water utility began its operation in the 1920's.

This publication is very important because informed customers are the best allies in maintaining safe drinking water. Regular meetings of the Park Ridge Board of Public Works occur on the first and third Wednesday of each month, at 8:00 PM at the Park Ridge Utility

In 2013, we analyzed over 2,500 samples to ensure that the 700 million gallons of water we pump, treat, and deliver meets water quality standards. We are pleased to report that our water meets or surpasses federal and state drinking water standards.

The Board of Public Works is committed to delivering a safe and reliable supply of drinking water to the 5,000 customers in Park

Department, 15 Sulak Lane, Park Ridge. The public is welcome.

If you have any questions about your water please call us at (201) 391-2113. Additional information is also available on the Borough's website at www.parkridgeboro.com. You may also call the Environmental Protection Agency safe drinking water hotline at (800) 426-4791 or find it on EPA's web site at www.epa.gov.

Where does our water come from?

Our water is supplied by groundwater from 18 wells located throughout Park Ridge and Woodcliff Lake. This water is drawn from the Brunswick Aquifer. In addition, we have three water storage tanks and five booster stations which can transfer water between different parts of the distribution system.

IMPORTANT PHONE NUMBERS

Park Ridge Water Department William Hahn - Licensed Operator	201-391-2113	NJDEP Bureau of Safe Drinking Water	1-609-292-5550
To report water emergencies during non-business hours	201-391-5400	New Jersey Board of Public Utilities	1-800-624-0241
New Jersey State Department of Environmental Protection (NJDEP)	1-609-292-3950	Environmental Protection Agency's Safe Drinking Water Hotline	1-800-426-4791

Drinking Water Quality Table

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 (800-426-4791).

Substance	Units	EPA Goal MCLG	EPA Stand- ard MCL	NJDEP Standard MCL	*Park Ridge Detected Level	Park Ridge Range	Major Sources
<i>Inorganic Chemicals</i>							
Barium	ppm	2	2	2	0.22	0.06 - 0.51	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Nickel	ppb	NA	NA	NA	6.60	3.5 - 8.7	Erosion of natural deposits
Nitrate	ppm	10	10	10	3.8	1.5-3.8	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Arsenic	ppb	NA	10	5	3.86	ND - 3.86	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Chromium	ppb	100	100	100	7.22	3.3 - 7.22	Discharge from steel and pulp mills; Erosion of natural deposits
<i>(This category contains 11 additional constituents which were not detected)</i>							
<i>Microbiological</i>							
Total Coliform		0	2	2	1	0 - 1	Naturally present in the environment
Fecal Coliform/ <i>E. Coli</i>		0	0	0	0	0	Human and animal fecal waste
Over 180 samples were collected throughout the year from our distribution system.							
<i>Radionuclides (Well #17 and Well #20 tested in 2008. All other wells tested in 2011)</i>							
Alpha Emitters	pCi/L	0	15	15	5.9	ND - 5.9	Erosion of natural deposits
Combined Radium 226/228	pCi/L	0	5	5	4.4	ND - 4.4	Erosion of natural deposits
Radon (tested 6/28/99)	pCi/L	n/a	n/a	n/a	790	n/a	Erosion of natural deposits
<i>Organic Chemicals</i>							
cis 1,2 Dichloroethylene	ppb	70	70	70	0.62	ND - 0.62	Discharge from industrial chemical factories
Methyl Tertiary-Butyl Ether	ppb	70**	n/a	70	1.95	ND - 1.95	Leaking underground gasoline and fuel oil tanks, gasoline and fuel oil spills
Tetrachloroethylene	ppb	0	5	1	0.26	ND - 0.26	Discharge from factories and dry cleaners
Trichloroethylene	ppb	0	5	1	0.33	ND - 0.33	Discharge from metal degreasing sites and other factories
1,1,1 Trichloroethane	ppb	200	200	30	0.58	ND - 0.58	Discharge from metal degreasing sites and other factories
Total Trihalomethanes (TTHM)	ppb	n/a	80	80	5.10	ND - 19.3	By-product of drinking water disinfection
Five Haloacetic Acids (HAA5)	ppb	n/a	60	60	ND	ND	By-product of drinking water disinfection
* Park Ridge detected level shows the highest test results used to determine compliance for the year in 2013. For some contaminants, this level is the running annual average of data from the highest entry point. Park Ridge did not exceed any MCL during 2013.							
** NJDEP regulated chemical. MCLG is health-based number developed by the NJDEP.							
<i>(This category contains 22 additional constituents which were not detected)</i>							

Definitions:

MCLG (Maximum Contaminant Level Goal) - 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

NJRUL - New Jersey Recommended Upper Limit

ND (non-detects) - laboratory analysis indicates that the constituent is not present.

ppm (parts per million) - one drop in 10 gallons, one minute in two years, or a single penny in \$10,000.

ppb (parts per billion) - one drop in 10,000 gallons, one minute in 2,000 years

pCi/L (picocuries per liter) - measure of the radioactivity in water

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

Drinking Water Quality Table (continued)

Lead and Copper (tested in 2013)

Substance	Units	Action Level	Number of Samples	90th Percentile	# Samples above the action level	Major Sources
Lead	ppb	15	31	0	0	Corrosion of household plumbing systems; erosion of natural deposits
Copper	ppb	1,300	31	575	0	Corrosion of household plumbing systems; erosion of natural deposits

Secondary Standards - related to aesthetic quality of drinking water

Substance	Units	NJ RUL	Highest Park Ridge Result	Average Park Ridge Result	Park Ridge Range	Major Sources
Chloride	ppm	250	188	107	53 - 188	Natural Mineral - Road Salt
Hardness	ppm	250	423	294	193 - 423	Natural Mineral
Manganese	ppm	0.05	0.09	ND	ND	Natural Mineral
Sodium	ppm	50	112	40	13-112	Natural Mineral - Road Salt
Sulfate	ppm	250	118	30	13 - 118	Natural Mineral
Zinc	ppm	5	0.1	0.03	0.01 - .10	Natural Mineral
Total Dissolved Solids	ppm	500	694	511	324 - 694	Erosion of Natural Mineral Deposits
pH		6.5 - 8.5	8.2	7.6	6.9 - 8.2	Natural Characteristic

Note: 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, are more than one year old.

What Does This Table Mean?

Our water is tested to ensure that it is safe. Major Sources shows where this substance usually originates. Range shows the highest and lowest results for the year. Definitions explain the abbreviations used in the table. We ran many analytical tests on our water. Only the listed substances in the table were detected.

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for certain contaminants. We received waivers for asbestos and synthetic

PROJECTS WE ARE DOING TO IMPROVE OUR WATER SYSTEM

- Recently replaced carbon at the Well #9/15 treatment facility.
- Resin replacement at the Well #9/15 treatment facility .
- Carbon change at the Well #3 and Well #4 treatment facilities.
- Replace Well #19 Air Stripping Tower.
- Purchase trailer mounted backup generator for Well #16.
- Upgrade distribution pipe at stream crossing.



Well #9/15 treatment facility: The drinking water passes through carbon in one tank to remove volatile organics and resin in the second tank to remove perchlorate.

NJDEP & EPA HEALTH NOTES

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 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 can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- 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 Park Ridge Water Department 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 <http://www.epa.gov/safewater/lead>.
- Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of

arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs 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 cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

- Radon: Radon is a radioactive gas that you can't see, taste or smell. At high levels of exposure, it is a known carcinogen. Radon is found throughout the U.S. in soil and can move up through the ground and into a home through cracks and holes in the foundation. It can also get into indoor air when released from tap water used for showering and other household activities. Radon entering the home through tap water will in most cases be a small source of radon in indoor air. If you are concerned about radon in your home, have the air tested. It is inexpensive and easy. There are simple ways to fix a radon problem that are not too costly. Call the EPA Radon Hotline for more information at 1-800-SOS-RADON.
- Manganese: The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.
- 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 a concern to individuals on a sodium restricted diet.

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 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.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Tests Showed Coliform Bacteria in the Park Ridge Water Department Water

Samples collected from our water system in June 2014 violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We routinely monitor for drinking water contaminants. We took twenty-seven (27) samples to test for the presence of coliform bacteria during June 2014. Four (4) of our samples tested by our outside contracted laboratory came back positive showing the presence of total coliform bacteria. The standard is that no more than 1 sample per month may be positive. For all coliform bacteria tests, it is our policy to take duplicate samples and test them in-house using the same test procedure as the contracted laboratory. All of our internally tested samples results were negative.

What does this mean?

This is not an emergency. If it had been you would have been notified within 24 hours. Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Usually, coliforms are a sign that there could be a problem with the system's treatment or distribution system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or E. coli, are present. We did not find any of these bacteria in our subsequent testing.

What should I do?

You do not need to boil your water or take other corrective actions. However, if you have specific health concerns (especially if you have a severely compromised immune system, have an infant, are pregnant, or are elderly), feel free to consult your doctor.

What is being done?

Further testing along with our matching internal sample analysis shows that this problem has been resolved.

For more information, please contact William Hahn at (201) 391-3533 or 53 Park Avenue, Park Ridge, NJ 07656.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

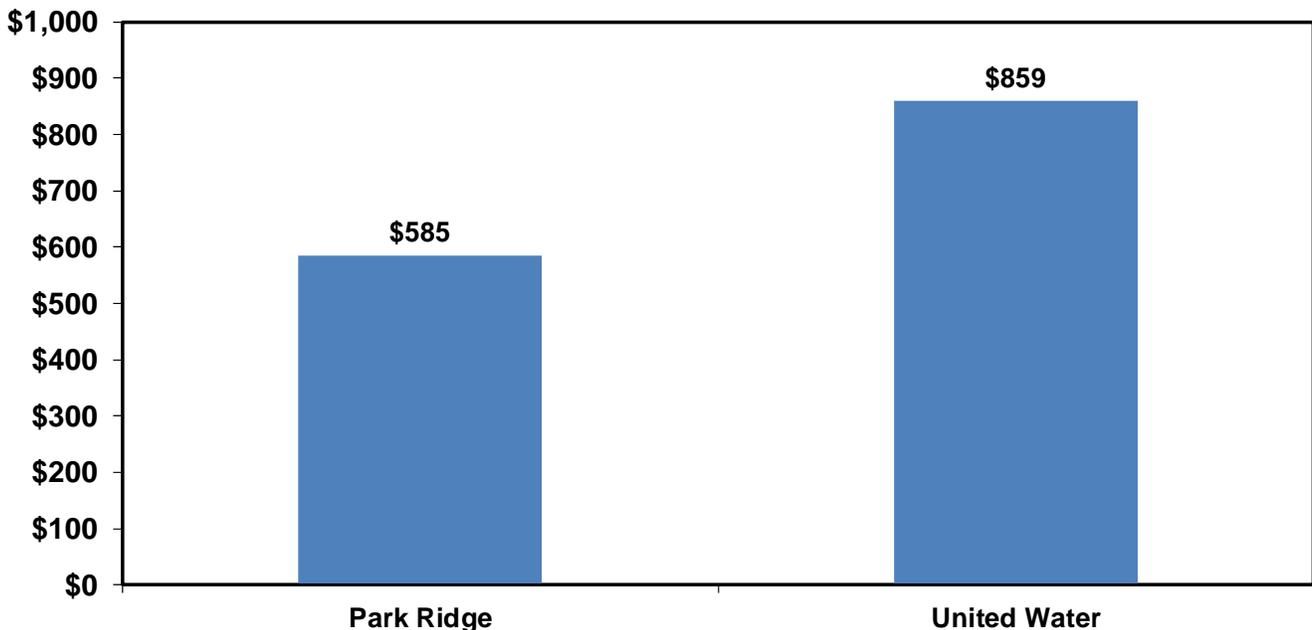
Reporting Violation

In December 2013, our system had a positive result in one of our 15 routine samples collected for total coliform during that month. All required follow-up sampling was completed on time and all the compliance results were negative. Unfortunately, the laboratory entered the results from the follow-up sampling incorrectly leading to a "reporting" violation. The situation has been resolved, and there were no health risks to our customers associated with this "reporting" violation.

Water Conservation Tips

- ◆ Wash full loads in your washing machine, or adjust the water level to reflect the size of the load.
- ◆ Let your pots and pans soak instead of letting the water run while you clean them.
- ◆ Try planting drought-tolerant and regionally adapted plants in areas that are hard to water or that receive little use. This may include narrow strips near sidewalks or driveways and steep hills.
- ◆ Soakers hoses are better than sprays. Install drip-irrigation or soaker hoses for more efficient watering in planting beds and beneath shrubs and trees.
- ◆ Install ultra-low-flush toilets to reduce the amount of water used in each flush.
- ◆ Put dye tablets or food coloring in your toilet tank and wait to see if the color appears in the bowl (without flushing). If it does, you have a leak!
- ◆ Turn the faucet off while you shave, brush your teeth and lather up your hands.
- ◆ Take a short shower instead of a bath. While a five minute shower uses a 12 to 25 gallons, a full tub requires about 70 gallons.

Annual Water Cost Comparison (based on typical residential customer)



Park Ridge's rate is 32% less than United Water for the typical Park Ridge Water Customer

Source Water Assessment Program

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for our public water system, which is available at www.state.nj.us/dep/swap or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The Source Water assessment performed on 19 wells determined the following susceptibility ratings for each of the groundwater supply wells. This table illustrates the susceptibility rating for each individual well and contamination category.

Susceptibility Rating for Drinking Water Sources												
EPTDS ID	Source ID	Source Name	Location	Contaminant Category								
				Pathogens Rating	Nutrients Rating	Pesticides Rating	VOCs Rating	Inorganics Rating	Radionuclides Rating	Radon Rating	DBPs Rating	
006	007	Well 1	Park Avenue	M	M	L	H	H	H	H	M	
006	009	Well 2	Mill Road	M	M	L	H	H	M	H	M	
007	013	Well 3	Spring Valley Road	M	H	L	H	M	M	H	M	
008	015	Well 4	Oak Avenue	M	M	L	H	H	H	H	M	
009	019	Well 5	Sulak Lane	M	M	L	H	M	H	H	M	
009	020	Well 6	Sulak Lane	M	H	M	H	H	M	H	M	
009	021	Well 7	Sulak Lane	M	H	M	H	H	M	H	M	
009	022	Well 8	Sulak Lane	M	H	L	H	H	M	H	M	
016	025	Well 9	Werimus Road	M	H	L	H	M	M	H	M	
011	027	Well 10	Glen Road	M	H	M	H	M	H	H	M	
012	029	Well 11	Russett Place	M	M	L	H	M	M	H	M	
013	031	Well 12	Glendale Road	M	H	L	H	M	M	H	M	
014	033	Well 13	Wield Court	M	M	L	H	H	M	H	M	
015	035	Well 14	Turrett Street	M	H	M	H	H	M	H	H	
016	037	Well 15	Old Mill Road	M	H	L	H	M	M	H	M	
017	039	Well 16	Prospect Avenue	M	M	L	H	M	H	H	M	
018	041	Well 17	Glenbrook Drive	M	H	L	H	M	M	H	H	
020	045	Well 18	New Street	M	M	L	H	H	H	H	H	
021	048	Well 19	Ridge Avenue	M	M	L	H	M	M	H	M	

* The NJDEP has not yet performed the source water assessment for Well #20. The susceptibility ratings will be similar to Well #15

EPTDS: Entry Point to the Distribution System

L,M,H: Low, Medium and High susceptibility

Pathogens: Disease-causing organisms such as bacteria, protozoa, and viruses. Common sources are animal and human fecal wastes.

Nutrients: Common types of nutrients include nitrogen and phosphorous. Common sources include discharge from septic fields, areas where animal waste is stored, and runoff from agricultural and residential land where fertilizers were used.

Pesticides: Pesticides are manmade chemicals used to control bacteria, fungi, weeds, rodents, and insects. Common sources of pesticides include land applications (nonpoint source) and manufacturing/distribution centers of pesticides (point source).

Volatile Organic Compounds (VOCs): Man-made chemicals that are used as solvents, degreasers, and gasoline components. VOCs are the most common organic contaminants in groundwater in New Jersey.

Inorganics: Mineral-based compounds that are both naturally occurring and manmade. Common sources include discharges from manufacturing plants, releases from contaminated sites, past land uses, and naturally occurring sources. Inorganics include arsenic, cadmium, copper, lead, mercury, and asbestos.

Radionuclides: Radioactive substances that are both naturally occurring and manmade, such as radium and radon. Common sources include the decay of naturally occurring minerals, leaching of subsurface material (for example rocks and sedimentary materials) into ground water, and improper disposal of radioactive waste.

Disinfection Byproduct (DBP) Precursors: Disinfection byproducts are formed when the disinfectants used to kill pathogens during treatment react with dissolved organic material present in the water.

If a source was rated highly susceptible for a contamination 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. If you have any questions regarding the source water assessment report or summary, please contact the Bureau of Safe Drinking Water at

The noblest of the elements is water"
Pindar, 476 B.C.

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