



2016 Drinking Water Quality Report

GARDEN CITY PARK WATER DISTRICT
PUBLIC WATER SUPPLY IDENTIFICATION NO. 2902825

May 2017

ANNUAL WATER SUPPLY REPORT

The Garden City Park Water District is pleased to present this year's Water Quality Report. The report is required to be delivered to all residents of our District in compliance with Federal and State regulations. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We also want you to understand the efforts we make to continually improve the water treatment process and protect our water supply. The Board of Water Commissioners and the District employees are committed to ensuring that you and your family receive the highest quality water.

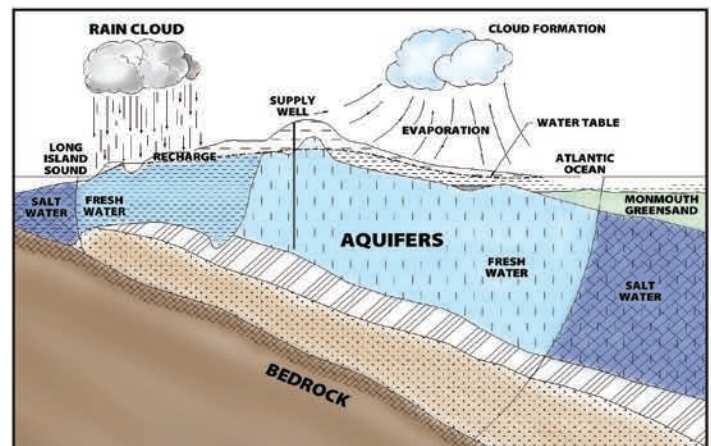
SOURCE OF OUR WATER

The source of water for the District is groundwater pumped from the six (6) wells located throughout the community that are drilled into the Magothy aquifer beneath Long Island, as shown on the adjacent figure. Generally, the water quality of the aquifer is good-to-excellent, although there are localized areas of contamination.

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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants.

In order to ensure that our tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department and the FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The population served by the Garden City Park Water District during



THE LONG ISLAND AQUIFER SYSTEM

2016 was 18,000. The total amount of water withdrawn from the aquifer in 2016 was 1.36 billion gallons, of which approximately 91 percent was billed directly to consumers.

WATER TREATMENT

Prior to distribution to the consumer, the Garden City Park Water District provides treatment at all of its wells to improve the quality of the water pumped. The pH of the pumped water is adjusted upward to reduce the corrosive action between the water and water mains and in-house plumbing by the addition of sodium hydroxide. An air stripping tower at Plant No. 6 is utilized to treat potable water from Well No. 6 for the removal of volatile organic compounds. Similar treatment facilities are also utilized at Plant Nos. 7/10, 8 and 9. A granular activated carbon filter is used at Well No. 6 and 11 for the removal of volatile organic compounds. The District is also mandated to chlorinate the water supply with small amounts of chlorine. The chlorine disinfects the water to protect against the possibility of bacteria in the water supply.

COST OF WATER

The District utilizes a step billing schedule as shown in the table. The average consumer is being billed at \$1.20 per 1,000 gallons of water used.

QUARTERLY WATER RATES - RESIDENTIAL

Consumption (gallons)	Charges
Up to 10,000	\$1.10/thousand gallons
Over 10,000	\$1.20/thousand gallons
Consumer Rate	\$1.40/thousand gallons

WATER CONSERVATION MEASURES

The underground water system of Long Island has more than enough water for present water demands. However, saving water will ensure that our future generations will always have a safe and abundant water supply.

In 2016, the Garden City Park Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2016 was 1.8 percent less than in 2015. This decrease can most likely be attributed to the cooler and wetter weather in the summer of 2016. The conservation program has been proven to be effective and will remain in effect in 2017.

Consumers should be aware that Nassau County Lawn Sprinkler Regulations of Odd-Even watering days are still in effect. In addition, the District feels it is necessary to impose increased water restrictions which prohibit irrigation between the hours of 6 a.m. and 6 p.m. Besides protecting our precious underground water supply, water conservation will produce a cost savings to the consumer in terms of both water and energy bills (hot water).

WATER QUALITY

In accordance with State regulations, the Garden City Park Water District routinely monitors your drinking water for numerous parameters. We test your drinking water for coliform bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes and synthetic organic contaminants. As listed in this newsletter, over 135 separate parameters are tested for in each of our wells numerous times per

year. The table presented on page 3 depicts which parameters or contaminants that were detected in the water supply. It should be noted that many of these parameters are naturally found in all Long Island drinking water and do not pose any adverse health effects.

During 2014, the District collected 30 samples for lead and copper. The next round of samples will occur in 2017. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Garden City Park Water District 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Water from the Garden City Park Water District has a slightly elevated nitrate level but is well below the maximum contaminant level of 10.0 parts per million. 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. The source of the nitrates is the nitrogen in fertilizers and from on-site septic systems. If you are caring for an infant, you should ask for advice from your health care provider.

CONTACTS FOR ADDITIONAL INFORMATION

We are pleased to report that our drinking water is safe and meets all Federal and State requirements. If you have any questions about this report or the Garden City Park Water District, please contact Water District Superintendent Michael Levy at (516) 746-3194 or the Nassau County Department of Health at (516) 227-9692. We want our valued customers to be informed about our water system. If you want to learn more, please attend any of our regularly scheduled meetings. They are normally held on the second Wednesday of each month at 4:00 p.m. at the Water District office.

The Garden City Park Water District routinely monitors for different parameters and possible contaminants in your drinking water as required by Federal and State laws. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some impurities. It's important to remember that the presence of these impurities does not necessarily pose a health risk. For more information on contamination and potential health risks, please contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791.

The Garden City Park Water District conducts over 10,000 water quality tests throughout the year, testing for over 130 different contaminants which have been undetected in our water supply including:

Arsenic	Metribuzin	Chloroacetic Acid	1,1,1,2-Tetrachloroethane
Cadmium	Butachlor	Bromoacetic Acid	Bromobenzene
Chromium	2,4-D	Dichloroacetic Acid	1,1,2,2-Tetrachloroethane
Mercury	2,4,5-TP (Silvex)	Trichloroacetic Acid	2-Chlorotoluene
Silver	Dinoseb	Dibromoacetic Acid	4-Chlorotoluene
Color	Dalapon	Total Haloacetic Acid	1,2-Dichlorobenzene
Turbidity	Picloram	Gross Beta	1,3-Dichlorobenzene
Odor	Dicamba	Chloromethane	1,4-Dichlorobenzene
4-Isopropyltoluene (P-Cumene)	Pentachlorophenol	Bromomethane	1,24-Trichlorobenzene
Nitrite	Hexachlorocyclopentadiene	Chloroethane	Hexachlorobutadiene
Detergents (MBAS)	Perfluorooctanoic Acid	Trichlorofluoromethane	1,2,3-Trichlorobenzene
Free Cyanide	bis(2-Ethylhexyl)phthalate	Chlorodifluoromethane	Benzene
Antimony	Hexachlorobenzene	Methylene Chloride	Toluene
Beryllium	Benzo(A)Pyrene	Trans-1,2-Dichloroethene	Ethylbenzene
Lindane	Aldicarb Sulfone	2,2-Dichloropropane	M,P-Xylene
Heptachlor	Aldicarb sulfoxide	Bromochloromethane	O-Xylene
Aldrin	Aldicarb	Carbon Tetrachloride	Styrene
Heptachloro Epoxide	Total Aldicarb	1,1-Dichloropropene	Isopropylbenzene (Cumene)
Dieldrin	Oxamyl	1,2-Dichloroethane	N-Propylbenzene
Endrin	Methomyl	1,2-Dichloropropane	1,3,5-Trimethylbenzene
Methoxychlor	3-Hydroxycarbofuran	Dibromomethane	Tert-Butylbenzene
Toxaphene	Carbofuran	Trans-1,3-Dichloropropene	
Chlordane	Carbaryl	cis-1,3-Dichloropropene	
Total PCBs	Glyphosate	1,1,2-Trichloroethane	
Propachlor	Diquat	Tetrachloroethene	
Alachlor	Endothall	1,3-Dichloropropane	
Simazine	1,2-Dibromoethane (EDB)	Sec-Butylbenzene	
Atrazine	1,2-Dibromo-3-Chl.Propane	1,2,4-Trimethylbenzene	
Metolachlor	Dioxin	N-Butylbenzene	

2016 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
Inorganic Contaminants							
Copper	No	July/August/September 2014	ND - 0.3 0.1 ⁽¹⁾	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	July/August/September 2014	ND - 1.7 1.0 ⁽¹⁾	ug/l	1.3	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Manganese	No	06/09/16	ND - 0.02	ug/l	n/a	MCL = 300	Naturally occurring
Barium	No	03/08/16	0.01- 0.03	mg/l	n/a	MCL = 20	Naturally occurring
Ammonia	No	06/09/16	ND - 1.3	mg/l	n/a	NONE	Naturally occurring
Sodium	No	06/09/16	18.0 - 50.0	mg/l	n/a	No MCL ⁽²⁾	Naturally occurring
Iron	No	05/03/16	ND - 100.0	ug/l	n/a	MCL = 300	Naturally occurring
Fluoride	No	05/13/16	ND - 0.2	mg/l	n/a	MCL = 2.2	Naturally occurring
Zinc	No	03/07/16	ND - 0.04	mg/l	n/a	MCL = 5	Naturally occurring
Nickel	No	03/08/16	ND - 0.7	ug/l	n/a	MCL = 100	Naturally occurring
Magnesium	No	06/09/16	ND - 21.0	ug/l	n/a	No MCL	Naturally occurring
Chloride	No	05/03/16	36.3 - 71.5	mg/l	n/a	MCL = 250	Naturally occurring
Calcium	No	06/09/16	16.0 - 36.0	mg/l	n/a	No MCL	Naturally occurring
Nitrate	No	12/09/16	1.2 - 6.8	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Sulfate	No	03/07/16	28.9 - 46.7	mg/l	n/a	MCL = 250	Naturally occurring
Perchlorate	No	03/07/16	ND - 1.0	ug/l	n/a	AL = 18 ⁽³⁾	Fertilizer
Volatile Organic Contaminants							
Tetrachloroethene	No	09/12/16	ND - 1.1	ug/l	0	MCL = 5	Industrial/Commercial discharge
MTBE	No	09/12/16	ND - 0.66	ug/l	0	MCL = 10	Gasoline Additive
Total Trihalomethanes	No	12/05/16	ND - 5.6	ug/l	n/a	MCL = 80	Disinfection By-Products
Radionuclides							
Gross Alpha	No	12/17/13	0.94 - 3.58	pCi/L	n/a	MCL = 15	Naturally occurring
Radium 226 & 228	No	12/17/13	0.39 - 1.84	pCi/L	n/a	MCL = 5 ⁽⁴⁾	Naturally occurring
Unregulated Contaminant Monitoring Rule⁽⁵⁾							
1,4-Dioxane	No	04/17/14	0.11 - 3.9	ug/l	n/a	MCL = 50	Industrial discharge
Chromium	No	09/02/14	ND - 1.0	ug/l	100	MCL = 100	Natural deposits
Hexavalent Chromium	No	05/27/14	ND - 1.1	ug/l	n/a	No MCL	Natural deposits and Industrial discharge
Strontium	No	05/27/14	77.8 - 86.7	ug/l	n/a	No MCL	Naturally occurring

Definitions:

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.

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.

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

Milligrams per liter (mg/l) - Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l) - Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

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

pCi/L - pico Curies per Liter is a measure of radioactivity in water.

⁽¹⁾ - During 2014, we collected and analyzed 30 samples for lead and copper. The 90% percentile level is presented in the table. The action levels for both lead and copper were not exceeded at any site tested.

⁽²⁾ - No MCL has been established for sodium. However, 20 mg/l is a recommended guideline for people on high restricted sodium diets and 270 mg/l for those on moderate sodium diets.

⁽³⁾ - Perchlorate is an unregulated contaminant. However, the State Health Dept. has established an action level of 18 ug/l.

⁽⁴⁾ - MCL for Radium 226 and 228 is a combined total Radium = 5 pCi/L.

⁽⁵⁾ - UCMR3 - Unregulated Contaminant Monitoring Rule 3 is a Federal water quality sampling program where water suppliers sample and test their source water point of entry for 1 year. Results will be used by the USEPA to determine if the contaminants need to be regulated in the future.

SOURCE WATER ASSESSMENT

The NYSDOH, with assistance from the local health department, has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how rapidly contaminants can move through the subsurface to the wells. The susceptibility of a water supply well to contamination is dependent upon both the presence of potential sources of contamination within the well's contributing area and the likelihood that the contaminant can travel through the environment to reach the well. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. Please refer to section "Water Quality" for a list of the contaminants that have been detected. The source

water assessments provide resource managers with additional information for protecting source waters into the future.

Our drinking water is derived from six (6) wells. The source water assessment has rated five (5) of the wells as having a very high susceptibility to industrial solvents and one (1) well with a high susceptibility to nitrates. The elevated susceptibility to industrial solvents and nitrates is due primarily to point sources of contamination related to commercial/industrial facilities and related activities in the assessment area. In addition, the high susceptibility to nitrates is also attributable to unsewered residential land use and related to practices in the assessment area, such as fertilizing lawns.

A copy of the assessment, including a map of the assessment area, can be reviewed by contacting the District Office.

Copies of the Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2016, are available at the Garden City Park Water District office which is located at 333 Marcus Avenue, Garden City Park, New York and the local Public Library.

We, at the Garden City Park Water District, work around the clock to provide top quality water to every tap throughout the community. We ask that all our customers help us protect our water supply which will improve our way of life and our children's future.



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