



2013 Drinking Water Quality Report

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

ANNUAL WATER SUPPLY REPORT MAY 2014

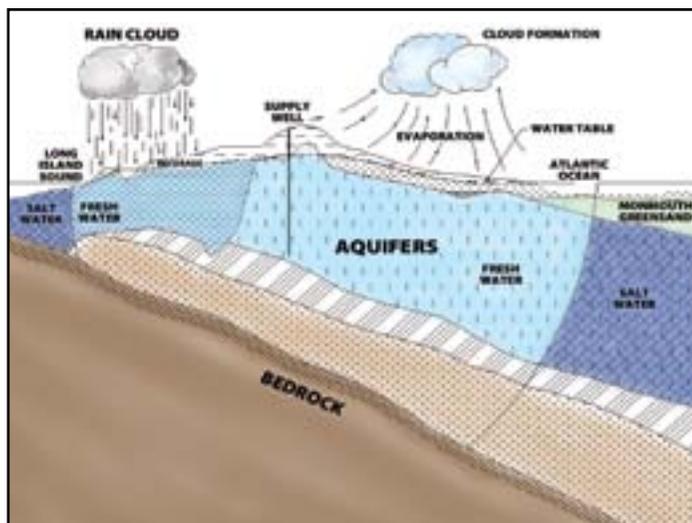
The Garden City Park Water District is pleased to present this year's Drinking Water Quality Report. This report is required to be delivered to all residents of our District in compliance with Federal and State regulations. This report is designed to inform you about the quality of water and services 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 to 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 in the adjacent figure. Generally, the water quality of the aquifer is good-to-excellent, although there are localized areas of contamination.

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 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 2013 was 18,000 people. The total amount of water withdrawn from the aquifer by Garden City Park in 2013 was 1.281 billion gallons, of which approximately 93 percent was billed directly to consumers.



THE LONG ISLAND AQUIFER SYSTEM

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. 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.

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

In 2013, the Garden City Park Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2013 was 11 percent more than in 2012. This increase can most likely be attributed to the hotter and drier weather in the summer of 2013. The conservation program has been proven to be effective and will remain in effect in 2014.

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).

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 130 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 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.

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 (ppm). 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.

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
Over 100,000	\$1.40/thousand gallons

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 7:30 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 EPA Safe Drinking Water Hotline at (800) 426-4791.

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

Arsenic	Metolachlor	1,2-Dibromo-3-Chl.Propane	1,1,2-Trichloroethane
Cadmium	Metribuzin	Dioxin	Tetrachloroethene
Chromium	Butachlor	Chloroacetic Acid	1,3-Dichloropropane
Mercury	2,4-D	Bromoacetic Acid	1,1,1,2-Tetrachloroethane
Silver	2,4,5-TP (Silvex)	Dichloroacetic Acid	Bromobenzene
Color	Dinoseb	Trichloroacetic Acid	1,1,2,2-Tetrachloroethane
Turbidity	Dalapon	Dibromoacetic Acid	2-Chlorotoluene
Odor	Picloram	Total Haloacetic Acid	4-Chlorotoluene
Manganese	Dicamba	Gross Alpha	1,2-Dichlorobenzene
Nitrite	Pentachlorophenol	Gross Beta	1,3-Dichlorobenzene
Detergents (MBAS)	Hexachlorocyclopentadiene	Radium 226	1,4-Dichlorobenzene
Free Cyanide	bis(2-Ethylhexyl)adipate	Radium 228	1,2,4-Trichlorobenzene
Antimony	bis(2-Ethylhexyl)phthalate	Chloromethane	Hexachlorobutadiene
Beryllium	Hexachlorobenzene	Bromomethane	1,2,3-Trichlorobenzene
Lindane	Benzo(A)Pyrene	Chloroethane	Benzene
Heptachlor	Aldicarb Sulfone	Trichlorofluoromethane	Toluene
Aldrin	Aldicarb sulfoxide	Chlorodifluoromethane	Ethylbenzene
Heptachloro Epoxide	Aldicarb	Methylene Chloride	M,P-Xylene
Dieldrin	Total Aldicarb	Trans-1,2-Dichloroethene	O-Xylene
Endrin	Oxamyl	2,2-Dichloropropane	Styrene
Methoxychlor	Methomyl	Bromochloromethane	Isopropylbenzene (Cumene)
Toxaphene	3-Hydroxycarbofuran	Carbon Tetrachloride	N-Propylbenzene
Chlordane	Carbofuran	1,1-Dichloropropene	1,3,5-Trimethylbenzene
Total PCBs	Carbaryl	1,2-Dichloroethane	Tert-Butylbenzene
Propachlor	Glyphosate	1,2-Dichloropropane	1,2,4-Trimethylbenzene
Alachlor	Diquat	Dibromomethane	Sec-Butylbenzene
Simazine	Endothall	Trans-1,3-Dichloropropene	4-Isopropyltoluene (P-Cumene)
Atrazine	1,2-Dibromoethane (EDB)	cis-1,3-Dichloropropene	N-Butylbenzene
	Glyphosate	Trans-1,3-Dichloropropene	
	Diquat	cis-1,3-Dichloropropene	

2013 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 2011	ND - 0.18 0.08 ⁽¹⁾	mg/L	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	July/August 2011	ND - 3.46 3.27 ⁽¹⁾	µg/L	1.3	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Barium	No	01/28/13	0.01 - 0.03	mg/L	n/a	MCL = 20	Naturally occurring
Sodium	No	01/14/13	14.2 - 38.9	mg/L	n/a	No MCL ⁽²⁾	Naturally occurring
Iron	No	03/19/13	ND - 80	mg/L	n/a	MCL = 300	Naturally occurring
Fluoride	No	01/14/13	ND - 0.14	mg/L	n/a	MCL = 2.2	Naturally occurring
Magnesium	No	01/14/13	7.1 - 16.5	mg/L	n/a	No MCL	Naturally occurring
Chloride	No	01/14/13	22.7 - 74.7	mg/L	n/a	MCL = 250	Naturally occurring
Calcium	No	01/14/13	13.3 - 27.0	mg/L	n/a	No MCL	Naturally occurring
Nitrate	No	05/01/13	ND - 7.2	mg/L	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Sulfate	No	01/07/13	15.6 - 38.5	mg/L	n/a	MCL = 250	Naturally occurring
Selenium	No	01/14/13	ND - 2.7	µg/L	n/a	MCL = 50	Naturally occurring
Zinc	No	04/15/13	ND - 0.1	mg/L	n/a	MCL = 5	Naturally occurring
Thallium	No	04/15/13	ND - 0.9	µg/L	n/a	MCL = 2	Naturally occurring
Perchlorate	No	01/14/13	ND - 1.1	µg/L	n/a	AL = 18 ⁽³⁾	Fertilizer
Volatile Organic Contaminants							
Tetrachloroethene	No	10/03/13	ND - 1.2	µg/L	0	MCL = 5	Industrial/commercial discharge
MTBE	No	03/19/13	ND - 0.8	µg/L	0	MCL = 10	Gasoline additive
Total Trihalomethanes	No	10/21/13	ND - 8.2	µg/L	n/a	MCL = 80	Disinfection by-products
Synthetic Organic Contaminants Including Pesticides and Herbicides							
None Detected	--	--	ND	--	--	--	--
Radionuclides							
Gross Alpha	No	12/17/13	0.94 - 3.58	pCi/L	n/a	MCL = 15	Naturally occurring
Radium 226	No	12/17/13	0.09 - 1.84	pCi/L	n/a	MCL = 5 ⁽⁴⁾	Naturally occurring
Radium 228	No	12/17/13	0.39 - 1.73	pCi/L	n/a	MCL = 5 ⁽⁴⁾	Naturally occurring
Unregulated Contaminant Monitoring Regulation (UCMR) Contaminants⁽⁵⁾							
1,4-Dioxane	No	10/17/13	0.1 - 3.0	µg/L	n/a	No MCL	Naturally occurring
Chromium	No	10/16/13	0.3 - 1.0	µg/L	100	MCL = 100	Natural deposits
Hexavalent Chromium	No	10/16/13	ND - 1.0	µg/L	n/a	No MCL	Natural deposits
Strontium	No	10/24/13	74.0 - 170.0	µg/L	n/a	No MCL	Naturally occurring
Chlorate	No	10/17/13	ND - 170	µg/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 (µg/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 - picocuries per liter is a measure of radioactivity in water.

- (1) - During 2011, 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 highly restricted sodium diets and 270 mg/L for those on moderately restricted sodium diets.
- (3) - Perchlorate is an unregulated contaminant. However, the State Department of Health has established an action level of 18 µg/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 for one year. Results will be used by the EPA to determine if the contaminants need to be regulated in the future.

SOURCE WATER ASSESSMENT

The New York State Department of Health, 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 in 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 Water District office.

Copies of the Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2013, are available at the Garden City Park Water District office which is located at 333 Marcus Avenue, Garden City Park, New York and at 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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