2024 drinking water quality report

GARDEN CITY PARK WATER DISTRICT

PUBLIC WATER SUPPLY IDENTIFICATION NO. 2902825

ANNUAL WATER SUPPLY REPORT **MAY 2025**

The Garden City Park Water District is pleased to present the 2024 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.

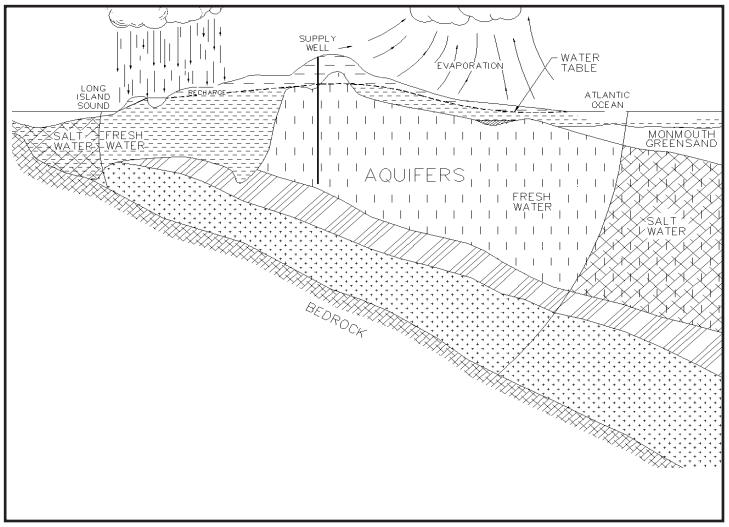
SOURCE OF OUR WATER

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 2024 was 18,000. The total amount of water withdrawn from the aquifer in 2024 was 1.141 billion gallons, of which approximately 91 percent was billed directly to consumers. The remaining 9 percent water loss can be attributed to fire fighting, water main flushing and system leaks.



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. 6 and 11 for the removal of volatile organic compounds. The District has constructed a GAC treatment system to remove PFOA/PFOS at Well Nos. 6, 7, 9, 10 and 11. Well No. 9 is equipped with a nitrate removal system. The District has also constructed an AOP treatment systems to remove 1,4-Dioxane at Wells 6 and 9. GAC & AOP systems have been constructed at Plant No. 8 and will be in service in mid-2025. 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. Residential customers are billed at $2.50 per 1,000 gallons used after the initial 10,000 gallons minimum charge or $18.

QUARTERLY WATER RATES

Consumption (gallons)	Charges
Residential Rate -Up to 10,000	$18.00
Residential Rate - Over 10,000	$2.50/thousand gallons
Commercial Rate - Up to 20,000	$60.00
Commercial Rate - Over 20,000	$3.00/thousand gallons

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.

Some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidum, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

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.

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:

Antimony	Hexachloro-1,3-butadiene	8:2FTS	Dieldrin
Apparent Color	m&p-Xylene	11Cl-PF3OUdS	Bromodichloro-methane
Arsenic	o-Xylene	1,1,1,2-Tetrachloroethane	Bromoform
Beryllium	Styrene	1,1,2,2-Tetrachloroethane	Chloroform
Cadmium	Toluene	1,1-Dichloroethane	Dibromoacetic Acid
Chromium	trans-1,2-Dichloroethene	1,1-Dichloropropene	Dibromochloro-methane
Fluoride	Trichloroethene	1,2,3-Trichlorobenzene	Dichloroacetic Acid
Iron	Vinyl chloride	1,2,3-Trichloropropane	Haloacetic Acids (Total)
Lead	Hexachlorocyclopentadiene	1,2,4-Trimethylbenzene	Monobromoacetic Acid
Manganese	Alachlor	1,3,5-Trimethylbenzene	Monochloroacetic Acid
MBAS, Calculated as LAS	Chlordane (Technical)	1,3-Dichlorobenzene	Trichloroacetic Acid
Mercury	Endrin	1,3-Dichloropropane	Acetaldehyde
Nitrogen, Ammonia	gamma-BHC (Lindane)	2,2-Dichloropropane	Benzaldehyde
Silver	Heptachlor	2-Chlorotoluene	Butanal
Thallium	Heptachlor epoxide	4-Chlorotoluene	Crotonaldehyde
Zinc	Hexachlorobenzene	Bromobenzene	Cyclohexanone
Bromate	Methoxychlor	Bromochloromethane	Decanal
Chlorite	PCB Screen	Bromomethane	Glyoxal
Cyanide, Free	Toxaphene	Chlorodifluoromethane	Heptanal
Perchlorate	PFBS	Chloroethane	Hexanal
1,1,1-Trichloroethane	ADONA	Chloromethane	Methyl glyoxal
1,1,2-Trichloroethane	PFEESA	cis-1,3-Dichloropropene	Nonanal
1,1,2-Trichlorotrifluoroethane	HFPO-DA	Dibromomethane	Octanal
1,1-Dichloroethene	NFDHA	Dichlorodifluoromethane	Pentanal
1,2,4-Trichlorobenzene	PFDA	Isopropylbenzene (Cumene)	Propanal
1,2-Dichlorobenzene	PFDoA	Methylene Chloride	E.coli
1,2-Dichloroethane	PFHpS	n-Butylbenzene	Total Coliforms
1,2-Dichloropropane	PFPeS	n-Propylbenzene	Butyric Acid
1,4-Dichlorobenzene	PFUnA	p-Isopropyltoluene	Formic Acid
Benzene	PFMPA	sec-Butylbenzene	Pyruvic Acid
Carbon tetrachloride	PFMBA	tert-Butylbenzene	Valeric Acid
Chlorobenzene	4:2FTS	trans-1,3-Dichloropropene	Acetic Acid
cis-1,2-Dichloroethene	6:2FTS	Trichlorofluoromethane	Propionic Acid
Ethylbenzene	9Cl-PF3ONS	Aldrin	

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

CONTACTS FOR ADDITIONAL INFORMATION

We are pleased to report that our drinking water 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 5:00 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.

2024 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
Lead & Copper Rule							
Copper	No	July/August/ September 2023	0.003 - 0.240 0.079[1]	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead	No	July/August/ September 2023	ND - 9.1 2.6[1]	ug/l	0	AL = 15	Corrosion of household plumbing systems and service lines connecting building to water mains, erosion of natural deposits
Inorganic Contaminants							
Barium	No	10/17/24	0.018 - 0.031	mg/l	2.0	MCL - 2.0	Naturally occurring
Turbidity	No	03/27/24	ND - 1.1	NTU	n/a	MCL = 5	
Sodium	No	03/20/24	21.7 - 43.7	mg/l	n/a	No MCL[2]	
Nickel	No	10/09/24	0.0006 - 0.001	ug/l	n/a	No MCL	
Magnesium	No	03/27/24	8.4 - 13.3	ug/l	n/a	No MCL	
Chloride	No	10/17/24	50.2 - 76.8	mg/l	n/a	MCL = 250	
Calcium	No	10/17/24	15.9 - 23.0	mg/l	n/a	No MCL	
Sulfate	No	03/27/24	18.5 - 32.1	mg/l	n/a	MCL = 250	
Selenium	No	10/09/24	ND - 2.2	ug/l	50	MCL = 50	
Nitrate	No	07/23/24	3.1 - 5.2	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Nitrite	No	09/30/24	ND - 0.05	mg/l	10	MCL = 10	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Chromium, Hexavalent	No	03/13/24	0-27 - 0.43	ug/l	n/a	No MCL	Erosion of natural deposits
Radionuclides							
Gross Alpha	No	05/25/23	ND - 2.81	pCi/L	0	MCL = 15	Erosion of natural deposits
Gross Beta	No	05/25/23	1.17 - 3.85	pCi/L[3]	0	MCL = 50	Decay of natural deposits and man-made emissions
Radium 226 & 228	No	05/25/23	0.0847 - 2.13	pCi/L	0	MCL = 5[3]	Erosion of natural deposits
Uranium	No	05/25/23	ND - 1.405	ug/l	n/a	MCL = 30	Erosion of natural deposits
Disinfection By-Products							
Total Trihalomethanes (TTHMS)	No	09/03/24	ND - 8.4	ug/l	0	MCL = 80	Disinfection by-product
Chlorate	No	06/20/24	17.5 - 25.3	ug/l	n/a	No MCL	Disinfection by-product
Disinfectants							
Chlorine Residual	No	Continuous	0.50 - 1.75	mg/l	n/a	MRDL = 4.0	Measure of Disinfectant
Volatile Organic Contaminants (VOCs)							
Acetone	No	02/27/24	ND - 3.5	ug/l	n/a	MCL = 50	Naturally occurring and is used in production of paints, varnishes, plastics, adhesives, organic chemicals and alcohol. Also used to clean and dry parts of precision equipment.
Methyl-tert-butyl ether	No	06/10/24	ND - 1.60	ug/l	0	MCL= 5	Gasoline additive
Tetrachloroethene	No	02/27/24	ND - 0.55	ug/l	n/a	MCL = 5	Industrial chemical discharge

2024 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS cont'd.

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
Physical Characteristics							
pH	No	Continuous	5.8 - 7.4	pH units	n/a	7.5 - 8.5[4]	Measure of acidity or alkalinity
Odor	No	10/09/24	ND - 1.0	Unit	n/a	MCL = 3	Naturally occurring
Calcium Hardness	No	10/17/24	39.7 - 57.40	mg/l	n/a	No MCL	
Total Hardness	No	03/27/24	78 - 108	mg/l	n/a	No MCL	
Total Alkalinity	No	03/20/24	17.8 - 67.60	mg/l	n/a	No MCL	
Total Dissolved Solids (TDS)	No	10/17/24	181 - 209	mg/l	n/a	No MCL	
Aldehydes							
Formaldehyde	No	02/27/24	ND - 9.0	ug/l	n/a	MCL = 50	By-product of oxidation
Synthethic Organic Contaminants (SOCs)							
1,4-Dioxane	No	01/04/24	ND - 0.38	ug/l	n/a	MCL = 1.0[5]	Industrial/Commercial chemical discharge[6]
Perfluorooctanoic Acid (PFOA)	No	12/03/24	ND - 7.97	ng/l	n/a	MCL = 10[7]	Released into the environment from widespread use in commercial and industrial applications[8][9]
Perfluorooctanesulfonic Acid (PFOS)	No	09/11/24	ND - 4.06	ng/l	n/a	MCL = 10[7]	
Unregulated Contaminant Monitoring Rule - Phase 5 (UCMR5)[10][11]							
Perfluorobutanoic Acid (PFBA)	No	10/15/2024	ND - 9.53	ng/l	n/a	MCL = 50,000	Industrial discharge
Perfluorohexanoic Acid (PFHxA)	No	10/17/2024	ND - 5.80	ng/l	n/a	MCL = 50,000	
Perfluoropentanoic Acid (PFPeA)	No	4/23/2024	ND - 8.06	ng/l	n/a	MCL = 50,000	Commerical industrial applications
Perfluorohexanesulfonic Acid (PFHxS)	No	9/11/2024	ND - 1.95	ng/l	n/a	MCL = 50,000	
Perfluoroheptanoic Acid (PFHpA)	No	9/23/2024	ND - 2.18	ng/l	n/a	MCL = 50,000	
Perfluorononanoic Acid (PFNA)	No	9/11/2024	ND - 2.78	ng/l	n/a	MCL = 50,000	

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.

Maximum Residual Disinfection 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 Disinfection Level 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 contaminants.

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

Nephelometric Turbidity Unit (NTU) - The unit used to measure the turbidity of a fluid or the presence of suspended particles in water.

Health Advisory (HA) - An estimate of acceptable drinking water levels for a chemical substance based on health effects information; a health advisory is not a legally enforceable Federal standard, but serves as technical guidance to assist Federal, State and local officials.

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).

Nanograms (ng/L) - Corresponds to one part of liquid in one trillion parts of liquid.(Parts per trillion-ppt).

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

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

[1] - During 2023, we collected and analyzed 30 samples for lead and copper. The action levels for both lead and copper were not exceeded at any site tested. The values reported for lead and copper represent the 90th percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. In our sampling program, the 90th percentile value is the 4th highest result.

[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] - MCL for Radium 226 and 228 is a combined total Radium = 5 pCi/L.

[4] - As per Nassau County Department of Health guidelines.

[5] - 1,4-Dioxane -The New York State (NYS) has established an MCL for 1,4 dioxane at 1 part per billion(ppb) effective August 26, 2020.

[6] - It is used as a solvent for cellulose formulations, resins, oils, waxes and other organic substances. It is also used in wood pulping, textile processing, degreasing, in lacquers, paints, varnishes, and stains; and in paint and varnish removers. Also used in personal care products including detergents.

[7] - The New York State (NYS) maximum contaminant level (MCL) is 10 ppt for PFOA and 10 ppt for PFOS as of August 2020.

[8] - PFOA/PFOS has been used to make carpets, leathers, textiles, fabrics for furniture, paper packaging, and other materials that are resistant to water, grease, or stains. It is also used in firefighting foams. Many of these uses have been phased out by its primary U.S. manufacturer; however, there are still some ongoing uses.

[9] - The US environmental Protection Agency (EPA) has established a life time interim health advisory level (HAL) of 0.0004 parts per trillion (ppt) for PFOA and 0.02 ppt for PFOS. The New York State (NYS) maximum contaminant level (MCL) is 10 ppt for PFOA and 10 ppt for PFOS as of August 2020.

[10] - USEPA Health Advisory Levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations. Health Advisory Levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available.

[11] - All perfluoroalkyl substances, besides PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50,000 ng/L

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.

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 2024, the Garden City Park Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2024 was 10.3 percent more than in 2023 This increase can most likely be attributed to the hotter and drier weather in the summer of 2024. The conservation program has been proven to be effective and will remain in effect in 2025.

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). The District distributes "water conservation" rulers that include conservation tips and a leak estimator. We also distribute "toilet dye packs" that help detect silent toilet bowl leaks. For additional water conservation measures, please refer to the Water District's annual newsletter.

INFORMATION ON LEAD SERVICE LINE INVENTORY

During 2023, the District collected 30 samples for lead and copper testing. The next round of samples will occur in 2026.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The Garden City Park Water District is responsible for providing high quality drinking water but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact the Garden City Park Water District, Supt. Michael Levy at (516) 746-3194. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible on our website at https://www.gcpwater.org/lead-service-line-information/, or it can be emailed directly upon request, or available for pick-up at the District office during normal business hours.

Copies of the Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2024, 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.