

2023 drinking water quality report

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

ANNUAL WATER SUPPLY REPORT

MAY 2024

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.

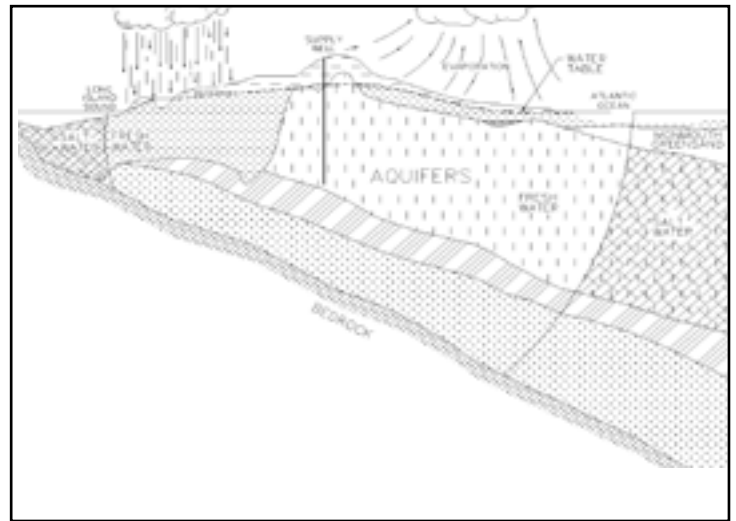
SOURCE OF OUR WATER

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 2023 was 18,000. The total amount of water withdrawn from the aquifer in 2023 was 1.030 billion gallons, of which approximately 91 percent was billed directly to consumers.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 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 system to remove 1,4-Dioxane at Well Nos. 6 and 9. GAC & AOP systems have been constructed at Plant No. 8 and will be in service in mid-2024. 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

QUARTERLY WATER RATES

The District utilizes a step billing schedule as shown in the table. The average consumer is being billed at \$2.50 per 1,000 gallons of water used.

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.

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

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 Cryptosporidium, 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.

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 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.

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	Atrazine	Bromoacetic Acid	Tetrachloroethene
Cadmium	Metolachlor	Dichloroacetic Acid	1,3-Dichloropropane
Chromium	Metribuzin	Trichloroacetic Acid	Chlorobenzene
Fluoride	Butachlor	Dibromoacetic Acid	1,1,1,2-Tetrachloroethane
Mercury	2,4-D	Total Haloacetic Acid	Bromobenzene
Langlier Saturation Index	2,4,5-TP (Silvex)	Chloroform	1,1,2,2-Tetrachloroethane
Selenium	Dinoseb	Bromoform	1,2,3-Trichloropropane
Silver	Dalapon	Dichlorodifluoromethane	2-Chlorotoluene
Zinc	Picloram	Chloromethane	4-Chlorotoluene
Color	Dicamba	Vinyl Chloride	1,2-Dichlorobenzene
Odor	Pentachlorophenol	Bromomethane	1,3-Dichlorobenzene
Iron	Hexachlorocyclopentadiene	Chloroethane	1,4-Dichlorobenzene
Manganese	bis(2-Ethylhexyl)adipate	Trichlorofluoromethane	1,24-Trichlorobenzene
Detergents (MBAS)	bis(2-Ethylhexyl)phthalate	Chlorodifluoromethane	Hexachlorobutadiene
Sulfate	Hexachlorobenzene	1,1-Dichloroethene	1,2,3-Trichlorobenzene
Free Cyanide	Benzo(A)Pyrene	Methylene Chloride	Benzene
Antimony	Aldicarb Sulfone	Trans-1,2-Dichloroethene	Toluene
Beryllium	Aldicarb sulfoxide	1,1-Dichloroethane	Ethylbenzene
Perchlorate	Aldicarb	cis-1,2-Dichloroethene	m,p-Xylene
Lindane	Total Aldicarb	2,2-Dichloropropane	O-Xylene
Heptachlor	Oxamyl	Bromochloromethane	Styrene
Aldrin	Methomyl	1,1,1-Trichloroethane	Isopropylbenzene (Cumene)
Perfluorodecanoic Acid	3-Hydroxycarbofuran	Carbon Tetrachloride	N-Propylbenzene
PFMPA	Carbofuran	1,1-Dichloropropene	1,3,5-Trimethylbenzene
Perfluorotridecanoic Acid	Carbaryl	1,2-Dichloroethane	Tert-Butylbenzene
HFPO-DA	Glyphosate	Trichloroethene	1,2,4-Trimethylbenzene
6:2FTS	Diquat	1,2-Dichloropropane	Sec-Butylbenzene
2,3,5,6-Tetrafluorobenzaldehyde	Endothall	Dibromomethane	4-Isopropyltoluene (P-Cumene)
Crotonaldehyde	1,2-Dibromoethane (EDB)	Trans-1,3-Dichloropropene	N-Butylbenzene
Heptanal	Perfluoroundecanoic Acid	PFEESA	Perfluorononanoic acid
Pentanal	Perfluorohexanoic Acid	Perfluorododecanoic Acid	Perfluorooctanesulfonic acid
Chlorite	Perfluoropentanesulfonic Acid	NMeFOSSA	Perfluoroheptanesulfonic Acid
Valeri Acid	NETFOSSA	11Cl-P3ONS	PFMBA
Dimethipin	NFDHA	ADONA	Perfluorotetradecanoic Acid
Tebuconazole	8:2FTS	4:2FTS	9CL-PF3ONS
o-Toluidine	1,1,2-Trichlorotrifluoroethane	Acetone	Butanal
2-Propen-1-OL	Acetaldehyde	Benzaldehyde	Glyoxal
2-Butanone (MEK)	Decanal	Formaldehyde	Methy Glyoxal (2-Oxopropanal or Pyruvic Aldehyde)
Naphthalene	Nonanal	Octanal	Butyric Acid
Chloroacetic Acid	Propanal	Lithium	Propionic Acid
Heptachloro Epoxide	Cyclohexanone	Formic Acid	Alpha-Hexachlorocyclohexane
Dieldrin	Germanium	Chlorpyrifos	Propfenofos
Endrin	Ethoprop	Oxyfluorfen	Butylated Hydroxyanisole
Methoxychlor	Total Permethrin (cis- & trans-)	Tribufos	2-Methoxyethanol
Toxaphene	Quinoline	1-Butanol	HAA9 (9 Haloacetic Acids)
Chlordane	2-Hexanone	4-Methyl-2-Pentanone (MIBK)	Chlorodibromoacetic Acid
Total PCBs	Bromochloroacetic Acid	Tetrahydrofuran	HAA5 (5 regulated Haloacetic Acids)
Propachlor	1,2-Dibromo-3-Chl.Propane	Bromodichloroacetic Acid	HAA6Br (6 brominated Haloacetic Acids)
Alachlor	Dioxin	cis-1,3-Dichloropropene	Acetic Acid
Simazine	1,1,2-Trichloroethane	1,1,2-Trichlorotrifluoroethane	

2023 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 2023	0.003 - 0.240 0.079 ⁽¹⁾	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	July/August/September 2023	ND - 9.1 2.6 ⁽¹⁾	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Barium	No	02/21/23	0.021 - 0.028	mg/l	2.0	MCL - 2.0	Naturally occurring
Turbidity	No	10/11/23	ND - 1.9	NTU	n/a	MCL = 5	
Sodium	No	02/17/23	21.6 - 38.5	mg/l	n/a	No MCL ⁽²⁾	
Ammonia	No	02/01/23	ND - 0.18	mg/l	n/a	No MCL	
Nickel	No	02/01/23	ND - 0.0011	ug/l	n/a	No MCL	
Magnesium	No	02/07/23	7.8 - 12.0	ug/l	n/a	No MCL	
Chloride	No	02/21/23	44.5 - 72.9	mg/l	n/a	MCL = 250	
Calcium	No	02/21/23	13.6 - 20.8	mg/l	n/a	No MCL	
Sulfate	No	02/07/23	20.5 - 32.4	mg/l	n/a	MCL = 250	
Nitrate	No	02/21/23	2.6 - 6.0	mg/l	10	MCL = 10	
Nitrite	No	02/01/23	ND - 0.22	mg/l	10	MCL = 10	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Thallium	No	02/17/23	ND - 0.35	ug/l	n/a	MCL = 5	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Hexavalent Chromium	No	09/20/23	ND - 0.88	ug/l	n/a	No MCL	Natural deposits and Industrial discharge
Radionuclides							
Gross Alpha	No	05/25/23	ND - 2.81	pCi/L	0	MCL = 15	Naturally occurring
Gross Beta	No	05/25/23	1.17 - 3.85	pCi/L	0	MCL = 50	
Radium 226 & 228	No	05/25/23	0.0847 - 2.13	pCi/L	0	MCL = 5 ⁽³⁾	
Uranium	No	05/25/23	ND - 1.405	ug/l	n/a	MCL = 30	
Disinfection By-Products							
Total Trihalomethanes (TTHMs)	No	09/26/23	ND - 3.3	ug/l	n/a	MCL = 80	Disinfection By-Products
Disinfectants							
Chlorine Residual	No	Continuous	0.3 - 1.53	mg/l	n/a	MRDL = 4.0	Measure of Disinfectant
Unregulated Contaminants							
Perfluoroheptanoic Acid	No	10/16/23	ND - 1.8	ng/l	0	MCL = 50,000	Industrial discharge
Perfluorobutanoic Acid	No	10/16/23	ND - 8.8	ng/l	0	MCL = 50,000	Industrial discharge
Perfluorobutanesulfonic Acid	No	09/20/23	ND - 1.9	ng/l	0	MCL = 50,000	Industrial discharge
Perfluorohexanoic acid	No	10/16/23	ND - 6.5	ng/l	0	MCL = 50,000	Industrial discharge
Perfluoropentanoic Acid	No	10/16/23	ND - 11.0	ng/l	0	MCL = 50,000	Industrial discharge

2023 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
Synthetic Organic Contaminants (SOCs)							
1,4-Dioxane	No	01/19/23	0.022 - 0.11	ug/l	n/a	MCL = 1.0 ⁽⁵⁾	Industrial discharge
Perfluorooctanoic Acid (PFOA)	No	09/20/23	ND - 3.8	ng/l	0	MCL = 10.0	Industrial discharge ⁽⁶⁾
Unregulated Contaminant Monitoring Rule - Phase 4 (UCMR4)⁽⁴⁾							
Manganese	No	01/17/19	0.62 - 30.8	ug/l	n/a	MCL = 300 ⁽⁷⁾	Naturally occurring
Bromide	No	02/21/23	ND - 0.15	ug/l	n/a	No MCL	Naturally occurring
Chlorate	No	02/21/23	ND - 21.9	ug/l	n/a	No MCL	Naturally occurring
Carboxylic Acids							
Tribromoacetic Acid	No	04/27/23	ND - 2.2	ug/l	n/a	No MCL	Naturally occurring
Volatile Organic Contaminants (VOCs)							
Methyl-tert-butyl ether	No	05/12/23	ND - 1.7	ug/l	0	MCL = 5	Gasoline additive
Physical Characteristics							
pH	No	Continuous	6.3 - 8.0	pH units	n/a	7.5 - 8.5 ⁽⁴⁾	Measure of acidity or alkalinity
Calcium Hardness	No	02/21/23	34.0 - 51.9	mg/l	n/a	No MCL	Naturally occurring
Total Hardness	No	02/07/23	70.0 - 97.9	mg/l	n/a	No MCL	Naturally occurring
Total Alkalinity	No	02/17/23	25.4 - 72.3	mg/l	n/a	No MCL	Naturally occurring
Total Dissolved Solids (TDS)	No	02/21/23	145.0 - 219.0	mg/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.

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.

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

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).

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 per Liter 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⁾ - 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.

⁽⁷⁾ - If iron and manganese are present, the total concentration of both should not exceed 500 ug/l.

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.

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 2023, the Garden City Park Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2023 was 7.9 percent less than in 2022. This decrease can most likely be attributed to the cooler and wetter weather in the summer of 2023. The conservation program has been proven to be effective and will remain in effect in 2024.

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.

A PUBLICATION OF THE GARDEN CITY PARK WATER/FIRE DISTRICT

Garden City Park Water/Fire District
333 Marcus Avenue
P.O. Box 806
Garden City Park, NY 11040

Phone: 516-746-3194

Fax: 516-746-3157

Email: info@gcpwater.org

VISIT OUR WEBSITE: www.gcpwater.org

PRESORTED
FIRST CLASS MAIL
U.S. Postage
PAID

New Hyde Park, NY 11040
PERMIT No. 1502

Copies of the Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2023, 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.