drinking water quality report

CITY OF GLEN COVE WATER DEPARTMENT PUBLIC WATER SUPPLY IDENTIFICATION NO. 2902826

ANNUAL WATER SUPPLY REPORT

MAY 2023

The City continues its commitment to provide our residents with drinking water that meets or exceeds quality standards while taking the necessary steps to improve our water supply system infrastructure.

Pamela D. Panzenbeck Mayor

SOURCE OF OUR WATER

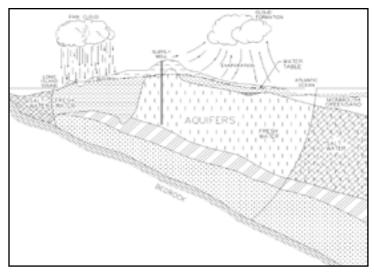
The source of water for the City is groundwater pumped from five (5) wells located throughout the community that are drilled into the aquifers beneath Long Island, as shown on the adjacent figure. Generally, the water quality of the aquifers is good to excellent.

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 radiological contaminants.

In order to ensure that 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's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The population served by the City of Glen Cove during 2022 was **28,000**. The total amount of water pumped by the City in 2022 was **1.429 billion** gallons, of which approximately **81** percent was billed directly to consumers.

The remaining un-metered water is from uses such as municipal and public school facilities, fire fighting, hydrant flushing, main breaks and undetected service line and water main leaks.



THE LONG ISLAND AQUIFER SYSTEM

WATER TREATMENT

The Water Department treats the water supply before it enters the distribution system. A small amount of chlorine is added to assure the water maintains its bacteria-free quality. Our water is also treated with sodium hydroxide to increase its pH to reduce its corrosivity before it enters the distribution system. This treatment reduces the leaching of copper and lead from household plumbing. Source water from the Kelly Street well and two (2) wells at Duck Pond Road are treated by air stripping to remove various volatile organic chemicals. Source water from the one (1) Duck Pond Road well is treated by granular activated carbon filters to remove various organic chemicals and pesticides. All treatment is approved by and in strict accordance with Nassau County Department of Health standards. Our well at Seaman Road has been removed from service.

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.

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 2022, the City of Glen Cove continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2022 was approximately **2.3% more** than the pumpage for 2021.

Water supply management has long been a practice in Glen Cove. Over the last 20 years, the city has initiated numerous programs geared to reducing water usage. Obviously, continued water conservation efforts will be required to maintain ample supplies.

Some of the major water conservation measures implemented by the City are:

Water Conservation Ordinances – local ordinances have long been in effect to restrict non-potable water use during periods of peak demand, such as Summer periods and fire emergencies. In 1987, the City, in an effort to promote conservation, amended its municipal ordinances and adopted stricter regulations related to:

- Water sprinkling (odd/even) hours are 5:00 a.m. to 9:00 a.m. and then again from 4:00 p.m. to midnight. There is NO watering permitted on the 31st of any month. Sprinkler systems must be equipped with a backflow device and rain sensor.
- Car washing only self closing shut off valved hose permitted for use.
- Water saving plumbing fittings and fixtures are required on all new residential and commercial construction and in certain alterations and additions to existing construction.

WATER QUALITY

In accordance with State regulations, the City of Glen Cove 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, synthetic organic contaminants and radiological contaminants. Over 135 separate parameters are tested for in each of our wells numerous times per year. Over 5,000 tests are taken each year from the distribution system and supply wells. The table presented on page 3 depicts which parameters or contaminants were detected in your drinking water. 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 affects.

COST OF WATER

Our residential rate structure for each 3 month period is as follows: \$2.71 per 1,000 for the first 45,000 gallons, \$3.06 per 1,000 gallons for the next 45,000 gallons, and \$3.39 per 1,000 gallons for usage over 90,000 gallons.

WATER SYSTEM IMPROVEMENTS

The City of Glen Cove is committed to providing Glen Cove residents with the highest quality water and to improve the overall efficiency of the system. With this in mind, the Department of Public Works had undertaken an internal audit of all water department facilities, mechanical systems and delivery infrastructure system improvements are made as necessary. The City is in the process of constructing an air stripping treatment facility at Duck Pond Road well site for the removal of the contaminant Freon and the rehabilitation of Seaman Road.

Trichloroacetic Acid

Dibromoacetic Acid

SOURCE WATER ASSESSMENT

The NYSDOH, with assistance from the local health department and the consulting firm CDM Smith, 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. See Section entitled "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.

Drinking water is derived from 5 wells. The source water assessment has rated most of the wells as having a very high susceptibility to industrial solvents, all of the wells as having a high susceptibility to nitrates, and one well as having a medium high susceptibility to microbial contamination. The very high susceptibility to industrial solvents is due primarily to point sources of contamination related to transportation routes and commercial/industrial facilities and related activities in the assessment area. The high susceptibility to nitrate contamination is attributable to unsewered residential land use and related practices in the assessment area, such as fertilizing lawns. Therefore, continued vigilance in compliance with water quality protection and pollution prevention programs as well as continued monitoring and enforcement will help to continue to protect groundwater quality.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting the City Water Dept.

The City of Glen Cove Water Department conducts over 5,000 water quality tests throughout the year, testing for over 135 different contaminants which have been undetected in our water supply including:

cluding:	
senic	Atrazine
dmium	Metolachlor
romium	Metribuzin
ercury	Butachlor
nglier Saturation Index	2,4-D
lver	2,4,5-TP (Silvex)
Butylbenzene	Dinoseb
mmonia	Dalapon
dicarb Sulfoxide	Picloram
3,5-Trimethylbenzene	Dicamba
dor	Pentachlorophenol
rbidity	Hexachlorocyclopentadiene
coli	bis(2-Ethylhexyl)adipate
yrene	bis(2-Ethylhexyl)phthalate
trachloroethene	Hexachlorobenzene
Xylene	Benzo(A)Pyrene
etergents (MBAS)	Aldicarb Sulfone
ee Cyanide	Sec-Butylbenzene
ntimony	Aldicarb
eryllium	Total Aldicarbs
allium	Oxamyl
ndane	Methomyl
eptachlor	3-Hydroxycarbofuran
drin	Carbofuran
eptachloro Epoxide	Carbaryl
eldrin	Glyphosate
drin	Diquat
ethoxychlor	Endothall
xaphene	1,2-Dibromoethane (EDB)
lordane	1,2-Dibromo-3-Chl.Propane

Dichloroacetic Acid

Total PCRs

Propachlor

Simazine

cis-1.2-Dichloroethene Ammonia Isopropylbenzene (Cumene) M.P-Xvlene Methyl Tert.Butyl Ether (MTBE) N-Propylbenzene Dichlorodifluoromethane Chloromethane Vinvl Chloride Bromomethane Chloroethane Trichlorofluoromethane Nitrite 1,1-Dichloroethene Methylene Chloride Trans-1.2-Dichloroethene 1,1-Dichloroethane 2.2-Dichloropropane Bromochloromethane 1.1.1-Trichloroethane Carbon Tetrachloride 1.1-Dichloropropene 1.2-Dichloroethane Trichloroethene 1.2-Dichloropropane Dibromomethane Trans-1,3-Dichloropropene Dioxin cis-1 3-Dichloropropene 1.1.2-Trichloroethane Chloroacetic Acid

1.1.1.2-Tetrachloroethane Bromobenzene 1.1.2.2-Tetrachloroethane 1,2,3-Trichloropropane 2-Chlorotoluene 4-Chlorotoluene 1,2-Dichlorobenzene 1 3-Dichlorohenzene 1,4-Dichlorobenzene 1.24-Trichlorobenzene Hexachlorobutadiene 1.2.3-Trichlorobenzene Benzene Ethylbenzene 4-Isopropyltoluene (P-Cumene) 1,2,4-Trimethylbenzene Tert-Butvlbenzene Isopropylbenzene (Cumene)

Chlorobenzene

2022 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		June/July/	0.02 - 0.74				
Copper	No	August 2020	0.43(1)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	June/July/ August 2020	ND - 18.4 3.0 ⁽¹⁾	ug/l	0	AL = 15	
Barium	No	01/10/22	0.018 - 0.022	mg/l	n/a	MCL = 2	
Sodium	No	02/15/22	13.0 - 24.1	mg/l	n/a	No MCL ⁽²⁾	
Iron	No	05/06/22	ND - 0.16	ug/l	n/a	$MCL = 300^{(3)}$	
Color	No	07/12/22	ND - 6.0	Units	15	MCL = 15	
Zinc	No	05/06/22	ND - 0.16	ug/l	n/a	MCL = 5000	
Nitrate	No	07/12/22	3.3 - 6.5	mg/l	n/a	MCL = 10	
Magnesium	No	07/12/22	6.2 - 8.1	mg/l	n/a	No MCL	Naturally occurring
Fluoride	No	01/10/22	ND - 0.1	mg/l	n/a	MCL = 2.2	
Chloride	No	02/15/22	21.2 - 38.1	mg/l	n/a	MCL = 250	
Calcium	No	07/12/22	15.7 - 20.8	mg/l	n/a	No MCL	
Nickel	No	03/14/22	ND - 0.00056	mg/l	n/a	No MCL	
Sulfate	No	07/12/22	18.4 - 32.5	mg/l	n/a	MCL = 250	
Selenium	No	04/15/22	ND - 2.2	ug/l	50	MCL = 50	Discharge from petroleum
Perchlorate	No	02/14/22	ND - 2.7	ug/l	0	$AL = 18^{(4)}$	Oxygen additive in solid fuel propellant for rockets,
							missiles, and fireworks.
Disinfection By-Products	N	02/15/22	ND 72	/1	1	MGI 00	D:: C /: D D 1 /
Total Trihalomethanes	No	02/15/22	ND - 7.3	ug/l	n/a	MCL = 80	Disinfection By-Products
Radionuclides	2.1	02/04/02	0.50.50	G: /T	,	MOI 15	
Gross Alpha	No	03/04/22	0.58 - 5.0	pCi/L	n/a	MCL = 15	Naturally occurring
Gross Beta	No	03/04/22	2.67 - 4.82	pCi/L	n/a	MCL = 50	
Radium 226 & 228 Combined	No	12/07/22	0.33 - 1.74	pCi/L	n/a	$MCL = 5^{(5)}$	
Uranium	No	03/04/22	0.29 - 2.5	ug/l	n/a	MCL = 30	
Synthetic Organic Contaminar	nts						
1,4-Dioxane	No	11/03/22	0.034 - 0.13	ug/l	n/a	$MCL = 1.0^{(6)}$	Industrial discharge ⁽⁷⁾
Perfluorooctanesulfonic Acid (PFOS)	No	11/03/22	ND - 2.2	ng/l	n/a	$MCL = 10.0^{(8)}$	Industrial discharge ⁽⁹⁾
Perfluorooctanoic Acid (PFOA)	No	11/03/22	ND - 6.1	ng/l	n/a	$MCL = 10.0^{(8)}$	muustitai discilaige
Unregulated Contaminant Mon	nitoring Rule	(UCMR3)					
Perfluorobutanesulfonic Acid	No	02/14/22	ND - 2.1	n/gl	n/a	MCL = 50,000	
Perfluoroheptanoic Acid	No	11/03/22	ND - 3.8	ng/l	n/a	MCL = 50,000	To decay of all all all
Perfluorohexanesulfonic Acid	No	11/03/22	ND - 6.2	ng/l	n/a	MCL = 50,000	Industrial discharge
Perfluorononanoic Acid	No	11/03/22	ND - 4.5	ng/l	n/a	MCL =50,000	
Unregulated Contaminants Mo							
Manganese	No	02/13/21	ND - 0.46	ug/l	n/a	$MCL = 300^{(3)}$	Naturally occurring
HAA5	No	08/22/19	1.0 - 3.22	ug/l	n/a	MCL = 60	, ,
HAA6Br	No	11/09/22	ND - 1.2	ug/l	n/a	No MCL	Disinfection by-products
HAA9	No	08/22/19	2.36 - 6.77	ug/l	n/a	No MCL	2 isinicetion by products
Disinfectants		J. J. L. 17		4.D/ 1	11/4	1.0 1.101	
Chlorine Residual	No	Continuous	0.3 - 1.0	mg/l	n/a	MRDL = 4.0	Measure of disinfectant

2022 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							
Field pH	No	continuous	7.2 - 7.8	pH units	n/a	7.5 - 8.5 ⁽¹⁰⁾	Measure of water acidity or alkalinity
Total Hardness	No	07/12/22	64.9 - 85.5	mg/l	n/a	No MCL	Natually occurring
Calcium Hardness	No	07/12/22	39.2 - 51.9	mg/l	n/a	No MCL	Naturally occurring
Total Alkalinity	No	02/15/22	24.8 - 37.0	mg/l	n/a	No MCL	Naturally occurring
Total Dissolved Solids	No	07/12/22	150.0 - 174.0	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.

<u>Maximum Residual Disinfection Level Goal (MRDLG)</u> - 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.

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).

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

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

Nephelometric (NTU) - signifies that the instrument is measuring scattered light from the sample at 90-degree angle from the incident light.

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.

- (i) During 2020, we collected and analyzed 30 samples for lead and copper. The action levels for lead had 1 sample that exceeded the MCL at 1 site. The action levels for copper was 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) If iron and manganese are present, the total concentration of both should not exceed 500 ug/l. Higher levels may be allowed by the State when justified by the supplier of water.
- (4) Perchlorate is an unregulated contaminant. However, the State Health Dept. has established an action level of 18 ug/l.
- (5) MCL is for combined Radium 226 and Radium 228.
- (6) 1,4-Dioxane -The New York State (NYS) has established an MCL for 1,4 dioxane is 1.0 part per billion(ppb) effective August 26, 2020.
- (7) 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.
- (8) The US Environmental Protection Agency (EPA) has established a life time health advisory level (HAL) of 70 parts per trillion (ppt) for PFOA and PFOS combined. The New York State (NYS) established a maximum contaminant level (MCL) at 10 ppt for PFOA and 10 ppt for PFOS effective August 2020.
- (9) PFOA 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 at airfields. Many of these uses have been phased out by its primary U.S. manufacturer; however, there are still some ongoing uses.
 (10) As per Nassau County Department of Health guidelines.

City of Glen Cove Water Department 9 Glen Street Glen Cove, New York 11542-2798 (516) 676-2238

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CONTACTS FOR ADDITIONAL INFORMATION

If you have any questions about this report or concerning your water utility, please contact Michael Colangelo at the Water Department at (516) 676-2238 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, you can attend any of our regularly scheduled City Council meetings. They are normally held on the second and fourth Tuesday of each month at 7:30 p.m. at City Hall, unless otherwise posted.

The City of Glen Cove routinely monitors for different parameters and 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 contaminants. It's important to remember that the presence of these contaminants 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.

During 2020, the City Water Department collected 30 samples for lead and copper. The next round of samples will occur in 2023. 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. The City of Glen Cove 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 Cryptosporidum, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

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. If you are caring for an infant you should ask advice from your health care provider.