

THE CITY OF GLEN COVE 2011 ANNUAL DRINKING WATER QUALITY REPORT

“Once again the City met water quality standards. Our water delivery system, water quality, operations and maintenance continue to improve each year as we plan and invest for necessary capital improvements.”

- Ralph V. Suozzi, Mayor

Dear Neighbor,

The City of Glen Cove takes great satisfaction in delivering safe drinking water to the over 27,000 users who live within the City and to the additional 15,000 plus daily water consumers who work in and visit our beautiful City. This Annual Drinking Water Quality Report is furnished to the consumers of City of Glen Cove Water in compliance with Federal and State Regulations. This report is designed to inform you about the quality of water and services the City has delivered in the past calendar year and to give you other information regarding your water supply and conservation. It is important for customers to realize that extensive monitoring is required of all public water suppliers. Long Island water must comply with strictly enforced standards established by the U.S. Environmental Protection Agency, the N.Y.S. Health Department and the Nassau County Health Department.

In 2011, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard.

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

La relazione contiene delle informazioni importanti del suo che la bendo acqua. Parlare con qualcuno che capisce esso bene o averlo ha tradotto.

Contacts for Additional Information: If you have any questions regarding this report or any drinking water issues, please contact the Water Department at (516) 676-2297 or Nassau County Department of Health at (516) 227-9692. The EPA Safe Drinking Water Hotline is (800) 426-4791. The City's Public Water Supply Identification Number is NY2902826.

Water System Information: The City pumped 1,387,735,000 gallons of water from the groundwater supply in 2011. Approximately 1,248,961,500 gallons were delivered to consumers in the City through metered sales. 138,773,500 gallons or ten percent (10%) of total withdrawal was un-metered from uses such as municipal and public school facilities, fire fighting, hydrant flushing, main breaks, undetected service line leaks and water tank overflow.

Cost of Water: Our residential rate structure for each 3 month period is as follows: \$2.36 per 1000 for the first 45,000 gallons, \$2.66 per 1000 gallons for the next 45,000 gallons, and \$2.95 per 1000 gallons for usage over 90,000 gallons.

Sources of Supply: The Water Department supplies water from five wells located on four separate well fields throughout the community. The wells are drilled into the Magothy aquifer beneath Long Island. Glen Cove has a total well capacity of 9.87 million gallons per day. Glen Cove water is excellent quality, meeting all State and Federal drinking water standards. All well stations are monitored daily for proper operation by Certified Operators who meet all the requirements of New York State and Nassau County Departments of Health. Please note that unregulated private wells should not be used for consumptive purposes.

In general, 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 tap water is safe to drink, the State and the EPA prescribe regulations which 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.

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 (caustic soda) 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 Well N-9334 is treated by “air stripping” to remove various volatile organic chemicals (VOC’s). Source water from Wells N-9210, N-9211 and N-5261 are treated by Granular Activated Carbon (GAC) filters to remove various organic chemicals. All treatment is approved by, and in strict accordance with, Nassau County Department of Health standards.

Source Water Assessment: The New York State Department of Health, with assistance from the local health department and the CDM consulting firm, completed a source water assessment in 2007 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 “Table of Detected Contaminants” for a list of the contaminants that have been detected (if any). The source water assessments provide resource managers with additional information for protecting source waters into the future. 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 un-sewered residential land use and related practices in the assessment area, such as fertilizing lawns. A copy of the Source Water Assessment including a map of the assessment and a supplement to this annual water quality report can be viewed at the Water Department, City Hall.

Analytical Results: The City routinely monitors water quality taking 40 samples per month from 10 various locations citywide. Over 135 separate parameters are tested in each of our wells numerous times per year. As required by the USEPA, the New York State Sanitary Code and the Nassau County Department of Health, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes and synthetic organic compounds. Analytical testing results and information regarding the contaminants detected in this testing can be found within the table of this annual report identified as 2011 Table of Detected Parameters.

Many of these parameters are naturally found in all Long Island drinking water. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Some people may be more vulnerable to disease-causing microorganisms or pathogens in drinking water than the general population. Although our drinking water met or exceeded state and federal regulations, 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. Please note that there have been no known outbreaks of Cryptosporidiosis and giardiasis linked to the water supply in Nassau County. 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).

In 2011, the City performed and submitted 2009-2011 lead/copper data to the Nassau County Health Department as part of its triennial reduced lead/copper monitoring program and was approved to continue on a triennial monitoring basis by the Department. The monitoring for the period 2012-2014 will be performed in the Spring of 2014. The City tests its water supply weekly at various monitoring locations within the City limits. An independent laboratory to insure water purity and quality also performs additional monitoring, sampling, and testing.

During 2011, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. The City of Glen Cove did have a Tier 2 bacterial contamination violation in September of 2011 and a public notification was distributed to the public in October of 2011 which is within the 30 day notification requirement. As you can see by the table, our system had no other violations, but as demonstrated through our testing, some contaminants have been detected; however, these contaminants were detected within New York State drinking water standards requirements. Although nitrate was detected below the MCL, it was detected at 6.5 mg/l, which is greater than one half of the MCL. Therefore, we are required to present the following

information: "Nitrate in drinking water at levels above 10 mg/l is a health risk for infants, less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider." The Water Department also wishes to note that this Water Quality report is being issued beyond the May 31st reporting requirement deadline, however, system water quality has in fact improved over the prior years due to system wide improvements in treatment, operator training and system management.

Please share this information with all the other people who drink this water, especially those who may have not received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Capital Improvements: The City of Glen Cove is committed to providing Glen Cove residents with the best tasting water and to improve the overall efficiency of the system. With this in mind, we have replaced the carbon filter media at all well sites which utilize Granular Activated Carbon as a treatment method. The city continues to modernize the water distribution infrastructure including fire hydrant and valve replacements city-wide, instrumentation and control improvements at our well sites. Our water meter replacement program continues with the addition of Radio Remote Reading system in businesses and hard to access areas. The new meters are equipped with a remote head that will allow meters to be read without entering the customer's premises. The new system allows for more efficient computerized meter reading and automated billing. Capital improvements for 2012 included upgrades to water mains to increase water flow from the wells, a review of all water maintenance equipment. Capital improvements for 2013 include, but are not limited to, replacement of the well pumps at wells N-9210 and N9211, increased perimeter security, upgrading the primary power supply to selected well sites, improving and increasing stand-by/emergency power, updating of electrical control and monitoring systems, and upgrades to the City distribution mapping system. The City had its water engineers review four separately produced reports that all concluded the need for two additional wells for the City water supply system – one immediately, and a second for the near future. This need will be met by the proposed expansion of an existing well field through the purchase of adjoining private land allowing the City to add one additional well immediately for both redundancy and capacity with the possible addition of a second well at this site when needed. The City is also in the process of upgrading the VOC removal system from Well N-5261 from a GAC system, to an Air Stripper system, which will provide for enhanced VOC removal. An engineering study has already been prepared and approved by the Nassau County Health Department. Engineering design and preparatory work is anticipated to begin in 2013.

Team Work: The Water Department performs a city-wide hydrant flushing and maintenance program. All dead-end mains are flushed by opening hydrants in the spring and fall to remove rust and sediments that have may accumulated over time. The City also performs regular hydrant inspections and maintenance to ensure that all City owned hydrants function properly and are in a good state of repair to provide optimum fire-fighting service.

Vigilance of our drinking water: The City of Glen Cove is committed to protect our drinking water supplies, prevent contaminants from entering our aquifers, and ensure high quality by treating the water. As a result of our nation's current alert status we are diligent to ensure the continued safety and quality of our water supplies. We use the best available water treatment technology and provide continued training of our employees for emergency awareness and response.

The New York State Department of Conservation (NYSDEC) has instituted a program to manage storm water runoff to improve water quality within our water bodies. The City of Glen Cove has been extremely conscientious about protecting and maintaining our waterways by maintaining and improving our existing storm drainage network system and by enhancing wetland areas to improve water quality from storm water runoff.

The City of Glen Cove on an annual basis submits to the NYSDEC an annual report which outlines our Storm Water Management Program (SWMP). The annual report is available for public viewing and comment on the City of Glen Cove website, or at the Glen Cove Public Library. If you should have any comments they should be made in writing to the City of Glen Cove Department of Public Works, Attn: Stormwater, City Hall, 9 Glen Street.

If you would like to know how you can help improve our waterways, please visit our website at www.glencove-li.com or visit the Glen Cove Library to view storm water materials and the annual report.

Water Conservation: The City actively enforces the water conservation ordinance year round and has developed a water conservation plan as mandated by the N.Y.S. Department of Environmental Conservation. Lawn sprinkling, car washing and other outdoor

water use is permitted at properties (houses and buildings) with odd numbered address on odd numbered days and with even numbered addresses or no address number on even numbered days between the hours of 5 am to 9 am and 4 pm to 12 midnight. For example, 1 School Street may sprinkle on May 1, 3, 5, etc. and 40 School Street may sprinkle on May 2, 4, 6 etc. Automatic sprinkler systems must be equipped with a rain sensor. Customers can take many measures to conserve water and lower their water bills and should be conscientious in their daily use of water. Customers can also save water by only using their existing dishwashers and washing machines with full loads. The Water Department provides its customers with free

A Continuous Leak over 90 Days	
Diameter of Stream in Inches	Waste in Gallons
¼	1,181,500
1/8	296,000
1/16	74,000
1/32	18,000

water conservation kits consisting of toilet tank displacement bags, toilet tank leak detector tablets, shower head restrictors and water conservation instructions. Customers should check all toilets, all faucets inside and outside, including hose bibs and showerheads for leaks which are often easily and inexpensively repaired. Since leaks waste water and inflate your bill, it is wise to fix them quickly.

Water Conservation Measures And Potential Water Savings	
Measures Consumers Can Take	Potential Water Savings
Installing a toilet tank displacement bag	3.28 gallons per day
Installing a low flow showerhead or flow restrictor	3.7 to 7.2 gallons per day per person
Replacing a dishwasher with a water efficient model	5 gallons per load
Replacing a clothes washer with a water efficient model	6 gallons per day
Repairing a toilet leak	100 gallons per day

Distribution System Annual Data Definitions:

Maximum Contaminant Level Goal (MCLG): the goal is the level of a contaminant in drinking water below which there is no known or expected risk to health.

Maximum Contaminant Level (MCL): The “Maximum Allowed” is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLG’s as feasible using the best available treatment technology.

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

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

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU’s is just noticeable to the average person.

Parts per million (ppm) or milligrams per liter (mg/L): One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or micrograms per liter (ug/L): One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

Parts per trillion (ppt) or nanograms per liter (ng/l): One part per trillion corresponds to one minute in 2,000,000 years or a single penny in \$10,000,000,000.

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