

# Hicksville Water District

## 2009 Drinking Water Quality Report

Public Water Supply Identification No.: 2902829

### Board of Commissioners

Karl M. Schweitzer, Chairperson  
Nicholas J. Brigandi, Treasurer  
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### Superintendent

William E. Schuckmann

**ANNUAL WATER SUPPLY REPORT**

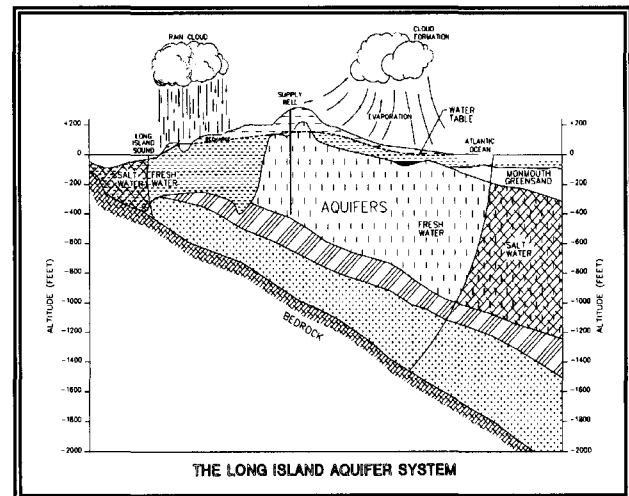
**May 2010**

The Hicksville Water District is pleased to present to you 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. Our constant goal is to provide you with a safe and dependable supply of drinking water every day. We also want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. 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 15 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 population served by the Hicksville Water District during 2009 was 47,810. The total amount of water withdrawn from the aquifer in 2009 was 2.22 billion gallons, of which approximately 85 percent was billed directly to consumers.



THE LONG ISLAND AQUIFER SYSTEM

The District utilizes a step billing schedule as shown below with the average consumer being billed at \$0.90/1000 gallons.

### Quarterly Water Rates

<u>Consumption</u>	<u>Charges</u>
Up to 10,000 gallons	\$7.50 minimum
11,000 – 30,000 gallons	\$0.90 per thousand gallons
31,000 – 50,000 gallons	\$1.15 per thousand gallons
51,000 – 70,000 gallons	\$1.65 per thousand gallons
71,000 gallons & Above	\$2.25 per 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 concerning your water utility, please contact Water District Superintendent William Schuckmann at (516) 931-0184 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 and fourth Tuesday of each month at 5:00 p.m. at the Water District office.

The Hicksville Water District 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 constituents. It's important to remember that the presence of these constituents 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.

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).

The USEPA established a Lead and Copper Rule that required all public water suppliers to sample and test for lead and copper at the tap. The first testing was required in 1992. All results were excellent indicating that the District's corrosion control treatment program was effective in

preventing the leaching of lead and copper from your home's plumbing in to your drinking water. The same testing was last conducted in 2008 with the same excellent results. The District will conduct its next round of sampling and testing IN 2011.

Some of the water from the Hicksville Water District has elevated levels of nitrates, but 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 advice from your health care provider.

### **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 2009, the Hicksville Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2009 was approximately 5.9 percent less than in 2008. This decrease in pumpage can most likely be attributed to the District's water conservation program and cooler and wetter weather in 2009.

Residents of the District can also implement their own water conservation measures such as retrofitting plumbing fixtures with flow restrictors, modifying automatic lawn sprinklers to include rain sensors, repairing leaks in the home, installing water conservation fixtures/appliances and maintaining a daily awareness of water conservation in their personal habits. In addition, the consumers should be aware that the Nassau County Lawn Sprinkler Regulations are still in effect. 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).

**HICKSVILLE WATER DISTRICT  
2009 WATER QUALITY REPORT  
TABLE OF DETECTED PARAMETERS**

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
<b>Inorganic Contaminants</b>							
Copper	No	July/Aug./Sept. 2008	ND - 0.02 <sup>(1)</sup>	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead	No	July/Aug./Sept. 2008	ND - 1.05 <sup>(1)</sup>	ug/l	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits
Sodium	No	06/08/09	3.8 - 26.9	mg/l	n/a	No MCL <sup>(2)</sup>	Naturally occurring
Zinc	No	06/11/09	ND - 0.02(1)	mg/l	n/a	MCL = 5	Naturally occurring
Chloride	No	06/08/09	4.1 - 45.4	mg/l	n/a	MCL = 250	Naturally occurring
Iron	No	06/11/09	ND - 100	ug/l	n/a	MCL = 300	Naturally occurring
Nitrate	No	11/16/09	3.1 - 9.2	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Calcium	No	06/08/09	1.2 - 11.6	mg/l	n/a	None	Naturally occurring
Magnesium	No	06/08/09	0.6 - 4.1	mg/l	n/a	None	Naturally occurring
Sulfate	No	06/08/09	ND - 17.3	mg/l	n/a	MCL = 25	Naturally occurring
<b>Synthetic Organic Contaminants Including Pesticides and Herbicides</b>							
None Detected	--	--	ND	--	--	--	--
<b>Volatile Organic Contaminants</b>							
Dichlorodifluoromethane	No	01/14/09	ND - 1.1	ug/l	0	MCL = 5	Industrial discharge
1,1,1-Trichloroethane	No	03/31/09	ND - 1.3	ug/l	0	MCL = 5	Industrial discharge
1,1-Dichloroethane	No	03/10/09	ND - 1.4	ug/l	0	MCL = 5	Industrial discharge
Trichloroethene	No	03/17/09	ND - 0.7	ug/l	0	MCL = 5	Industrial discharge
Total Trihalomethanes	No	01/06/09	ND - 13.5	ug/l	0	MCL = 80	Disinfection By-Product
<b>Radionuclides</b>							
Gross Alpha	No	06/09/09	ND - 2.9	pCi/L	n/a	MCL = 15	Naturally occurring
Gross Beta	No	09/29/09	ND - 2.2	pCi/L	n/a	MCL = 50	Naturally occurring
<b>Unregulated Contaminants<sup>(3)</sup></b>							
Perchlorate	No	01/14/09	1.6 - 12.9	ug/l	n/a	AL = 18	Fertilizer

**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.

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

**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).

**pCi/L** - pico Curies per Liter is a measure of radioactivity in water.

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

<sup>(1)</sup> - During 2008 we collected and analyzed 31 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. The next Lead and Copper Sampling Program is scheduled in 2011.

<sup>(2)</sup> - 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 moderately sodium diets.

<sup>(3)</sup> - Perchlorate is an unregulated contaminant. However, the New York State Dept. of Health has established an action level of 18 ug/l.

### WATER TREATMENT

The Hicksville Water District provides treatment at all wells to improve the quality of the water pumped prior to distribution to the consumer. The pH of the pumped water is adjusted upward to reduce corrosive action between the water and water mains and in-house plumbing by the addition of sodium hydroxide. Air stripping treatment units are located at Plant Nos. 1, 4, 5, 8 and 9. The District also adds small amounts of calcium hypochlorite (chlorine) as a disinfection agent and to prevent growth of bacteria in the water distribution system. A nitrate removal system is currently being constructed at Plant No. 8.

### WATER QUALITY

In accordance with State regulations, the Hicksville 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. 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 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.

### 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. See the 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.

Our drinking water is derived from 15 wells. The source water assessment has rated most of the wells as having a very high susceptibility to industrial solvents and all of the wells as having a high to very high susceptibility to nitrates. 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, high density residential land use and related practices, in the assessment area, such as fertilizing lawns.

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

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2009, are available at the Hicksville Water District office located at 4 Dean Street, Hicksville, New York and the local public library.

We at Hicksville 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 resources, which are the heart of our community, our way of life and our children's future.