

# Plainview Water District 2009 Drinking Water Quality Report

Public Water Supply Identification No.: 2902845

## Board of Commissioners

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**ANNUAL WATER SUPPLY REPORT**

**Spring 2010**

The Plainview 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 who live in the community and 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 12 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.

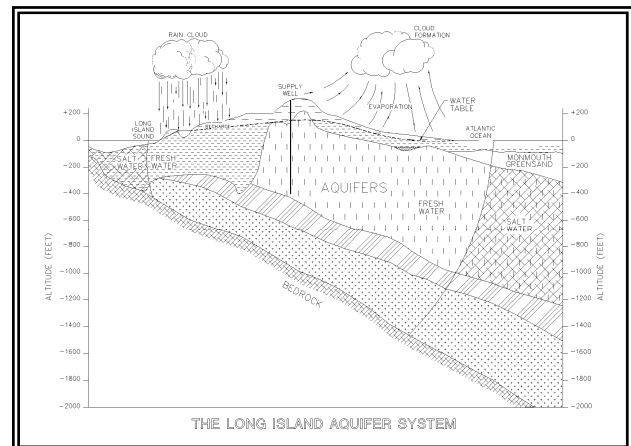
The population served by the Plainview Water District during 2009 was 35,000. The total amount of water withdrawn from the aquifer in 2009 was 1.54 billion gallons, of which approximately 95 percent was billed directly to consumers.

### COST OF WATER

The District utilizes a step billing schedule as shown with the average consumer being billed at \$1.20/1,000 gallons.

### QUARTERLY WATER RATES - 2009

<u>Consumption</u>	<u>Charges</u>
Up to 10,000 gallons	\$7.25 minimum
10,000 – 40,000 gallons	\$1.20 per thousand gallons
40,000 – 100,000 gallons	\$1.65 per thousand gallons
Over 100,000 gallons	\$2.40 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 Richard W. Tobin at (516) 931-6469 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 every Tuesday at 7:30 p.m. at the Water District office, located at 10 Manetto Hill Road. Updated meeting schedules are posted

on a monthly basis at the Water District office, Plainview Public Library and on the District website located at <http://www.plainviewwater.org>.

The Plainview 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.

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 is repeated every three years and was last conducted in 2008. Results of the 2008 testing also were excellent.

#### **NEW YORK STATE MANDATORY HEALTH ADVISORY**

Water from the Plainview Water District has elevated levels of nitrates, but 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.

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 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 Plainview Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2009 was 16 percent less than in 2008. This can most likely be due to the cool and wet weather in the summer of 2009 and not due to uncontrolled usage.

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 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).

#### **WATER TREATMENT**

The Plainview 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 lime. The pumped water is also chlorinated to a minimum chlorine residual of 0.1 milligrams per liter (mg/l) to protect against the growth of bacteria within the distribution system. At Plant No. 4, an individual well with high nitrate

# PLAINVIEW WATER DISTRICT - 2009 WATER QUALITY REPORT

## TABLE OF DETECTED PARAMETERS

Contaminants or Constituents	Violation (Yes/No)	Date of Max. Sample	Level Detected (Maximum) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
<b>Inorganic Contaminants</b>							
Copper	No	June, July, August, Sept. 2008	ND - 0.03 <sup>(1)</sup>	mg/l	1.3	AL = 1.3	Corrosion of galvanized pipes; Erosion of natural deposits
Lead	No	June, July, August, Sept. 2008	ND <sup>(1)</sup>	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Sodium	No	6/9/09	2.8 - 14.7	mg/l	n/a	No MCL <sup>(2)</sup>	Naturally occurring
Calcium	No	6/9/09	1.1 - 12.3	mg/l	None	None	Naturally occurring
Chloride	No	6/9/09	4.4 - 21.1	mg/l	n/a	MCL = 250	Naturally occurring
Iron	No	6/9/09	ND - 20	ug/l	n/a	MCL = 300	Naturally occurring
Nitrate	No	9/17/09	0.3 - 7.8	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Magnesium	No	6/9/09	0.4 - 4.2	mg/l	None	None	Naturally occurring
Zinc	No	6/9/09	ND - 0.03	mg/l	None	MCL = 5	Naturally occurring
Sulfate	No	12/7/09	ND - 8.0	mg/l	n/a	MCL = 250	Naturally occurring
<b>Synthetic Organic Contaminants Including Pesticides and Herbicides</b>							
None Detected	--	--	--	--	--	--	--
<b>Volatile Organic Contaminants</b>							
Total Trihalomethanes	No	6/29/09	ND - 14.0	ug/l	0	MCL = 80	Chlorine By-Product
<b>Unregulated Contaminants</b>							
Perchlorate	No	11/19/09	ND - 12.8	ug/l	n/a	AL = 18 <sup>(3)</sup>	Fertilizer and/or Chemical Industrial Discharge

**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.

**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 33 samples for lead and copper. The 90% percentile level is presented in the table. The action level for lead was not exceeded at any site tested. The action level for copper was exceeded at only one site. The next round of sampling and testing will occur in 2011.

<sup>(2)</sup> - No MCL has been established for sodium. However, 20 mg/l is a recommended guideline for people on highly restricted sodium diets and 270 mg/l for those on moderately restricted sodium diets

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

levels is blended with another well with low nitrate levels to meet the nitrate limit of 10 mg/ℓ. Carbon adsorption treatment systems are available for Well Nos. 1-2 and 3-2 for the removal of volatile organic compounds. Well Nos. 2-1, 4-2, 5-1, 5-2, 5-3 and 7 are presently treated by air stripping treatment systems for the removal of volatile organic compounds.

The District is in the process of executing a multi-plant Capital Improvement Program to upgrade the equipment and facilities throughout the District.

### **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.

Drinking water is derived from 12 wells. The source water assessment has rated most of the wells as having a very high susceptibility to industrial solvents and a high susceptibility to nitrates. The elevated 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 elevated susceptibility to nitrates is

due to unsewered residential land use and related practices, such as fertilizing lawns, in portions of the assessment area.

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

It must be noted that assessment results indicating an elevated susceptibility does not imply supply well contamination or inevitability. Susceptibility correlates to contaminant prevalence and sensitivity. Furthermore, a supply well that has a medium to high susceptibility demonstrates the need for continuing management of potential contamination sources. It is important to note that there is a distinct difference between raw source water and actual finished (treated) water delivered to the customers. Water suppliers are obligated by strict federal, state and local laws and regulations to provide water that is safe to drink. Treatment is required when water quality results indicate the presence of contaminants at or above an established maximum contaminant level.

### **WATER QUALITY**

In accordance with State regulations, the Plainview 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.

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 Plainview Water District office located at 10 Manetto Road, Plainview, New York, local Public Library and the Water District website located at <http://www.plainviewwater.org>.

We at the Plainview Water District work diligently 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.