

**Board of Commissioners**

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# Oyster Bay Water District

## 2010 Drinking Water Quality Report

Public Water Supply Identification No.: 2902844

**ANNUAL WATER SUPPLY REPORT**

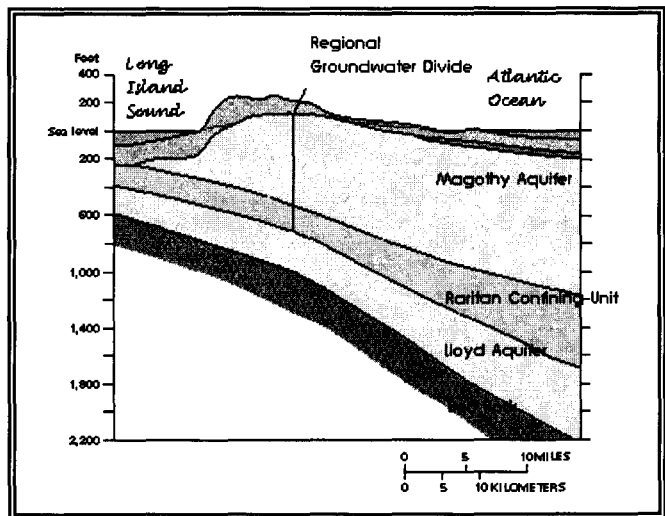
**May 2011**

The Oyster Bay 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. The Board of Commissioners is happy to report that our water is in full compliance with all Federal, State and County 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 five (5) wells located throughout the community that are drilled into the Glacial and Magothy aquifer beneath Long Island, as shown on the enclosed figure. Generally, the water quality of the aquifer in Oyster Bay is excellent.

The population served by the Oyster Bay Water District during 2010 was 8,800. The total amount of water withdrawn from the aquifer in 2010 was 464.9 million gallons, of which approximately 96 percent was billed directly to consumers.



In 2010, the District utilized a step billing schedule as shown on the following table. The average residential consumer (domestic use) is being billed at \$1.00/1,000 gallons. To obtain a copy of the sprinkler system, or multi-user water rates, please contact the District office.

### **Quarterly Water Rates – Residential**

<b><u>Consumption (gallons)</u></b>	<b><u>Charges</u></b>
Up to 12,000	\$1.00/thousand gallons
12,001 – 24,000	\$1.55/thousand gallons
24,001 – 33,000	\$2.00/thousand gallons
33,001 – 60,000	\$2.50/thousand gallons
60,001 – 150,000	\$3.30/thousand gallons
Over 150,000	\$3.95/thousand gallons

### **CONTACT 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 Operator of Record John Walsh (516) 922-4848 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 Thursday mornings at 9:00 a.m. at the Water District office.

The Oyster Bay 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 of our 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 into your drinking water. Follow-up testing was last conducted in 2008 with the same excellent results.

### **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 2010, the Oyster Bay Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2010 was 22.8 percent higher than in 2009. This increase can most likely be attributed to the extremely hot and dry summer weather that occurred in 2010.

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, 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). Utilizing the water conservation measures listed above can reduce your water use by 5%.

### **WATER TREATMENT**

The Oyster Bay 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. As mandated by the New York State and Nassau County Health Departments, the District currently adds a slight amount of chlorine to the water as a disinfection agent to prevent the growth of bacteria in the distribution system.

A granular activated carbon treatment system has been constructed at Plant No. 2 – Shutter Lane for the removal of low levels of volatile organic contaminant.

### **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

**OYSTER BAY WATER DISTRICT  
2010 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	June/Sept. 2008	ND - 0.07 <sup>(1)</sup>	mg/l	1.3	AL = 1.3	Corrosion of galvanized pipes; Erosion of natural deposits
Lead	No	June/Sept. 2008	ND - 1.61 <sup>(1)</sup>	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Iron	No	---	ND	ug/l	n/a	MCL = 300	Naturally occurring
Sodium	No	04/07/10	2.1 - 16.2	mg/l	n/a	No MCL <sup>(2)</sup>	Naturally occurring
Magnesium	No	04/07/10	2.6 - 4.9	mg/l	n/a	None	Naturally occurring
Chloride	No	12/13/10	6.7 - 12.8	mg/l	n/a	MCL = 250	Naturally occurring
Nitrate	No	12/13/10	1.6 - 3.5	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Sulfate	No	12/13/10	ND - 13.8	mg/l	n/a	MCL = 250	Naturally occurring
Calcium	No	12/13/10	6.0 - 11.4	mg/l	n/a	None	Naturally occurring
Perchlorate	No	04/01/10	ND - 3.8	ug/l	n/a	AL = 18 <sup>(3)</sup>	Fertilizer
<b>Microbiological</b>							
Total Coliform	No	Weekly	None Detected	Positive or Negative	n/a	MCL = More than 5% of samples positive	Commonly found throughout the environment
<b>Radiological</b>							
Gross Alpha	No	10/25/10	0.1 - 0.7	pci/L	--	15 pci/L	Naturally occurring
Radium 228	No	10/25/10	0.3 - 1.0	pci/L	--	No MCL	Naturally occurring
<b>Volatile Organic Contaminants and Synthetic Organic Contaminants Including Pesticides and Herbicides</b>							
Tetrachloroethene	No	10/12/10	ND - 0.7	ug/l	0	MCL = 5	Industrial/Commercial Discharge
Total Trihalomethanes	No	10/12/10	ND - 1.0	ug/l	0	MCL = 80	Disinfection By-Product
MTBE	No	04/01/10	ND - 0.8	ug/l	0	MCL = 10	Gasoline Additive

**SPECIAL NOTE: The water supplied by the Oyster Bay Water District currently meets or exceeds all Federal, State and local drinking water standards.**

**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 20 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. Resampling is scheduled to occur 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 set an action level of 18.0 ug/l.

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 five (5) wells. The source water assessment has rated one (1) of the wells as having a very high susceptibility to industrial solvents. The elevated susceptibility to industrial solvents and nitrates is due primarily due to the shallow depth of Well No. 1 and due 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 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 District Office.

#### **WATER QUALITY**

In accordance with State regulations, the Oyster Bay 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 144 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.

#### **WATER SYSTEM IMPROVEMENTS**

The District is continuing with a Capital Improvement Program to rehabilitate existing equipment and facilities to ensure that the District is able to supply a safe and reliable source of drinking water and sufficient pumping capacity for fire flow protection. Within the last year, the Water District has recently completed a new treatment system at Plant No. 2 and the repainting of our tank at Plant No. 8. We are planning a few new capital improvement projects in 2011. Details of these projects are highlighted in the enclosed District Newsletter.

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2010, are available at the Oyster Bay Water District office located at 45 Audrey Avenue, Oyster Bay, New York and the local Public Library.

We at Oyster Bay 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.