

2013 drinking water quality report

OYSTER BAY WATER DISTRICT
PUBLIC WATER SUPPLY IDENTIFICATION NO. 2902844

Board of Commissioners
Robert J. McEvoy, Chairman
Michael F. Rich, III, Secretary
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ANNUAL WATER SUPPLY REPORT

MAY 2014

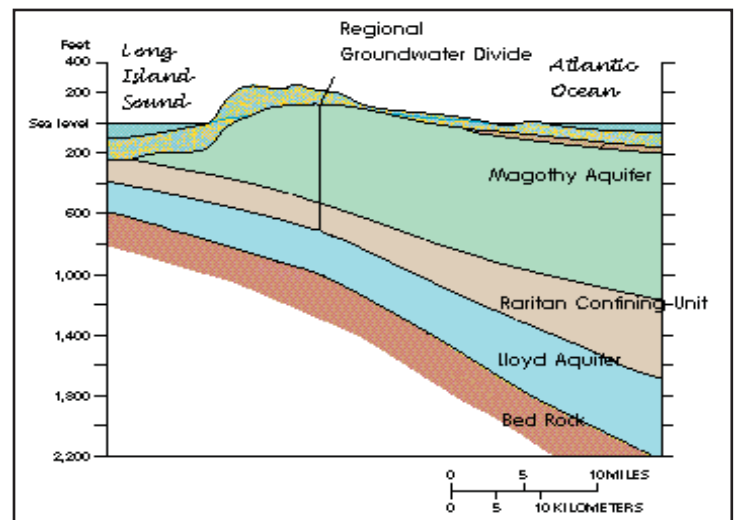
The Oyster Bay Water District is pleased to present to you this year's Water Quality Report. The report is required to be delivered to all residents of our District in compliance with Federal and State regulations. The Board of Commissioners is happy to report that our water is in full compliance with 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 aquifers beneath Long Island, as shown on the enclosed figure. Generally, the water quality of the aquifers in Oyster Bay is excellent.

In order to ensure that our 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 Oyster Bay Water District during 2013 was 8,800. The total amount of water withdrawn from the aquifer in 2013 was 436.3 million gallons, of which approximately 96 percent was billed directly to consumers.



THE LONG ISLAND AQUIFER SYSTEM

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.

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 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 2011 with the same excellent results. The next sampling program will occur this year.

COST OF WATER

The District utilizes a step billing schedule as shown on the following table. The purpose of step billing is to reward customers who conserve water. 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

Consumption (gallons)	Charges
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

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 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 2013, the Oyster Bay Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2013 was 5.2 percent more than in 2012. This can most likely be attributed to the hotter and drier weather conditions that occurred in 2013. The District also has implemented an Increase Water Rate Structure that promotes water conservation.

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%.

2013 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							
Copper	No	July/August 2011	ND-0.13 0.10 ⁽¹⁾	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	July/August 2011	ND - 3.8 2.3 ⁽¹⁾	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Iron	No	12/23/13	ND - 100	ug/l	n/a	MCL = 300	Naturally occurring
Manganese	No	12/23/13	ND - 400	ug/l	n/a	MCL = 300	Naturally occurring
Nickel	No	12/23/13	ND - 4	ug/l	n/a	MCL = 100	Naturally occurring
Barium	No	12/23/13	ND - 0.01	mg/l	n/a	MCL = 200	Naturally occurring
Sodium	No	06/07/13	6.1 - 12.4	mg/l	n/a	No MCL ⁽²⁾	Naturally occurring
Magnesium	No	06/07/13	3.3 - 5.6	mg/l	n/a	None	Naturally occurring
Chloride	No	12/23/13	9.3 - 18.2	mg/l	n/a	MCL = 250	Naturally occurring
Calcium	No	06/07/13	7.4 - 12.1	mg/l	n/a	None	Naturally occurring
Nitrate	No	12/02/13	ND - 3.4	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Sulfate	No	12/12/13	ND - 11.7	mg/l	n/a	MCL = 250	Naturally occurring
Unregulated Contaminants							
Perchlorate	No	12/12/13	ND - 2.9	ug/l	0	AL = 18 ⁽³⁾	Fertilizers, Road Flares
Volatile Organic Contaminants							
Tetrachloroethene	No	09/13/13	ND - 1.8	ug/l	0	MCL = 5	Industrial/Commercial discharge
Total Trihalomethanes (TTHMS)	No	03/05/13	ND - 1.0	ug/l	n/a	MCL = 80	Disinfection Byproduct
Synthetic Organic Contaminants Including Pesticides and Herbicides							
None Detected	--	--	ND	--	n/a	--	--
Radionuclides							
Gross Alpha	No	12/12/13	ND - 0.79	pCi/L	n/a	MCL = 15	Naturally occurring
Radium 226	No	12/23/13	ND - 2.5	pCi/L	n/a	MCL = 5	Naturally occurring
Radium 228	No	12/23/13	ND - 0.45	pCi/L	n/a	MCL = 5	Naturally occurring
Bacteriological							
Total Coliform	No	10 Samples Taken Monthly	None Detected	Positive or Negative	n/a	MCL = More than 5% of monthly samples positive	Commonly found throughout the environment

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).

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.

⁽¹⁾ - During 2011, 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 2014.

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

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 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 an elevated susceptibility to industrial solvents. The elevated susceptibility to industrial solvents and nitrates is due primarily 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 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 the rehabilitation of supply Well No. 6-2. We are planning a few new capital improvement projects in 2014. Details of these projects are highlighted in the enclosed District Newsletter.

The Oyster Bay Water District conducts over 3,000 water quality tests throughout the year, testing for over 130 different contaminants which have been undetected in our water supply including:

Arsenic	Metolachlor	Dichloroacetic Acid	Trans-1,3-Dichloropropene
Cadmium	Metribuzin	Trichloroacetic Acid	cis-1,3-Dichloropropene
Chromium	Butachlor	Dibromoacetic Acid	1,1,2-Trichloroethane
Fluoride	2,4-D	Total Haloacetic Acid	1,3-Dichloropropane
Mercury	2,4,5-TP (Silvex)	Bromodichloromethane	Chlorobenzene
Selenium	Dinoseb	Dibromochloromethane	1,1,1,2-Tetrachloroethane
Silver	Dalapon	Bromoform	Bromobenzene
Zinc	Picloram	Gross Alpha	1,1,2,2-Tetrachloroethane
Color	Dicamba	Gross Beta	1,2,3-Trichloropropane
Turbidity	Pentachlorophenol	Radium 226	2-Chlorotoluene
Odor	Hexachlorocyclopentadiene	Radium 228	4-Chlorotoluene
Ammonia	bis(2-Ethylhexyl)adipate	Dichlorodifluoromethane	1,2-Dichlorobenzene
Nitrite	bis(2-Ethylhexyl)phthalate	Chloromethane	1,3-Dichlorobenzene
Detergents (MBAS)	Hexachlorobenzene	Vinyl Chloride	1,4-Dichlorobenzene
Free Cyanide	Benzo(A)Pyrene	Bromomethane	1,24-Trichlorobenzene
Antimony	Aldicarb Sulfone	Chloroethane	Hexachlorobutadiene
Beryllium	Aldicarb sulfoxide	Trichlorofluoromethane	1,2,3-Trichlorobenzene
Thallium	Aldicarb	Chlorodifluoromethane	Benzene
Lindane	Total Aldicarb	1,1-Dichloroethene	Toluene
Heptachlor	Oxamyl	Methylene Chloride	Ethylbenzene
Aldrin	Methomyl	Trans-1,2-Dichloroethene	M,P-Xylene
Heptachloro Epoxide	3-Hydroxycarbofuran	1,1-Dichloroethane	O-Xylene
Dieldrin	Carbofuran	cis-1,2-Dichloroethene	Styrene
Endrin	Carbaryl	2,2-Dichloropropane	Isopropylbenzene (Cumene)
Methoxychlor	Glyphosate	Bromochloromethane	N-Propylbenzene
Toxaphene	Diquat	1,1,1-Trichloroethane	1,3,5-Trimethylbenzene
Chlordane	Endothall	Carbon Tetrachloride	Tert-Butylbenzene
Total PCBs	1,2-Dibromoethane (EDB)	Carbon Tetrachloride	1,2,4-Trimethylbenzene
Propachlor	1,2-Dibromo-3-Chl.Propane	1,1-Dichloropropene	Sec-Butylbenzene
Alachlor	Dioxin	1,2-Dichloroethane	4-Isopropyltoluene (P-Cumene)
Simazine	Chloroacetic Acid	1,2-Dichloropropane	N-Butylbenzene
Atrazine	Bromoacetic Acid	Dibromomethane	MTBE

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2013, 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.