

## WESTBURY WATER DISTRICT

# 2016 DRINKING WATER QUALITY REPORT

Public Water Supply Identification No: 2902856

**Board of Commissioners**  
William C. Olson, Chairman  
Kenneth O. Jones, Secretary  
Vincent Abbatiello, Treasurer

**Superintendent**  
John R. Ingram

## Annual Water Supply Report

May 2017

The Westbury Water District is pleased to present this year's Water Quality Report. It is required to be delivered to all residents of our district in compliance with federal and state regulations.

This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. 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 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 10 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 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.

To ensure that 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 Westbury Water District during 2016 was 20,500. The total amount of water withdrawn from the aquifer in 2016 was 1.16 billion gallons, of which approximately 93 percent was billed directly to consumers.

### COST OF WATER

The district bills its consumers utilizing a step billing schedule, as shown below. The average cost of water is \$1.25 per 1,000 gallons.

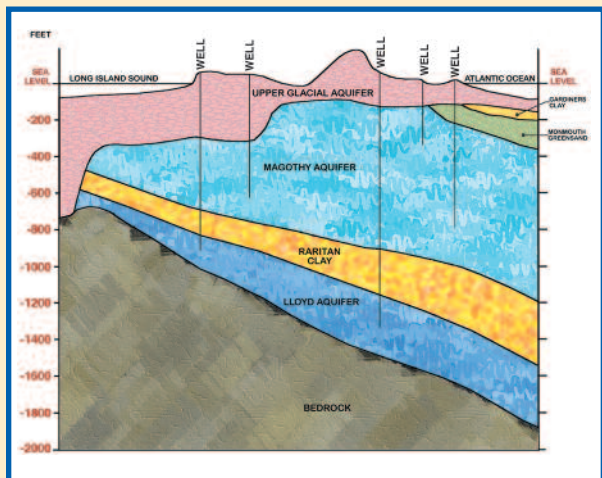
#### Step Billing Schedule

Water Use Per 6 Month Period	Cost (per 1,000 Gallons)
0 to 20,000	\$25.00 (min. per billing period)
20,001 – 60,000	\$1.25
60,001 – 100,000	\$1.50
100,001 – 150,000	\$1.75
150,001 – 200,000	\$2.00
Over 200,000	\$2.40

### 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 Superintendent John Ingram at the water district at (516) 333-0427 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 each Wednesday at 4:00 p.m. at the water district office.

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Aquifer System

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The Westbury 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 reasonably be 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 about contamination and potential health risks, please contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791 or [www.epa.gov/safewater](http://www.epa.gov/safewater).

### NY STATE MANDATORY HEALTH ADVISORY

Some people may be more vulnerable than the general population to disease-causing microorganisms or pathogens in drinking water. Immuno-compromised people such as those with cancer undergoing chemotherapy; people who have undergone organ transplants; people with HIV/AIDS or other immune system disorders; some elderly and infants can be particularly at risk for 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 at 1-800-426-4791.

Water from the Westbury Water District has a slightly elevated nitrate level, but it is 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 seek advice from your health care provider.

During 2014, the District collected 30 samples for lead and copper. The 90% level is presented in the table as the maximum result. The next round of samples will occur in 2017. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Westbury Water District is responsible for providing high quality drinking

### The Westbury Water District conducts over 10,000 water quality tests throughout the year, testing for over 130 different contaminants which have been undetected in our water supply including:

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

water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### 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 2016, the Westbury Water District continued to implement a water conservation program to minimize any unnecessary water use. The pumpage for 2016 was approximately 6.5 percent LESS than in 2015. This water use decrease can most likely be attributed to the district's water conservation

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# 2016 Water Quality Report

## WESTBURY WATER DISTRICT 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
<b>Inorganic Contaminants</b>							
Copper	No	June/July 2014	ND - 0.19 0.14 <sup>(1)</sup>	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead	No	June/July 2014	ND - 2.4 1.3 <sup>(1)</sup>	ug/l	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits
Barium	No	05/23/16	ND - 0.032	mg/l	2	MCL = 2.0	Naturally occurring
Iron	No <sup>(4)</sup>	05/23/16	ND - 710	ug/l	n/a	MCL = 300	Naturally occurring
Sodium	No	05/23/16	3.0 - 33.0	mg/l	n/a	No MCL <sup>(2)</sup>	Naturally occurring
Zinc	No	05/23/16	ND - 0.052	mg/l	n/a	MCL = 5	Naturally occurring
Chloride	No	05/23/16	2.4 - 54.1	mg/l	n/a	MCL = 250	Naturally occurring
Calcium	No	05/23/16	0.9 - 15.0	mg/l	None	No MCL	Naturally occurring
Magnesium	No	05/23/16	0.07 - 5.2	mg/l	None	No MCL	Naturally occurring
Nickel	No	05/23/16	0.7 - 2.6	ug/l	n/a	MCL = 100	Naturally occurring
Nitrate	No	12/12/16	ND - 8.6	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Sulfate	No	05/23/16	ND - 14.7	mg/l	n/a	MCL = 250	Naturally occurring
Thallium	No	05/23/16	ND - 0.02	mg/l	n/a	None	Naturally occurring
<b>Unregulated Contaminants</b>							
Perchlorate	No	05/23/16	ND - 8.4	ug/l	0	AL = 18 <sup>(3)</sup>	Fertilizers
<b>Volatile Organic Contaminants</b>							
Trichloroethene	No	07/18/16	ND - 0.72	ug/l	0	MCL = 5	Discharge from industrial facilities
Tetrachloroethene	No	08/08/16	ND - 2.36	ug/l	0	MCL = 5	Discharge from industrial facilities
1,1-Dichloroethane	No	08/08/16	ND - 3.75	ug/l	0	MCL = 5	Discharge from industrial facilities
1,1-Dichloroethene	No	08/08/16	ND - 1.5	ug/l	0	MCL = 5	Discharge from industrial facilities
1,1,1-Trichloroethane	No	05/04/16	ND - 0.64	ug/l	0	MCL = 5	Discharge from industrial facilities
m, p-xylene	No	01/04/16	ND - 0.86	ug/l	0	MCL = 50	Paint additive
<b>Micro-Bacteriological</b>							
Total Coliform	No	09/12/16	1 positive sample out of 244	Positive or Negative	-	MCL=Positive results in more than 5% of the monthly samples	Commonly found in the environment
<b>Radionuclides</b>							
Gross Alpha	No	09/08/16	ND - 2.03	pci/L	-	MCL = 15	Naturally occurring
Gross Beta	No	09/08/16	0.419 - 5.88	pci/L	-	MCL = 50	Naturally occurring
Combined Radium 226 & 228	No	09/08/16	0.912 - 3.49	pci/L	-	MCL = 5 <sup>(5)</sup>	Naturally occurring
<b>Unregulated Contaminant Monitoring Rule<sup>(6)</sup></b>							
1,4 Dioxane	No	01/30/14	ND - 0.8	ug/l	n/a	MCL = 50	Industrial discharge
Chlorodifluoromethane	No	01/30/14	ND - 0.19	ug/l	n/a	No MCL	Naturally occurring
Chromium	No	01/30/14	ND - 1.0	ug/l	100	MCL = 100	Natural deposits
Strontium	No	01/30/14	3.3 - 87.1	ug/l	n/a	No MCL	Naturally occurring
Hexavalent Chromium	No	01/30/14	ND - 0.9	ug/l	n/a	MCL = 100	Natural deposits
Chlorate	No	01/30/14	ND - 55.0	ug/l	n/a	No MCL	Naturally occurring

**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.

**Picocuries per Liter (pCi/L)** - Measure of radioactivity in water.

(1) - During 2014 we collected and analyzed 30 samples for lead and copper. The action levels for both lead and copper were not exceeded at any site tested. The next sampling program for lead and copper will be conducted in 2017. The values reported for lead and copper represent the 90th percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. In our sampling program, the 90th percentile value is the 4th highest result.

(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.

(4) - Iron is only a secondary drinking water standard. Iron has no health affects. Therefore, exceeding the MCL represents a level at which adverse aesthetics effects start to occur.

(5) - MCL for Radium is for Radium 226 and Radium 228 combined.

(6) - UCMR3 - Unregulated Contaminant Monitoring Rule 3 is a Federal water quality sampling program where water suppliers sample and test their source water for 1 year. Results will be used by the USEPA to determine if the contaminants need to be regulated in the future.

# 2016 Water Quality Report

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program and colder and wetter weather conditions in 2016.

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 Sprinkling Regulations that require odd-even day sprinkling 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 Westbury 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. The district adds small amounts of calcium hypochlorite (chlorine) as a disinfection agent as required by the Nassau County Department of Health and New York State Health Department. An air stripping tower facility is utilized to treat potable water from Well Nos. 6 and 7 for the removal of volatile organic compounds.

## WATER QUALITY

In accordance with state regulations, the Westbury Water District routinely monitors your drinking water for numerous parameters and contaminants. Your drinking water is tested 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 the district's wells numerous times per year. The table presented in this report depicts which parameters or contaminants were detected in your drinking water. It should be noted that many of these parameters are found naturally in all Long Island drinking water and do not pose any adverse health affects. We are happy to report that the district's water supply is in full compliance with all federal, state and county regulations and that no water quality violations exist.

## 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 10 wells. The source water assessment has rated most of the wells as having a high susceptibility to nitrates, and three (3) of those wells as having very high susceptibility to industrial solvents. The elevated susceptibility to nitrates is due primarily to commercial, institutional and residential land use and related practices, such as fertilizing lawns in the assessment area. The elevated susceptibility to industrial solvents is due primarily to point sources of contamination related to commercial/industrial facilities and related practices in the assessment area.

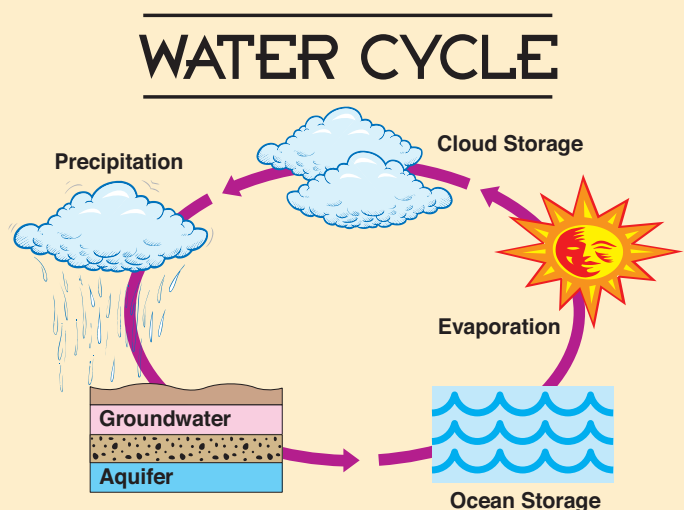
A copy of the assessment, including a map of the assessment area, can be obtained by contacting the water district.

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2016, are available at the Westbury Water District office located at 160 Drexel Avenue, Westbury, New York and the local public library.

We at the Westbury 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 for use today and in our children's future.

## INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

**Spanish** – *Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.*



# 2016 Water Quality Report