

2022 drinking water quality report

WESTBURY WATER DISTRICT
PUBLIC WATER SUPPLY IDENTIFICATION NO. 2902856

ANNUAL WATER SUPPLY REPORT

The Westbury Water District is pleased to present to you the 2022 Drinking Water Quality Report. The report 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 the District employees are committed to ensuring that you and your family receive the highest quality water.

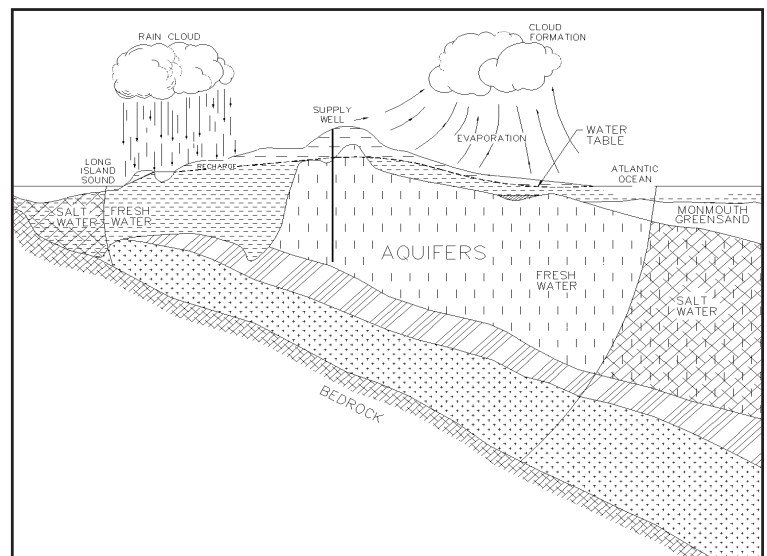
SOURCE OF OUR WATER

The source of water for the District is groundwater pumped from ten (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 radiological contaminants.

In order 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 2022 was 20,500. The total amount of water withdrawn from the aquifer in 2022 was 1.12 billion gallons, of which approximately 93 percent was billed directly to consumers.



THE LONG ISLAND AQUIFER SYSTEM

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 gallons	\$25.00 (min. per billing period)
20,001 to 60,000	\$1.25
60,001 to 100,000	\$1.50
100,001 to 150,000	\$1.75
150,001 to 200,000	\$2.00
Over 200,000	\$2.40

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. The District is in the process of designing and constructing AOP wellhead treatment systems at Well Nos. 6/7A and Well Nos. 10 and 14 for the removal of 1,4-Dioxane. We are also designing and constructing a GAC filtration system at Well No. 12 for the removal of PFAS.

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 Supt. 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.

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 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 or www.epa.gov/safewater.

WATER QUALITY

In accordance with State regulations, the Westbury Water District routinely monitors your drinking water for numerous parameters and contaminants. 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 in this report 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. 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.

The Westbury Water District conducts over 10,000 water quality tests throughout the year, testing for over 135 different contaminants which have been undetected in our water supply including:

Arsenic	Endothall	Dieldrin	1,3-Dichloropropane
Fluoride	2,4,5-TP (Silvex)	Dioxin	Chlorobenzene
Mercury	Dinoseb	Diquat	1,1,1,2-Tetrachloroethane
Selenium	Dalapon	4-Isopropyltoluene (P-Cumene)	Bromobenzene
Silver	Picloram	1,2,4-Trimethylbenzene	1,1,2,2-Tetrachloroethane
Odor	Hexachlorocyclopentadiene	Tert-Butylbenzene	1,2,3-Trichloropropane
Calcium	bis(2-Ethylhexyl)adipate	1,3,5-Trimethylbenzene	2-Chlorotoluene
Lindane	bis(2-Ethylhexyl)phthalate	N-Propylbenzene	1,3-Dichlorobenzene
Heptachlor	Hexachlorobenzene	Isopropylbenzene (Cumene)	1,4-Dichlorobenzene
Thallium	Benzo(A)Pyrene	Vinyl Chloride	1,2,4-Trichlorobenzene
Ammonia	Aldicarb sulfoxide	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	1,2-Dibromoethane (EDB)	Bromochloromethane	Perfluorobutanesulfonic Acid
Propachlor	1,2-Dibromo-3-Chl.Propane	Carbon Tetrachloride	Perfluorohexanesulfonic Acid
Alachlor	Chloroform	1,1-Dichloropropene	Perfluorononanoic Acid
Simazine	Bromodichloromethane	1,2-Dichloropropane	Perfluorooctanesulfonic Acid
Atrazine	Bromoform	Dibromomethane	1,2-Dibromoethane (EDB)
Metolachlor	Dibromochloromethane	Trans-1,3-Dichloropropene	Total Coliform
Metribuzin	Total Trihalomethanes	cis-1,3-Dichloropropene	e.Coli
Butachlor	Antimony	1,1,2-Trichloroethane	Manganese
Beryllium	Dichlorodifluoromethane	N-Butylbenzene	Zinc
2,4-D	Chloromethane	Sec-Butylbenzene	

2022 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
Lead & Copper							
Copper	No	June/July/ August 2020	0.0099 - 0.018 0.11 ⁽¹⁾	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	June/July/ August 2020	ND - 2.2 ND ⁽¹⁾	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							
Barium	No	05/23/22	0.0074 - 0.013	mg/l	2	MCL = 2.0	Naturally occurring
Sodium	No	05/23/22	9.5 - 38.6	mg/l	n/a	No MCL ⁽²⁾	Naturally occurring
Iron	No	05/23/22	ND - 0.06	ug/l	n/a	MCL = 300	Naturally occurring
Manganese	No	05/23/22	ND - 0.11	ug/l	n/a	MCL = 300 ⁽²⁾	Naturally occurring
Chloride	No	05/23/22	17.0 - 20.7	mg/l	n/a	MCL = 250	Naturally occurring
Calcium	No	05/23/22	6.5 - 10.2	mg/l	None	No MCL	Naturally occurring
Turbidity	No	05/23/22	ND - 2.4	NTU	n/a	MCL = 5	Naturally occurring
Magnesium	No	05/23/22	2.6 - 3.5	mg/l	None	No MCL	Naturally occurring
Nickel	No	05/23/22	0.0012 - 0.0017	ug/l	n/a	MCL = 100	Naturally occurring
Nitrate	No	07/12/22	3.0 - 8.1	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Sulfate	No	05/23/22	ND - 6.6	mg/l	n/a	MCL = 250	Naturally occurring
Volatile Organic Contaminants							
Trichloroethene	No	01/10/22	ND - 1.0	ug/l	0	MCL = 5	Discharge from industrial facilities
Tetrachloroethene	No	01/10/22	ND - 2.4	ug/l	0	MCL = 5	Discharge from industrial facilities
1,1-Dichloroethane	No	01/10/22	ND - 2.8	ug/l	0	MCL = 5	Discharge from industrial facilities
1,1-Dichloroethene	No	01/10/22	ND - 1.6	ug/l	0	MCL = 5	Discharge from industrial facilities
1,1,1-Trichloroethane	No	01/10/22	ND - 0.67	ug/l	0	MCL = 5	Discharge from industrial facilities
Radionuclides							
Gross Alpha	No	09/06/22	0.217 - 2.04	pCi/L	n/a	MCL = 15	Naturally occurring
Gross Beta	No	09/06/22	1.91 - 2.96	pCi/L	n/a	MCL = 50	Naturally occurring
Combined Radium 226 & 228	No	09/06/22	0.268 - 1.71	pCi/L	n/a	MCL = 5 ⁽⁴⁾	Naturally occurring
Uranium	No	09/06/22	0.109 - 1.02	ug/l	n/a	MCL = 30	Naturally occurring
Disinfectants							
Chlorine Residual	No	Continuous	0.56 - 1.2	mg/l	n/a	MRDL = 4	Measure of disinfectants
Physical Characteristics							
pH	No	Continuous	6.2 - 9.0	pH units	n/a	7.5 - 8.5 ⁽⁵⁾	Measure of acidity or alkalinity
Total Alkalinity	No	05/23/22	6.3 - 63.2	mg/l	n/a	No MCL	Naturally occurring
Calcium Hardness	No	05/23/22	16.3 - 25.5	mg/l	n/a	No MCL	Naturally occurring
Total Hardness	No	05/23/22	27.1 - 39.9	mg/l	n/a	No MCL	Naturally occurring
Total Dissolved Solids (TDS)	No	05/23/22	56.0 - 169.0	mg/l	n/a	No MCL	Naturally occurring

2022 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
Synthetic Organic Contaminants (SOCs)							
1,4-Dioxane	No ⁽⁶⁾	02/15/22	ND - 1.1	ug/l	n/a	MCL = 1.0 ⁽⁷⁾	Industrial discharge ⁽⁸⁾
1,2-Dibromoethane (EDB)	No	03/29/22	ND - 0.015	ug/l	n/a	MCL = 0.05	Industrial discharge
Perfluorooctanesulfonic Acid (PFOS)	No	08/02/22	ND - 4.8	ng/l	0	MCL = 10.0 ⁽⁹⁾	Industrial discharge ⁽¹⁰⁾
Perfluorooctanoic Acid (PFOA)	No	11/07/22	ND - 5.4	ng/l	0	MCL = 10.0 ⁽⁹⁾	Industrial discharge ⁽¹⁰⁾
Perfluorohexanoic Acid (PFHxA)	No	11/07/22	ND - 3.0	ng/l	0	No MCL	Industrial discharge
Perfluorobutanoic Acid (PFBS)	No	11/07/22	ND - 3.3	ng/l	0	No MCL	Industrial discharge
Perfluoropentanoic Acid (PFPeA)	No	11/07/22	ND - 3.2	ng/l	0	No MCL	Industrial discharge
Unregulated Contaminant Monitoring Rule 3 (UCMR3)							
Perfluoroheptanoic Acid	No	11/07/22	ND - 2.2	ng/l	0	MCL = 50,000	Industrial discharge
Perfluorohexanesulfonic Acid	No	08/02/22	ND - 2.8	ng/l	0	MCL = 50,000	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.

Maximum Residual Disinfection Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfection Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health.

MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Health Advisory (HA) - An estimate of acceptable drinking water levels for a chemical substance based on health effects information; a health advisory is not a legally enforceable Federal standard, but serves as technical guidance to assist Federal, State and local officials.

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).

Nanograms per liter (ng/l)nd - Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion - ppt).

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

Nephelometric Turbidity Unit (NTU) - Signifies that the instrument is measuring scattered light from the sample at a 90-degree angle from the incident light.

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

⁽¹⁾ - During 2020, 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 2023. 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⁾ -MCL for Radium is for Radium 226 and Radium 228 combined.

⁽⁵⁾ - As per Nassau County Department of Health guidelines

⁽⁶⁾ - The District received a Deferral from the MCL to provide sufficient time to construct wellhead treatment.

⁽⁷⁾ - 1,4-Dioxane -The New York State (NYS) established an MCL for 1,4-Dioxane at 1 part per billion(ppb) effective August 26, 2020.

⁽⁸⁾ - It is used as a solvent for cellulose formulations, resins, oils, waxes and other organic substances. It is also used in wood pulping, textile processing, degreasing, in lacquers, paints, varnishes, and stains; and in paint and varnish removers.

⁽⁹⁾ - New York State (NYS) established a maximum contaminant level (MCL) at 10 ppt for PFOA and 10 ppt for PFOS effective August 2020.

⁽¹⁰⁾ - PFOA has been used to make carpets, leathers, textiles, fabrics for furniture, paper packaging, and other materials that are resistant to water, grease, or stains. It is also used in firefighting foams at airfields. Many of these uses have been phased out by its primary U.S. manufacturer; however, there are still some ongoing uses.

NEW YORK STATE MANDATORY HEALTH ADVISORY

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 (1-800-426-4791).

Water from the Westbury Water District has a slightly elevated nitrate level, 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.

During 2020, 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 this year. 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 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 <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 2022, the Westbury Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2022 was 4.2 percent less than in 2021. This increase in water use can most likely be attributed to the hotter and drier weather in 2022.

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. The Water District will provide residents with dye tablets for testing of toilet leaks. In addition, the Nassau County Lawn Sprinkler Regulation are still in effect that require odd-even day sprinkling. 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).

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2022, are available at the Westbury Water District office located at 160 Drexel Avenue, Westbury, New York and the local Public Library.

We at 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, which are the heart of our community, our way of life and 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.

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.

MCL DEFERRAL

In January 2021, the District received a deferral from the new Maximum Contaminant Level (MCL) established by the New York State Department of Health for 1,4-Dioxane, PFOA and PFOS. This deferral delays the 1.0 ppb MCL for 1,4-Dioxane and 10.0 ppt PFOA and PFOS up until August 25, 2022, to allow the District time to construct treatment facilities. For more information on the deferral and the quarterly progress schedule, please visit www.westburywaterdistrict.com/deferral. The District will also be providing quarterly updates to the emerging contaminant MCL Deferral as presented on our website section entitled Deferral.



2022 Drinking Water Quality Report

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