

ANNUAL DRINKING WATER QUALITY REPORT FOR 2016

INCORPORATED VILLAGE OF WILLISTON PARK WATER DEPARTMENT

494 Willis Avenue, Williston Park, NY 11596-1738
(Public Water Supply ID # 2902858)



Prepared by:

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INTRODUCTION

To comply with State regulations, the Incorporated Village of Williston Park Water Department annually issues a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources.

Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact the EPA Safe Drinking Water Hotline at 1-800-426-4791, the Nassau County Department of Health at (516) 227-9692, or the Incorporated Village of Williston Park Water Department at (516) 746-2193. We want our valued customers to be informed about your drinking water. If you want to learn more, please visit the EPA's website at <http://www.epa.gov/safewater/>, the Department of Health's website at <http://www.health.state.ny.us/>, and attend any of our regularly scheduled village board meetings on the third Monday of each month at 8:00 p.m.

WHERE DOES OUR WATER COME FROM?

In general, 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. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which 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 the public health.

One hundred percent of the water distributed to the Village's consumers is pumped from wells that obtain water from the Magothy aquifer that underlies northwest Nassau County. The water levels in the aquifer dropped in the drought period of the mid-1960s and have risen in response to generally favorable precipitation that has occurred between 1970 and 2016. Available well supply from the aquifer has not diminished. Williston Park has three wells: Well 1A, 2, and 4. The Village is 100% metered and has an active cross connection control program in compliance with the State sanitary code. During 2016, our system did not experience any restriction of our water source.

During 2016, water pumped into the distribution system from Well No. 2 and Well No. 4 was treated to remove volatile organic chemicals by packed tower aeration (air stripping towers). The process is completely natural, using air delivered through the packing media in the tower past the cascading water to remove the volatile organics from the water. The treated water discharges from the tower to a clear well where it is pumped to the distribution system. All source water for the Village is treated with sodium hydroxide (caustic soda) in an amount necessary to maintain a pH level between 7.5 and 8.5 to reduce corrosivity. The Nassau County Department of Health requires disinfection of all water systems. The Village disinfects its water supply by feeding small amounts of liquid sodium hypochlorite into the distribution system at each pumping station.

The Nassau County Department of Health completed a Source Water Assessment Program for the Incorporated Village of Williston Park Water Department. Possible and actual threats to this drinking water source were evaluated. The source water assessment includes a susceptibility rating which is dependent upon the presence of potential sources of contamination within the well's contributing area and the likelihood that the contaminant will travel through the environment to reach the well. The 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 "ARE THERE CONTAMINANTS IN OUR DRINKING WATER?" for a list of contaminants that may be detected. The source water assessments provide resource managers with additional information for protecting source waters in the future.

A copy of the assessment, including a map of the assessment area, can be obtained by contact the Nassau County Department of Health.

FACTS AND FIGURES

Our water system serves approximately 7,287 residents through 2,400 service connections. The total water produced in 2016 was 415,737,000 gallons. The amount of water delivered to customers was 238,243,000 gallons. The Incorporated Village of East Williston purchased approximately 127,696,000 gallons. This leaves an unaccounted-for total of 49,798,000 gallons. This water was used to flush mains; fight fires; fill road sweepers and tanker trucks; and during water main breaks, leakage in mains and water services, unauthorized use of hydrants; and water storage tank inspection and accounts for the remaining 49,798,000 gallons (11.9% of the total amount produced). In 2016, water customers were charged \$3.92 per 1,000 gallons for usage up to 50,000 gallons and \$4.09 per 1,000 gallons for usage over 50,000 gallons. The commercial usage rate charged was \$4.33 per 1,000 gallons. The Village of East Williston was charged \$4.33 per 1,000 gallons for their purchase of our water.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total Coliform, Escherichia Coliform, turbidity,

inorganic compounds, nitrate, nitrite, lead and copper, physical characteristics, trihalomethanes, volatile organic compounds, synthetic organic compounds, and radioactive compounds. The table presented below, Table 1, depicts which compounds were detected in your drinking water.

A supplement to this report showing laboratory results of analysis of all raw and treated samples taken from each water supply well in service and from the distribution system is available upon request. Contact Mr. Keith Bunnell, Water Department Superintendent, at the Village of Williston Park, (516) 746-2193, located at 494 Willis Avenue, Williston Park, NY 11596, if you would like to obtain a copy.

Contamination of the groundwater from the Incorporated Village of Williston Park Water Department has been detected in samples from the wells. All groundwater pumped to the distribution system from the operating Water Department wells complies with New York State Department of Health Standards for public drinking water supplies. It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791 or the Nassau County Department of Health at (516) 227-9692.

Table 1 shows the results of our monitoring for the period of January 1st to December 31st, 2016. The table depicts which compounds were detected in your drinking water.

SEE TABLE PAGE 4

Not included in the table are the more than 110 other contaminants which were tested for and not detected in the wells and distribution system. These undetected contaminants are listed herein:

Organics (also including Other Principal Organics): 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,1-dichloropropene, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloropropane, 1,4-dichlorobenzene, 2,2-dichloropropane, 2/4-chlorotoluene, 4-isopropyltoluene, benzene, bromobenzene, bromochloromethane, bromomethane, carbon tetrachloride, chlorobenzene, chloroethane, chloromethane, cis-1,2-dichloroethene, cis-1,3-dichloropropene, dibromomethane, dichlorodifluoromethane, ethylbenzene, hexachlorobutadiene, isopropylbenzene, m,p-xylene, methyl tert-butyl ether, methylene chloride, n-butylbenzene, n-propylbenzene, o-xylene, sec-butylbenzene, styrene, tert-butylbenzene, tetrachloroethene, toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, trichloroethene, trichlorofluoromethane, vinyl chloride, 2,4,5-TP, 2,4-D, dalapon, dicamba, dinoseb, pentachlorophenol, picloram, atrazine, benzo(a)pyrene, bis(2-ethylhexyl)adipate, butachlor, metolachlor, metribuzin, propachlor, simazine, 1,2-dibromo-3-chloropropane, 1,2-dibromoethane, alachlor, aldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorocyclopentadiene, lindane, methoxychlor, PCB screen, toxaphene, 3-hydroxycarbofuran, aldicarb, aldicarb sulfone, aldicarb sulfoxide, carbaryl, carbofuran, methomyl, oxamyl, glyphosate, endothall, diquat, dioxin, perchlorate.

TABLE 1

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range) (1)	Avg/Max	Unit Measurement	MCLG OR MRDLG	Regulatory Limit (MCL or MRDL)	Likely Source of Contamination
Microbiological Contaminant								
Total Coliform Bacteria	No	1/11/16	1 positive sample		n/a	0	MCL = 2 or more positive samples over the system in one month	Naturally present in the environment
Inorganic Contaminants								
Barium	No	4/25/16	0.0035		mg/L	2	MCL - 2	Erosion of natural deposits
Calcium	No	8/22/16	14 (8.2 - 14)		mg/L	n/a	n/a	Naturally occurring
Chloride	No	4/25/16	25.8		mg/L	n/a	MCL - 250	Naturally occurring or indicative of road salt contamination
Iron	No	4/25/16	110		ug/L	n/a	MCL - 300	Naturally occurring
Magnesium	No	4/25/16	5.2		mg/L	n/a	n/a	Naturally occurring
Sodium	No	4/25/16	28		mg/L	n/a	20 / 270 ₂	Naturally occurring, Road salt, Water softeners, Animal waste
Sulfate	No	4/25/16	16.2		mg/L	n/a	MCL - 250	Naturally occurring
Inorganic Contaminants - Nitrates								
Nitrate	No	10/12/16	4.6 (3.59 - 4.6)		mg/L	10	MCL - 10	Runoff from fertilizer use, Leaching from septic tanks, sewage, Erosion of natural deposits
Nitrate-Nitrite (as N)	No	10/12/16	4.6		mg/L	10	MCL - 10	Runoff from fertilizer use, Leaching from septic tanks, sewage, Erosion of natural deposits
Physical Characteristics								
Calcium Hardness	No	4/25/16	25.5		mg/L	n/a	n/a	Naturally occurring
Langelier Saturation Index	No	4/25/16	-1.04		units	n/a	n/a	Naturally occurring
pH	No	6/13/16	6.4 (7.6 - 6.4)		units	n/a	n/a	Naturally occurring
Silica	No	6/8/16	14.1 (13.4 - 14.1)		mg/L	n/a	n/a	Naturally occurring
Specific Conductivity	No	6/13/16	230 (159 - 230)		umhos/cm	n/a	n/a	Naturally occurring
Total Alkalinity	No	6/13/16	42.6 (13.6 - 42.6)		mg/L	n/a	n/a	Naturally occurring
Total Dissolved Solids	No	4/25/16	111		mg/L	n/a	n/a	Naturally occurring
Total Hardness	No	4/25/16	46.6		mg/L	n/a	n/a	Naturally occurring
Disinfectant								
Chlorine Residual	No	4/25/16	0.4 (0.1 - 0.9)		mg/L	n/a	MRDL - 4 ₁₀	Water additive used to control microbes
Radioactive Contaminants								
Gross Alpha	No	11/14/16	0.386 (0.227 - 0.386)		pCi/L	0	MCL - 15	Erosion of natural deposits
Gross Beta	No	10/17/16	2.42 (1.74 - 2.42)		pCi/L	0	50 ₂	Decay of natural deposits and man-made emissions
Radium 226	No	10/17/16	0.52 (0.0697 - 0.52)		pCi/L	0	MCL - 15	Erosion of natural deposits
Radium 228	No	10/17/16	1.69 (0.22 - 1.69)		pCi/L	0	MCL - 5	Erosion of natural deposits
Contaminant	Violation Yes/No	Date of Sample	90 th Percentile and Range		Unit Measurement	MCLG	Regulatory Limit (AL)	Likely Source of Contamination
Lead and Copper Contaminants								
Copper	No	6/15/16	0.21 (<0.02 - 0.21) ₁₀		mg/L	1.3	AL - 1.3	Corrosion of household plumbing systems, Erosion of natural deposits
Lead	No	6/15/16	<1.0 (<1.0 - 36) ₁₀		ug/L	0	AL - 15	Corrosion of household plumbing systems, Erosion of natural deposits

Notes:
 (1) When compliance with the MCL is determined annually or less frequently, the data reported is the highest detected level of any of the sampling points and the range of detected values. When compliance with the MCL is determined more frequently than annually, the data reported is the highest average of any of the sampling points used to determine compliance and the range of detected values.
 (2) Water containing more than 20 mg/L of sodium should not be used for drinking by people on sodium-restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderate-restricted sodium diets.
 (3) The value presented represents the Maximum Residual Disinfectant Level (MRDL). MRDLs are not currently required, but in the future they will be enforceable in the same manner as MCLs.
 (4) The State considers 50 pCi/L to be the level of concern for beta particles.
 (5) The level presented represents the 90th percentile of the 20 sites tested during June-July 2016. 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 copper values detected at your water system. In this case, twenty samples were collected at your water system during June-July 2016 and the 90th percentile value was the eighteenth-highest value (0.21 mg/L). The action level for copper was not exceeded at any of sites tested.
 (6) The level presented <1.0 ug/L represents the 90th percentile of the 20 sites tested during June-July 2016. The action level for lead was not exceeded at any of the sites tested.

Definitions:
 MCL: Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.
 MCLG: Maximum Contaminant Level Goal, 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.
 MRDL: Maximum Residual Disinfectant Level, 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.
 MRDLG: Maximum Residual Disinfectant Level Goal, 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 contamination.
 AL: Action Level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
 ND: Non-Detect, laboratory analyses indicates that the constituent is not present.
 mg/L: Milligrams per Liter, corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
 ug/L: Micrograms per Liter, corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
 pCi/L: PicoCuries per Liter, a measure of the radioactivity in water.
 n/a: Not applicable, i.e., no value is assigned by regulatory authorities.

Disinfection By-Products [Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5)] – bromodichloromethane, bromoform, chloroform, dibromochloromethane, total trihalomethanes, bromoacetic acid, chloroacetic acid, dibromoacetic acid, dichloroacetic acid, total haloacetic acids, and trichloroacetic acid.

Inorganics and Physical Characteristics – ammonia nitrogen (as N), antimony, arsenic, beryllium, cadmium, chromium, color, fluoride, free cyanide, manganese, MBAS, mercury, nickel, odor, ortho-phosphate, selenium, silver, thallium, and zinc.

Microbiological – Escherichia Coliform and turbidity.

The highest level of a contaminant that is allowed in drinking water is known as the Maximum Contaminant Level (MCL). The level of a contaminant below which there is no known or expected risk to health is known as the Maximum Contaminant Level Goal (MCLG). MCLGs allow for a margin of safety.

The highest level of a disinfectant allowed in drinking water is known as the Maximum Residual Disinfectant Level (MRDL). There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. The level of a drinking water disinfectant below which there is no known or expected risk to health is known as the Maximum Residual Disinfectant Level Goal (MRDLG). MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow is known as the Action Level (AL).

Sampling for radiological contaminants is done in accordance with Nassau County Department of Health standards. The sampling results presented are from the most recent radiological sampling that was performed in 2016. Raw water samples were collected from Water Department wells and analyzed for gross alpha activity, gross beta activity, radium 226, and radium 228, measured in picocuries per Liter (pCi/L). The maximum contaminant level for gross alpha activity in water is 15 pCi/L. The 2016 average of the gross alpha samples is 0.29 pCi/L. The State level of concern for gross beta activity in water is 50 pCi/L. The 2016 average of the gross beta samples is 2.123 pCi/L. The maximum contaminant level for radium 226 in water is 15 pCi/L. The 2016 average of the radium 226 samples is 0.327 pCi/L. The maximum contaminant level for radium 228 in water is 5 pCi/L. The 2016 average of the radium 228 samples is 0.929 pCi/L.

Sampling for lead and copper contaminants is performed every 3 years in accordance with Nassau County Department of Health standards. The sampling results presented are from the most recent lead and copper sampling that was done in 2016. Samples were collected from the distribution system at twenty sites and analyzed for lead and copper. Lead is measured in micrograms per Liter (ug/L). The Action Level (AL) for lead is 15 ug/L. The AL for lead was not exceeded at any of the sites tested. Copper is measured in milligrams per Liter (mg/L). The AL for copper is 1.3 mg/L, and the MCLG for copper is 1.3 mg/L. The AL for copper was not exceeded at any of the sites tested.

The levels of lead and copper presented in Table 1 indicate the 90th percentile of those contaminants at the 20 sites tested. 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. Twenty samples were collected from your water system and the 90th percentile values for lead and copper were the eighteenth-highest values for those contaminants. In Table 1, the 90th percentile for lead is <1.0 ug/L and the 90th percentile for copper is 0.21 mg/L.

WHAT DOES THIS INFORMATION MEAN?

As you can see by Table 1, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

We are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Williston Park Water Department 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 or at www.epa.gov/safewater/lead.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, 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).

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.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems, and water towers;
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met;

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances, and then check the meter after 15 minutes. If it moved, you have a leak.
- Water your lawn in the early morning to reduce water loss by evaporation.

SYSTEM IMPROVEMENTS

In 2016, system improvements included maintenance work on the elevated storage tank at Syracuse Street. The system improvements planned for 2017 include the purchase of a street valve exerciser as well as the establishment of new maintenance plans for street valves. Also, plans will be developed for the rehabilitation of the elevated storage tank at Syracuse Street.

In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. The Village of Williston Park works hard to provide top quality water to every customer. We ask that all our customers help us protect our water resources, which are the heart of the community. Please call our office if you have any questions.