2016 Annual Water Quality Report

Lynbrook Operations District
Public Water Supply ID# NY2902835
January 1 to December 31, 2016

NEW YORK AMERICAN WATER

This report complies with Part 5-1.72, New York State Sanitary Code (10 NYCCR) and federal Consumer Confidence Report regulations (40 CFR Part 141, Subpart O).

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

本报告与您的饮用水有关。
如果您不了解其内容，应请别人为您翻译解说。

이 보고서에는 귀하께서 사용하고 계시는 식수에 관한 정보가 들어있습니다. 만약에 이해를 못하시면 누군가에게 번역을 의뢰하십시오.

A Message from the New York American Water President

To Our Valued Customer:

New York American Water is proud to be your local water service provider, and I am pleased to share some very good news about the quality of your drinking water. As you read through our Annual Water Quality Report, you will see that we continue to supply water that meets or surpasses all state and federal water quality standards. **Better yet, the price you pay for this high-quality water service remains less than a penny per gallon.**

This is an exceptional value when you consider the facilities and technology needed to draw water from the source and treat it, along with miles and miles of pipeline hidden below the ground to bring water to your tap. What's more, our plant operators, water quality experts, engineers and maintenance crews work around the clock to make sure that quality water is always there when you need it.

Delivering reliable, high-quality water service also requires significant investment to maintain and upgrade aging facilities. **In 2016 alone, we invested approximately $44 million in system improvements across the state; and plan on investing another $40 million in 2017.**

Because water is essential for public health, fire protection, economic development and overall quality of life, New York American Water's employees are committed to ensuring that quality water keeps flowing not only today but well into the future. We hope you agree that your water service is worth every penny.

Please take the time to review this report. It provides details about the source and quality of your drinking water using the data from water quality testing conducted for your local system between January and December 2016.

Thanks for allowing us to serve you.

Sincerely,

Brian K. Bruce
President, New York American Water

Public Participation – How You Can Get Involved

Customers can participate in decisions that may affect the quality of water by:

- Reading the information provided in bill inserts and special mailings
- Contacting the company directly with questions or to discuss issues
- Attending open houses conducted by the company
- Responding to survey requests
- Contacting agencies such as the Nassau County Health Department at 516-227-9692.

AT LESS THAN A PENNY PER GALLON WATER IS A GREAT VALUE™

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Be Water Smart – Think Conservation

Our system has more than enough water to meet present and future demands. However, saving water helps the environment by preserving our natural resource, and reducing the cost of pumping and treating the water. Saving water can also help lower your water bill and your hot water heating bill.

The following suggestions will help you make your home "water efficient" without sacrificing comfort or changing lifestyles:

- Use native, drought-resistant shrubs, trees, plants and grasses in your landscape.
- Run dishwashers and washing machines only with full loads.
- Turn off the tap when brushing your teeth or shaving.
- Check every faucet for leaks. Even a slow drip can waste 15 to 20 gallons a day, or about 6,000 gallons a year.
- If you suspect that you have a water leak, order our free Leak Detection Kit. The kit contains information, hints and dye tablets to help you determine if you have a wasteful water loss. Call our customer call center or 516-632-2215 to order.
- Water your lawn only on odd/even days according to your address, and only before 10:00am or after 4:00pm, as per **mandatory** Nassau County Dept. of Health ordinance.
- Install a moisture sensor on your lawn sprinkler system to prevent wasteful watering during or just after a rain.
- Replace older devices with water-saving showerheads, faucets, or low flush toilets. A normal showerhead uses 5 to 7 gallons a minute. Switching to a low-flow model that uses 1.5 gallons a minute can save a family thousands of gallons of water a year.

What is a Water Quality Report

For more than 30 years, New York American Water – Lynbrook Operations (formerly Long Island American Water) has published an Annual Water Quality Report to keep our customers up-to-date on the quality of our drinking water.

Once again, we are pleased to report that your tap water not only meets, but in all instances except iron, is better than all federal, state and local drinking water standards, and our system has never violated a primary maximum contaminant level.

To assure that water is safe to drink, the U.S. Environmental Protection Agency, and the Health Departments of New York State and Nassau County, set regulations for water quality and indicate the levels of various substances that are acceptable in public drinking water. This report explains how our water measures up to those standards. As you can see by the results, our water quality is excellent!

The New York State Health Department and the U.S. Food & Drug Administration regulate and set limits for substances in bottled water, which must also provide protection for public health.

During 2016, our system was in compliance with applicable NYS drinking water operating, monitoring and reporting requirements. If you have questions about this report, please contact our Water Quality Manager at 516-632-2215.

Share This Report:

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their location who are not customers of New York American Water. Additional copies of this report are available by contacting us at 516-632-2215.

How to Contact Us

Thank you… for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers protect our water sources, which are the heart of our community. *Please call our Customer Call Center toll-free if you have questions*:

New York American Water:

Customer Call Center: 1-877-426-6999 (M-F; 7am-7pm)
Emergencies: 1-877-426-6909 (24 hours)
Automated Meter Reading Line: 1-800-672-1095
TDD (Hearing/Speech impaired): 1-800-300-6202
Merrick Administrative Office: 516-632-2232
On-line – "My H2O Online": www.newyorkamwater.com

Billing Payment Address:
New York American Water
PO BOX 371332
Pittsburgh, PA 15250-7332

Water Information Sources :

New York State Department of Health
1-518-473-8600 • www.health.state.ny.us

Nassau County Health Department
516-227-9692 • www.co.nassau.ny.us/health

New York State Department of Public Service
1-800-342-3377 • www.dps.state.ny.us

US Environmental Protection Agency
www.epa.gov/safewater

EPA Safe Drinking Water Hotline
1-800-426-4791

American Water Works Association
www.awwa.org

Water Quality Association
www.wqa.org

About New York American Water

New York American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water company in New York, providing high-quality and reliable water and/or wastewater services to approximately 350,000 people.

About American Water

With a history dating back to 1886, American Water (NYSE: AWK) is the largest and most geographically diverse publicly traded U.S. water and wastewater utility company. The company employs more than 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting www.amwater.com.

Communities Served

Atlantic Beach
Baldwin
Baldwin Harbor
Barnum Island
Bay Park
Cedarhurst
East Atlantic Beach
East Rockaway
Harbor Isle
Hewlett
Hewlett Bay Park
Hewlett Harbor
Hewlett Neck
Inwood
Island Park
Lakeview
Lawrence
Lynbrook
Malverne
Malverne Park-Oaks
Meadowmere
North Lawrence
North Lynbrook
North Woodmere
Oceanside
Roosevelt
South Hempstead
Valley Stream
West Hempstead*
Woodmere
Woodsburgh

**community partially served*

Average Residential Usage & Cost

In 2016, the average residential household used approximately 104,347 gallons of water at a cost of $681, or $1.87 a day. With an average of 3.0 persons per household, the cost of water was about 62¢ a day per person.

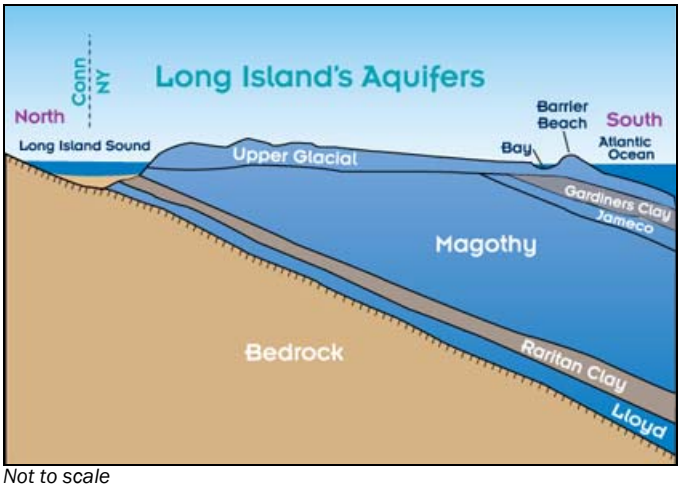
Source, Quality & Quantity

Groundwater is the source of your drinking water supply. It is drawn from approximately 162 wells (including well fields) located in the aquifer system beneath the land surface.

The Aquifers

The aquifers are water-bearing geologic deposits of sand and clay that absorb and store about 45 percent of the rain and snow that fall on Long Island. New York American Water – Lynbrook Operations has wells in the Upper Glacial, Magothy, Jameco and Lloyd aquifers.

Not all wells are operating at the same time, which means that the water you receive is a blend of treated water from different well locations (an integrated system).



Not to scale

If you have a private well which is unregulated and untested, you should not use the water for drinking or cooking. (Source: Nassau County Department of Health)

Source Water Assessment

The NYS DOH, with assistance from the local health department and the CDM consulting firm, 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 section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected (if any). The source water assessments provide resource managers with additional information for protecting source waters into the future.

Drinking water is derived from 36 wells. The source water assessment has rated most of the wells as having a very high susceptibility to industrial solvents and a high susceptibility to nitrates. The very high susceptibility to industrial solvents is due primarily to point sources of contamination related to transportation routes and commercial/ industrial facilities and related activities in the assessment area. The high susceptibility to nitrate contamination is attributable to residential and commercial land use and related practices in the assessment area, including fertilizing lawns.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted: Please contact New York American Water's Water Quality Manager at 516-632-2215.

How is Your Water Treated?

Our water supply is obtained from wells located throughout our service area. The wells range in depth from about 30 feet to 1,100 feet, averaging 500 feet. In our area of southwestern Nassau County, the soil has a naturally high iron and mineral content. The water dissolves these naturally occurring minerals, and while they are not health hazards, they can cause discolored water issues.

Bacteriological pollutants are not usually present in wells at the average depth of 500 feet and, consequently, water directly from the well is drinkable. However, water treatment is required to protect the water in the distribution system and to minimize discolored water conditions.

Treatment consists of:

1. Chlorination (with 12.5% Sodium Hypochlorite) for bacteriological disinfection.
2. Lime (Calcium Hydroxide) to raise pH and minimize corrosivity to water mains and household plumbing (at 12 out of 20 locations).
3. Caustic Soda (25% Sodium Hydroxide) to raise pH and minimize corrosivity to water mains and household plumbing (at 8 out of 20 locations).
4. Filtration to remove naturally-occurring Iron at 10 well locations.
5. Sodium Silicate to stabilize (sequester) iron not removed by filtration and for corrosion control.
6. Air strippers to remove volatile organics at one location.

System Improvements

In 2016, we continued to make *significant upgrades* to our system and infrastructure. These improvements include:

- Completed the construction of the new permanent Iron Removal Filter Plant facility at Station #18 in South Hempstead (4 MGD).
- Completed the construction and testing of a new portable skid-mounted Iron Removal Filter Plant at Station #2 in Lakeview (2 MGD).
- Completed the construction and testing of a new portable skid-mounted Iron Removal Filter Plant at Station #16 in Roosevelt (2 MGD)
- Continued with the permitting and construction of a new portable skid-mounted Iron Removal filter Plant at Station #23 in Malverne (2 MGD).
- Replaced Iron Removal filter media at Plant #12 in Baldwin.
- Replaced 9.1 miles of water main throughout the service territory (over 48,000 feet of pipeline)
- Replaced 98 fire hydrants
- Replaced or installed 1,060 service lines
- Replaced over 3,350 water meters
- Completed electrical equipment replacements and upgrades at various pump station locations throughout our service territory.
- Continued with the design phase and planning for a new permanent Iron Removal Filter Plant facility at Pump Station #1 in Roosevelt (6 MGD).

Capital Improvements planned for 2017 include:

- Continue with performance testing of permanent Iron Removal Filter Plant at Station #18 in South Hempstead.
- Replace approximately 3.5 miles of water main throughout the service territory
- Replace approximately 35 fire hydrants
- Replace approximately 350 service lines
- Replace approximately 18,000 water meters
- Start construction of filter plant and pump upgrades with general electrical and physical rehabilitation at Iron Removal Filter Plant facility #5 in Hewlett (8 MGD).
- Well screen repairs at Well 22-1 in Baldwin.
- Electrical equipment replacements and upgrades at various pump station locations throughout the service territory.
- Complete construction activities at the new portable skid-mounted Iron Removal Filter Plant at Station #23 in Malverne.
- Continue with permitting and design, and start construction of new permanent Iron Removal Filter Plant facility at Station #1 in Roosevelt (6 MGD)

Do I Need to Take Special Precautions?

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Although our drinking water meets all 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.

If you have questions, contact the Nassau County Department of Health at 516-227-9692. 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.

Substances Expected to be in Drinking Water

In general terms, the sources of drinking water (both tap 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 can pick up substances resulting from the presence of animals or from human activities.

Substances that may be present in source water include:

- **Microbiological Contaminants:** Such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.
- **Inorganic Contaminants (IOC's):** Such as salts and metals which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and Herbicides (SOC's):** Which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- **Organic Chemical Contaminants (VOC's):** Including synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff and septic systems.
- **Radioactive Contaminants:** Which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Cryptosporidiosis & Giardiasis

Although there have been no cases of Cryptosporidiosis in Nassau County attributable to the water supply, we thought you should be aware of the risks to people with severely weakened immune systems. Cryptosporidiosis and Giardiasis are intestinal illnesses caused by microscopic parasites that can be transmitted a number of ways including through drinking water. Cryptosporidiosis can be very serious for people with weak immune systems, such as transplant patients; individuals receiving chemotherapy or dialysis, and people with Crohn's disease or HIV infection. Individuals who think they may have been exposed to Cryptosporidiosis or Giardiasis should contact their health care providers immediately.

Immuno-compromised patients who may have been advised by their health care provider that they may be at risk, especially when traveling, should observe the following:

- One minute of boiling water at a rolling boil will kill *Cryptosporidium* parvum and Giardia lamblia.
- Drinking bottled water does not guarantee that the water is free from Cryptosporidiosis or Giardiasis.

Contact your health care provider about your options. If you have questions, contact the Nassau County Department of Health at 516-227-9692.

Lead & Copper Rule Statements

The Lead and Copper Rule requires sampling for lead and copper at the tap. In 1992, the first year testing was required; tap water was sampled in compliance with EPA regulations. Test results were excellent: at least 90 percent of the lead tests were well below 5 parts per billion, and for copper, below 0.2 parts per million, indicating that the company's corrosion control treatment processes continue to be effective. The same tests were done roughly every three years from 1997 through 2014 with similar results. The next round of homeowner monitoring for the Lead and Copper Rule will be completed in the summer of 2017.

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. New York American Water 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 drinking 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 at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

How do I read the Water Quality Table

The Water Quality Table – "**Table of Detected Contaminants**" is the most important section in this report, containing details on New York American Water's comprehensive testing program for drinking water at the tap. It compares the results from tests we performed in 2015 (and earlier) with the health standards established by federal, state and local health authorities. Of about 200 substances or parameters tested, detectable levels were found for only 40; and with the exception of iron, which is not considered a health hazard, these levels are trace amounts, well below the levels set to protect public health.

To review the quality of your drinking water, compare the result in the "**Maximum Amount Detected**" column with the **Standard** in the "**MCL**" column. That **Standard** is the

highest level that is considered safe for drinking water. To be in compliance, the **High** result in the "**Range: Low-High**" column should be lower than the **MCL Standard**.

For example, under **Metals & Inorganic Substances**, the "**MCL**" standard for **Chlorides** is **250 ppm** and the "**Maximum Amount Detected**" result is **24.8 ppm**, well below the maximum allowed level (or "**MCL**").

Also review the "**Compliance Achieved**" and "**Violation**" columns to determine if New York American Water violated any standards. As you can see, our system had no violations. In fact, New York American Water – Lynbrook Operations has never violated a primary maximum contaminant level standard.

Further evidence of the quality of our water can be seen in the "**Listing of Non-Detected (ND) Contaminants**" — An extensive list of substances that we tested for and did not find in our distribution system and/or water sources.

The **Definition of Terms** below provides further explanation of the data.

Definitions of Terms Used in This Report

- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **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 Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant 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.
- **90th Percentile Value:** The values reported in the "Lead and Copper Rule" section 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 percent of the lead and copper values detected in your water system.
- **N/A:** Not applicable
- **Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **None Detected (ND):** Laboratory analysis indicates that the constituent is not present at the method detection level.
- **Parts per Million (ppm):** Corresponds to one part of liquid in one million parts of liquid [Equivalent to "milligrams per liter" (mg/L)].
- **Parts per Billion (ppb):** Corresponds to one part of liquid in one billion parts of liquid [Equivalent to "micrograms per liter" (µg/L)].
- **Picocuries per liter (pCi/L):** A measure of the radioactivity in water.
- **Total Dissolved Solids [TDS]:** An overall indicator of the amount of minerals in the water.

Water Quality Facts

To assure high quality water, individual water samples are taken each year for chemical, physical and microbiological tests. Testing can pinpoint a potential problem so that preventive action may be taken.

Tests are done on water taken from the well ("raw water"), water within our treatment facilities, water exiting our treatment plants at the point-of-entry to the distribution system, and from sites located throughout our distribution system after treatment. These tests are conducted in the company's state certified laboratory, by the Nassau County Health Department Laboratory, and by independent, certified laboratories approved by the state, who report results simultaneously to the company and to the Health Department.

New York State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year-to-year. Some of the data, though representative of the water quality, are more than one year old.

For a copy of the Water Supplement containing detailed data on testing at the source water wells before treatment, call us at 516-632-2215 and request a copy.

2016 STATISTICS AT-A-GLANCE

Wells Closed/Restricted	One
Violations of Standards	None
Typical Well Depth	500 Feet
Aquifers	Upper Glacial*, Jameco, Magothy, Lloyd
Pumping Stations	23
Service Area	43 Square Miles
Total Water Withdrawn	10,448,586,000 Gal.
Total Water Delivered to System	10,109,935,000 Gal.
Total Water Lost from System**	1,546,544,000 Gal.
Population Served (approx.)	220,000
Customers Served (services)	73,880
Miles of Mains	723

* The Upper Glacial aquifer is no longer utilized for water source

** Total water lost from the system includes "Accounted For" and "Unaccounted For" water. Non-revenue water is approx. 15.3% of total water delivered to the distribution system; of which 6.4% is accounted for and 8.9% is unaccounted for.

Water Quality Table – Table of Detected Contaminants 2016 (Lynbrook Operations)

REGULATED SUBSTANCES

Contaminant (units)	Date Sampled	MCL	MCLG	Maximum Amount Detected	Range: Low-High	Compliance Achieved	Typical Source
Microbiological							
Total Coliform (% positive samples in any given month) [1]	2016 (One positive sample in June 2016)	MCL=>5% samples positive	0	0.64 % (06/2016)	ND = 0.64%	Yes	Naturally present in the environment
E. Coli[2]	2016 (One positive sample in June 2016)	Any Positive sample[2]	0	One positive sample, followed by Negative resamples	ND = 0.64%	Yes	Human and Animal fecal waste
Radiological [3]							
Gross Alpha Activity (pCi/L)	2016	15	0	3.94	ND – 3.94	Yes	Erosion of natural deposits
Radium-226 (pCi/L)	2016	5	0	0.987	ND – 0.987	Yes	Erosion of natural deposits
Radium-228 (pCi/L)	2016	5	0	2.15	0.207 – 2.15	Yes	Decay of natural deposits and man-made emissions
Uranium (ppb)	2016	30	0	0.128	ND – 0.128	Yes	Erosion of natural deposits
Disinfection By-Products							
TTHM's [Total Trihalomethanes] (ppb) [4]	2016	80	0	7.9	ND – 7.9	Yes	By-product of drinking water disinfection
HAA5's [Total Haloacetic acids] (ppb) [5]	2016	60	0	ND	ND	Yes	By-product of drinking water disinfection
Disinfectants							
Chlorine (ppm) [6]	2016	MRDL = 4.0	MRDLG = 4.0	1.91	ND - 1.91	Yes	Water additive used to control microbes

Lead and Copper Rule (Tap water samples were collected from 50 homes in the service area)

Contaminant (units)	Date Sampled	Action Level	MCLG	Amount Detected (90th %tile)	Range: Low-High	Homes Above Action Level	Violation	Typical Source
Copper(ppm) [7]	9/14	1.3	1.3	0.140	ND - 0.270	0	No	Corrosion of household plumbing systems
Lead (ppb) [8]	9/14	15	0	3.8	ND – 9.5	0	No	Corrosion of household plumbing systems

Metals & Inorganic Substances

Contaminant (units)	Date Sampled	MCL	MCLG	Maximum Amount Detected	Range: Low-High	Typical Source
Chlorides (ppm)	2016	250	N/A	24.8	13.0 - 24.8	Naturally occurring or indicative of road salt contamination
Iron (ppb)[9]	2016	300	N/A	750	ND – 750	Naturally occurring
Manganese(ppb) [10]	2016	300	N/A	104	ND - 104	Naturally occurring
Nitrates as N (ppm)	2016	10	10	0.13	ND - 0.13	Erosion of natural deposits; Runoff from fertilizers and septic tanks
Sodium (ppm) [11]	2016	None	N/A	23.1	14.6 – 23.1	Naturally occurring; Road salt; Water softeners
Sulfate (ppm)	2016	250	N/A	36.7	7.6 – 36.7	Naturally occurring

Organic Substances

Contaminant (units)	Date Sampled	MCL	MCLG	Maximum Amount Detected	Range: Low-High	Typical Source
Dacthal (ppb) [12]	2016	50	N/A	3	ND - 3	Agricultural herbicide

Physical Parameters & Unregulated Substances

Contaminant (units)	Date Sampled	Maximum Amount Detected	Range: Low-High	Typical Source
Alkalinity (ppm)	2016	66.8	37.1 – 66.8	N/A
Aluminum (ppb)	2016	110	ND - 110	Naturally occurring
Calcium (ppm)	2016	26.0	11.0 – 26.0	Naturally occurring; Water treatment additive
Calcium Hardness (ppm)	2016	60.4	29.5 – 60.4	N/A
Color Index (units)	2016	15	ND - 15	Presence of metals such as copper, iron and manganese
Corrosivity (Langelier Index) [13]	2016	(-2.30)	(+0.04) - (-2.30)	N/A
Hardness, Total (ppm)	2016	77.5	34.0 – 77.5	N/A
Magnesium (ppm)	2016	5.8	ND – 5.8	Naturally occurring
pH (units) [14]	2016	8.5	6.5 – 8.5	N/A
Nickel (ppb)	2016	8.0	ND – 8.0	N/A
Silica (ppm as SiO2)	2016	22.0	12.0 – 22.0	Naturally occurring; Water additive used for corrosion control and to help control discolorations due to iron.
Temperature (°F)	2016	69	53 - 69	N/A
Turbidity (NTU)	2016	3.6	ND – 3.6	Measurement of the clarity of water
Total Dissolved Solids [TDS] (ppm)	2016	163	55 - 163	N/A

Footnotes:

[1] 1,851 total distribution system bacteriological samples taken in 2016; with One positive Total Coliform result = 0.05% positive for the year.
[2] ,A violation occurs when a Total Coliform positive sample is positive and is positive for E. Coli AND a repeat total coliform is positive OR when a total coliform positive sample is negative for E. Coli, but a repeat total coliform sample is positive and the resample is also positive for E. Coli. **In this case, all resamples collected were Negative for both total coliform and E. Coli.**
[3] Radiological results are from raw water wells, not on distribution locations, as required by the Nassau County Dept. of Health (NCDOH).
[4]. Total Trihalomethanes (TTHM's) mean the sum of: Bromoform, Bromodichloromethane, Dibromochloromethane, and Chloroform.
[5] Total Haloacetic acids (HAA5's) include the sum of: Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Bromoacetic acid, and Dibromoacetic acid.
[6] The running annual average of all Chlorine Residual readings in the distribution system was **0.83 ppm** for 2016.
[7] The level presented represents the 90th percentile of 50 sites tested. The "action level" for copper was not exceeded at any of 50 sites tested.
[8] The level presented represents the 90th percentile of 50 sites tested. The "action level" for lead was not exceeded at any of 50 sites tested.
[9] Higher levels of iron (up to 1,500 ppb) may be allowed by the state when justified by the water supplier by using metal sequestering treatments, as is the case with New York American Water - Lynbrook Operations.
[10] Total of iron and manganese should not exceed 500 ppb, unless allowed by the state, as is the case with New York American Water - Lynbrook Operations.
[11] Water containing more than 20 mg/L of sodium should not be used for drinking by persons on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.
[12] Dacthal also known as Dimethyl Tetrachloroterephthalate (DCPA) is an unregulated SOC, and was analyzed on raw water wells, and not on distribution locations, as per NCDOH requirements.
[13]The Nassau County Dept. of Health (NCDOH) recommends that the Langelier Saturation Index (for corrosivity) be as close to zero as possible.
[14] Nassau County Dept. of Health (NCDOH) guidelines recommend a pH range of 7.5 – 8.5. The running annual average of all pH readings in the distribution system was **7.66 units** in 2016.

Unregulated Contaminant Monitoring Rule (UCMR3):

The following parameters were tested for as per a required USEPA monitoring program (2013 - 2015) to try to quantify the presence and amount of emerging or unregulated compounds to see if any should be regulated by the EPA in the future (No MCL's exist for these parameters to-date).

The following contaminants that we tested for on the treated water exiting our treatment plants ("point of entry" locations) were detected as follows:

Contaminant (units)	Date Sampled	Maximum Amount Detected	Range: Low-High	Typical Source
Cobalt (ppb)	2014-2015	8.0	ND – 8.0	Naturally-occurring; medicines
Chromium (ppb)	2014-2015	9.1	ND – 9.1	Naturally-occurring; steel manufacturing; metal plating
Chromium VI (ppb)	2014-2015	0.28	ND – 0.28	Naturally-occurring; steel manufacturing; metal plating
Strontium (ppb)	2014-2015	73.4	18.2 – 73.4	Naturally-occurring
Vanadium (ppb)	2014-2015	0.8	ND – 0.8	Naturally-occurring
Chlorate (ppb)	2014-2015	180	ND - 180	Agricultural defoliant
1,4-Dioxane (ppb)	2014-2015	0.92	ND – 0.92	Manufacturing solvent
Chlorodifluoromethane (ppb)	2014-2015	0.44	ND – 0.44	Refrigerant

Listing of Non-Detected (ND) Contaminants – 2016 (Lynbrook Operations):

None of the following compounds that we analyzed for were detected in your drinking water at the respective method detection levels:

Microbiological:

Inorganics & Physical:

Ammonia as N
Cyanide, free
Fluoride
Nitrite as N
Odor
Perchlorate
Surfactants (as MBAS)

Metals:

Antimony
Arsenic
Barium
Boron
Beryllium
Cadmium
Chromium
Cobalt
Mercury
Molybdenum
Potassium
Selenium
Silver
Thallium
Vanadium
Zinc

Miscellaneous:

Asbestos fibers

Volatile Organic Compounds (VOC's):

Benzene
Bromobenzene
Bromochloromethane
Bromomethane
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
Dibromomethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4- Dichlorobenzene (Meta)
Dichlorodifluormethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethane
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
1,1-Dichloropropene
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
Hexachlorobutadinene
Isopropylbenzene
4-Isopropyltoluene
Methylene Chloride (Dichloromethane)
Methyl Tert. Butyl Ether (MTBE)
n-Propylbenzene
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene (PCE)
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene (TCE)
Trichlorofluoromethane
1,2,3-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
M-Xylene
O-Xylene
P-Xylene
Vinyl Chloride

Synthetic Organic Compounds (SOC's):*

Regulated Group #1:

Alachlor
Aldicarb
Aldicarb Sulfone
Aldicarb Sulfoxide
Atrazine
Carbofuran
Chlordane, Total
1,2-Dibromo-3-Chloropropane (DBCP)
2,4-D
Endrin
1,2-Dibromomethane (EDB)
Heptachlor
Heptachlor Epoxide
Lindane
Methoxychlor
PCB's
Pentachlorophenol
Toxaphene
2,4,5-TP (Silvex)

Regulated Group #2:

Aldrin
Benzo(a)pyrene
Butachlor
Carbaryl
Dalapon
Di (2-Ethylhexyl) adipate
Di (2-Ethylhexyl) phthalalte
Dicamba
Dieldrin
Dinoseb
Diquat
Endothall
Glyphosate
Hexachlorobenzene
Hexachlorocyclopentadiene
3-Hydroxycarbofuran
Methomyl
Metolachlor
Metribuzin
Oxamyl (Vydate)
Picloram
Propachlor
Simazine
2,3,7,8-TCDD (Dioxin)

Unregulated SOC's:*

2,4-DB
2,4,5-T
3,5-Dichlorobenzoic Acid
Acifluorfen
Bentazon
Dichlorprop
Methiocarb

** Synthetic Organic Compounds (SOC's) are mainly Pesticides and Herbicides, and are required to be sampled on raw water wells, as per NCDOH requirements.*

Unregulated Contaminant Monitoring Rule (UCMR3):

The following parameters were tested for as per a required USEPA monitoring program (2013 - 2015) to try to quantify the presence and amount of emerging or unregulated compounds to see if any should be regulated by the EPA in the future.

The following contaminants that we tested for on the treated water exiting our treatment plants ("point of entry" locations) were "Non-detected" (ND):

Metals Group:

Molybdenum

Volatile Organic Compounds (VOC's) Group:

1,1-Dichloroethane
1,2,3-Trichloropropane
1,3-Butadiene
Bromochloromethane (halon1011)
Bromomethane
Chloromethane

Perfluorinated Compounds Group (all ND):

Perfluorooctanesulfonin acid (PFOS)
Perfluorooctonoic acid (PFOA)
Perfluorononanoic acid (PFNA)
Perfluorohexanesulfonic acid (PFHxS)
Perfluoroheptanoic acid (PFHpA)
Perfluorobutanesulfonic acid (PFBS)

Hormones Group (all ND):

Estradiol (17beta-)
Equilin
4-Androstene-3,17-dione
Estrone
Ethynylestradiol (ethinyl estradiol)
Hydroxyestradiol
Testosterone

There's a lot more to your water bill than just water.
When you turn on the tap, it's easy to see what your water bill buys. What's not as easy to see is what it takes to bring that water to your home. The miles of pipeline hidden below the ground. The facilities that draw water from the source. The plant where it's treated and tested. The scientists, engineers, and maintenance crews working around the clock to make sure that water is always there when you need it. Your water payments are helping to build a better tomorrow by supporting needed improvements that will keep water flowing for all of us—today and well into the future. All for less than a penny a gallon.
AT LESS THAN A PENNY PER GALLON WATER IS A GREAT VALUE
WE CARE ABOUT WATER. IT'S WHAT WE DO.
FIND OUT WHY YOU SHOULD, TOO, at amwater.com.