

South Huntington Water District 2019 Drinking Water Quality Report

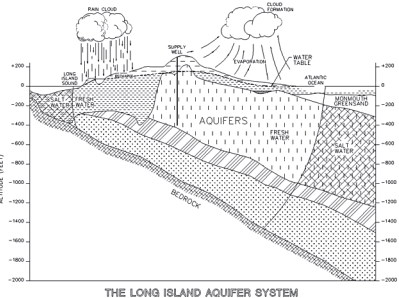
Public Water Supply Identification No.: 5103263

**ANNUAL WATER SUPPLY/CONSUMER
CONFIDENCE REPORT
JANUARY 2020**

Board of Commissioners
Paul Tonna, Chairman
Ciro DePalo, Treasurer
Joseph Perry, Secretary

The South Huntington Water District is pleased to present to you this year's Water Quality Report. **The Board of Commissioners is happy to report that our water meets or exceeds all Federal, State and County drinking water standards.** This report is required to be delivered to all residents of our District in compliance with Federal and State regulations. Our constant goal is to provide you with a safe and dependable supply of drinking water every day. We also want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. The Board of Water Commissioners and the District employees are committed to ensuring that you and your family receive the highest quality water at the lowest possible cost.

SOURCE OF OUR WATER



The source of water for the District is groundwater pumped from 18 active wells located throughout the community that are drilled into the Glacial and Magothy aquifers beneath Long Island, as shown in the above figure. Generally, the water quality of the aquifer is good to excellent, although there are localized areas of contamination.

The population served by the South Huntington Water District during 2019 was 81,760. The total amount of water withdrawn from the aquifer in 2019 was 3.258 billion gallons, of which approximately 95 percent was billed directly to consumers.

Throughout the United States 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.

COST OF WATER

The District bills each customer quarterly based on the rates shown below effective January 1, 2020:

9,000 - 50,000 gallons	\$0.95 per 1,000 gallons
51,000 - 100,000 gallons	\$1.46 per 1,000 gallons
101,000 gallons and over	\$1.76 per 1,000 gallons

The minimum bill is \$8.00 per quarter which includes 8,000 gallons.

We are proud to state that these are still some of the lowest water rates on Long Island!

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 service, please contact Chief Plant Operator Ken Carsten at (631) 427-8190 or the Suffolk County Department of Health Services at (631) 852-5810. 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 every Tuesday at 8:30 a.m. at the Water District office.

The South Huntington Water District routinely monitors for different parameters and contaminants in your drinking water as required by Federal and State laws. All sources of drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents or contaminants. It's important to remember that the presence of these constituents does not necessarily pose a health risk. 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 public health. For more information on contamination and potential health risks, please contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791.

Water from the South Huntington Water District has elevated levels of nitrates, 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.

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 microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

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 2019, the South Huntington Water District continued to implement a water conservation program in order to minimize any unnecessary water use. The pumpage for 2019 was 3.8 percent less than 2018. This decrease can most likely be attributable to the cooler and wetter weather that occurred during 2019 compared to 2018, as well as the effectiveness of our water conservation program

Residents of the District can also implement their own water conservation measures such as utilizing odd-even lawn sprinkling schedule, 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. 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 South Huntington 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 small amounts of sodium hydroxide.

The District also adds small amounts of calcium hypochlorite (chlorine) as a disinfection agent and to prevent the growth of bacteria in the distribution system.

Air stripping facilities are located at Well Nos. 1, 2, 5-1, 5-2, 9, 10-1 and 10-2 for the removal of volatile organic chemicals. Granular activated carbon filters are installed at Well Nos. 3-2/3-3, 4, 6, 7-1/7-2, 8, 15-1/15-2 and 20 for the removal of volatile organic chemicals. The District recently completed the construction of an air stripping facility at Plant No. 9 located on Gwynne Road in Melville for the removal of volatile organic chemicals. The District is in the early stages of planning for a state-of-the-art treatment system to remove emerging contaminants at Plant No. 10 on Whitson Lane, as explained below.

WATER QUALITY

In accordance with State regulations, the South Huntington Water District routinely monitors your drinking water for numerous parameters. We test your

drinking water for coliform bacteria, turbidity, inorganic compounds, lead and copper, nitrate, nitrite, volatile organic contaminants, total trihalomethanes, haloacetic acids, radiological and synthetic organic contaminants. Over 135 separate parameters are tested for in each of our wells numerous times per year. The Water District conducts more testing than required by the State Health Department to ensure your water is safe to drink. The enclosed table 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. All of our water meets the drinking water standards after treatment. In addition to the table of detected parameters, the District tested for over 100 contaminants that were not detected in our water, including pesticides, herbicides, organic chemicals and radioactive contaminants.

SOURCE WATER ASSESSMENT

The NYSDOH 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 State Source Water Assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. 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 "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.

As mentioned before, our water is derived from 18 drilled wells. The source water assessment has rated most of the wells as having a high susceptibility to industrial solvents and nitrates. The susceptibility to nitrates is due primarily to point sources of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the State and/or Federal government), agricultural practices and activities associated to high density land use, such as fertilizing lawns. The susceptibility to industrial solvents is primarily due to point sources of contamination related to industrialized activities in the assessment area.

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

WATER SYSTEM IMPROVEMENT

The District completed a Master Water Plan back in December 2018 that evaluated the infrastructure needs for the next 10 years from both a water quality and infrastructure rehabilitation standpoint. The highest priority project recommended by the Master Plan is to construct a new wellhead treatment for emerging contaminants at Plant No. 10. The District submitted a grant application to New York State and was very fortunate to be awarded

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TABLE OF DETECTED PARAMETERS

a \$3.75 million grant. The project is currently in the design stages with construction expected to start in late 2020/early 2021. The District will continue with this Capital Improvement Program of constructing new facilities and rehabilitating the older facilities and equipment to ensure that the District will be able to provide a reliable and safe water supply to our consumers.

A copy of this water quality report can also be found on the web at www.shwd.org. Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2019, are available at the South Huntington Water District office located at 75 5th Avenue South, Huntington Station, New York and the local public library.

We at South Huntington Water District work around the clock to provide the highest quality water to every tap throughout the community. We ask that all our consumers help us protect our water resources, which are the heart of our community, our way of life and our children's future.

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.

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.

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).

ppt - parts per trillion.

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

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

⁽¹⁾ - The District sampled for lead and copper under the guidelines of the USEPA requirements in 2018. Results indicated are from this special sampling program with the range of sample results from low to high and bottom number represents the 90th percentile. Of the 31 samples collected, none of the samples exceeded the action level for lead or copper. The District will resample in 2021.

⁽²⁾ - 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. South Huntington 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 or at <http://www.epa.gov/safewater/lead>.

⁽³⁾ - 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.

⁽⁴⁾ - Iron is essential for maintaining good health. However, too much iron can cause adverse health effects. Drinking water with very large amounts of iron can cause nausea, vomiting, diarrhea, constipation and stomach pain. These effects usually diminish once the elevated iron exposure is stopped. A small number of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called "iron overload") and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter, and is based on iron's effects on the taste, odor and color of the water.

⁽⁵⁾ - Perchlorate is an unregulated contaminant. However, the State Health Dept. has established an action level of 18 ug/l

⁽⁶⁾ - Total coliform bacteria was detected in 1 out of 1,203 routine compliance samples collected within our distribution system once in July and once in July 2019. No positive samples were detected for the rest of the year. All repeat samples were negative for bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.

⁽⁷⁾ - Emerging contaminants are contaminants that do not yet have a specific drinking water standard or regulatory limit, but are currently being evaluated for a drinking water standard.

⁽⁸⁾ - HA is a combined number for PFOA and PFOS.

Parameters or Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
Inorganic Contaminants							
Lead ^{(1) (2)}	No	July & August 2018	ND - 1.1 ND ⁽¹⁾	µg/L	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits
Copper ⁽¹⁾	No	July & August 2018	0.0036 - 0.40 0.048 ⁽¹⁾	mg/L	1.3	AL = 1.3	Corrosion of household plumbing; erosion of natural deposits
Ammonia	No	04/08/19	ND - 0.13	mg/L	n/a	No MCL	Nitrogen from fertilizers and sewage
Barium	No	04/09/19	ND - 0.013	mg/L	2	MCL = 2.0	Naturally occurring
Sulfate	No	04/30/19	ND - 13.5	mg/L	n/a	MCL = 250	Naturally occurring
Nickel	No	04/08/19	ND - 4.5	µg/L	n/a	MCL = 100	Naturally occurring
Sodium	No	04/25/19	ND - 46.4	mg/L	n/a	No MCL ⁽³⁾	Naturally occurring
Zinc	No	04/30/19	ND - 0.046	mg/L	n/a	MCL = 5.0	Naturally occurring
Chloride	No	04/30/19	ND - 46.5	mg/L	n/a	MCL = 250	Naturally occurring
Iron	No	10/03/19	ND - 45 ⁽⁴⁾	µg/L	n/a	MCL = 300	Naturally occurring
Manganese	No	04/08/19	ND - 19	mg/L	n/a	MCL = 300	Naturally occurring
Nitrate	No	03/06/19	1.1 - 8.6	mg/L	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Perchlorate	No	01/17/19	ND - 4.0	µg/L	n/a	AL= 18 ⁽⁵⁾	Fertilizer
Bacteriological							
Total Coliform ⁽⁶⁾	No	7/15/2019	1 positive out of 1,203 samples	n/a	0	MCL = More than 5% per month	Naturally occurring in the environment
Radiological							
Gross Alpha	No	02/07/19	ND - 0.825	pci/L	0	MCL = 15	Erosion of natural deposits
Gross Beta	No	02/17/19	ND - 1.08	pci/L	0	MCL = 50	Erosion of natural deposits
Radium 226 and 228	No	02/08/19	0.33 - 0.924	pci/L	0	MCL = 5	Erosion of natural deposits
Volatile Organic Contaminants							
c/s -1,2-Dichloroethene	No	06/05/19	ND - 1.3	µg/L	n/a	MCL = 5	Industrial chemical discharge
1,1-Dichloroethane	No	08/15/19	ND - 1.9	µg/L	n/a	MCL = 5	Industrial chemical discharge
Trichloroethene	No	07/15/19	ND - 1.7	µg/L	n/a	MCL = 5	Industrial chemical discharge
1,1-Dichloroethene	No	05/03/19	ND - 0.9	µg/L	0	MCL = 5	Industrial chemical discharge
1,2-Dichloropropane	No	10/02/19	ND - 1.7	µg/L	n/a	MCL = 5	Industrial chemical discharge
Total Trihalomethanes	No	01/08/19	ND - 6.4	µg/L	n/a	MCL = 80	Disinfection by-product
Trichlorofluoromethane (Freon 11)	No	10/02/19	ND - 1.7	µg/L	n/a	MCL = 10	Refrigerant
MTBE	No	08/15/19	ND - 0.5	µg/L	n/a	MCL = 10	Gasoline additive
Emerging Contaminants⁽⁷⁾							
1,4-Dioxane	No	02/01/19	ND - 1.6	µg/L	n/a	MCL = 50	Industrial chemical discharge
Perfluorooctanoic Acid (PFOA)	No	02/05/19	ND - 3.6	ng/L	n/a	HA=70 ⁽⁸⁾	PFOA (or, PFOS) can get into drinking water through releases from fluoropolymer manufacturing or processing facilities, wastewater treatment plants, and landfills
Hexavalent Chromium	No	02/01/19	ND - 2.6	µg/L	n/a	MCL = 100	Natural deposits and industrial discharge
Chlorate	No	08/06/19	ND - 39.9	µg/L	n/a	No MCL	Agricultural defoliant