

South Huntington Water District 2020 Drinking Water Quality Report

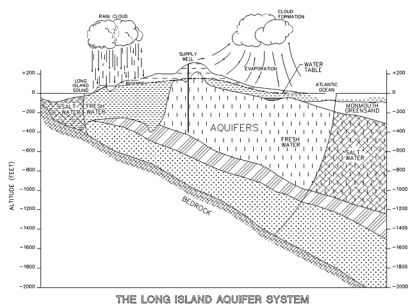
Public Water Supply Identification No.: 5103263

ANNUAL WATER SUPPLY/CONSUMER
CONFIDENCE REPORT
FEBRUARY 2021

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



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 2020 was 81,760. The total amount of water withdrawn from the aquifer in 2020 was 3.344 billion gallons, of which approximately 92 percent was billed directly to consumers.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, 2021:

9,000 - 50,000 gallons	\$1.00 per 1,000 gallons
51,000 - 100,000 gallons	\$1.51 per 1,000 gallons
101,000 gallons and over	\$1.81 per 1,000 gallons

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

In addition, there is a \$25 per quarter surcharge to cover the cost of water quality treatment improvement projects.

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 Kenneth 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 Wednesday at 8:30 a.m. at the Water District office or by conference call. Please contact the Water District for call-in number if you wish to listen in.

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 2020, the South Huntington Water District revised its water conservation program in order to minimize any unnecessary water use. The District established a mandatory ODD/EVEN lawn irrigation restriction program. The pumpage for 2020 was 2.6 percent more than 2019. This increase can most likely be attributable to the hotter and drier weather that occurred during 2020 compared to 2019.

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. 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 is constructing a state-of-the-art treatment system to remove emerging contaminants at Plant No. 10 on Whitson Lane, as explained below. The District is also in the design phase of constructing a similar treatment system at Plant No. 3 on Amityville Road.

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 and organic chemicals contaminants.

MCL DEFERRAL

When a public water system (PWS) is issued a deferral, the water system agrees to a schedule for corrective action and compliance with the new PFOS, PFOA or 1,4-dioxane MCLs. In exchange, the New York State Department of Health (the Department) agrees to defer enforcement actions, such as assessing fines, if the PWS is meeting established deadlines. Deferral recipients are required to update the Department and the Suffolk County Department of Health Services each calendar quarter on the status of established deadlines. The Department can resume enforcement if the agreed upon deadlines are not met. Information about our deferral and established deadline can be found at the following site: <https://www.shwd.org/deferralquarterlyreport/>. and <https://www.shwd.org/wordpress/wp-content/uploads/2021/04/21.04.08-SHWD-First-Quarter-Update.pdf>

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 is in the process of undertaking a major

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TABLE OF DETECTED PARAMETERS

water system improvement program that provides specialized wellhead treatment at several wells for the removal of the contaminant 1,4-Dioxane. The District has two wells that exceed the new MCL for 1,4-Dioxane. Both of these wells have been removed from service until such time a treatment system is in service.

An AOP (Advanced Oxidation Process) Treatment System is under construction at Plant No. 10 on Whitson Road. This treatment system should be in service by spring 2022. Another treatment system is currently under design at Plant No. 3 on Amityville Road and is expected to be placed into service by late 2022.

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 2020, 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 (µg/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⁾ - During 2018, we collected and analyzed 31 samples for lead and copper. The result indicated represents the 90th percentile as defined by the Lead and Copper Rule. No sample exceeded the action level for copper and lead. Next testing is scheduled for 2021. 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. 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

⁽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⁾ - If iron and manganese are present, the total concentration of both should not exceed 500 µg/L. 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.

⁽⁴⁾ - Perchlorate is an unregulated contaminant. However, the State Health Dept. has established an action level of 18 µg/L.

⁽⁵⁾ - MCL of 100 µg/L is for Total Chromium. There is no MCL for Hexavalent Chromium.

⁽⁶⁾ - Highest test result of 1.5 µg/L from Well No. 10-1 taken before new MCL established on August 26, 2020. Well No. 10-1 has been taken off-line and is not in service.

⁽⁷⁾ - The New York State Dept. of Health (NYSDOH) established a new MCL for 1,4-dioxane at 1 part per billion (ppb) starting in August 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. Also used in personal care products including detergents.

⁽⁹⁾ - MCL for Radium is for Radium 226 and Radium 228 combined.

⁽¹⁰⁾ - The US environmental Protection Agency (EPA) has established a life time health advisory level (HAL) of 70 parts per trillion (ppt) for PFOA and PFOS combined. The New York State (NYS) maximum contaminant level (MCL) is 10 ppt for PFOA and 10 ppt for PFOS as of August 2020.

⁽¹¹⁾ - PFOA/PFOS 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. Many of these uses have been phased out by its primary U.S. manufacturer; however, there are still some ongoing uses.

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
Inorganic Contaminants							
Lead ⁽¹⁾	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
Barium	No	4/3/2020	ND - 0.026	mg/L	2	MCL = 2.0	Naturally occurring
Sulfate	No	4/20/2020	ND - 17.7	mg/L	n/a	MCL = 250	Naturally occurring
Nickel	No	4/2/2020	ND - 3.6	µg/L	n/a	MCL = 100	Naturally occurring
Sodium	No	4/2/2020	2.9 - 41.6	mg/L	n/a	No MCL ⁽²⁾	Naturally occurring
Zinc	No	4/3/2020	ND - 1.22	mg/L	n/a	MCL = 5.0	Naturally occurring
Chloride	No	4/2/2020	2.2 - 61.2	mg/L	n/a	MCL = 250	Naturally occurring
Iron	No	4/2/2020	ND - 33	µg/L	n/a	MCL = 300 ⁽³⁾	Naturally occurring
Manganese	No	4/2/2020	ND - 10	µg/L	n/a	MCL = 300 ⁽³⁾	Naturally occurring
Nitrate	No	10/5/2020	0.8 - 9.9	mg/L	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Perchlorate	No	1/7/2020	ND - 9.8	µg/L	n/a	AL=18 ⁽⁴⁾	Fertilizer
Hexavalent Chromium	No	2/19/2020	ND - 1.9	µg/L	n/a	No MCL ⁽⁵⁾	Natural deposits and industrial discharge
Specific Conductivity	No	4/21/2020	26.0 - 255.0	umhos/cm	n/a	n/a	Naturally occurring
Total Hardness	No	4/3/2020	2.7 - 88.1	mg/L	n/a	n/a	Measure of calcium and magnesium
Volatile Organic Contaminants							
cis-1,2-Dichloroethene	No	9/15/2020	ND - 1.6	µg/L	n/a	MCL = 5	Industrial chemical discharge
1,1-Dichloroethane	No	7/7/2020	ND - 2.8	µg/L	n/a	MCL = 5	Industrial chemical discharge
Trichloroethene	No	9/15/2020	ND - 0.76	µg/L	n/a	MCL = 5	Industrial chemical discharge
Trichlorofluoromethane (Freon 11)	No	12/7/2020	ND - 0.9	µg/L	n/a	MCL = 10	Refrigerant
MTBE	No	4/2/2020	ND - 0.61	µg/L	n/a	MCL = 10	Gasoline additive
1,4-Dioxane	No	1/9/2020	ND - 1.5 ⁽⁶⁾	µg/L	n/a	MCL = 1.0	Industrial/Commercial chemical discharge ⁽⁷⁾⁽⁸⁾
Disinfection By-Products							
Total Trihalomethanes (THMS)	No	4/2/2020	ND - 7.0	µg/L	0	MCL = 80	Disinfection by-product
Radionuclides							
Gross Alpha	No	2/7/2019	ND - 0.825	pCi/L	0	MCL = 15	Erosion of natural deposits
Gross Beta	No	2/17/2019	ND - 1.08	pCi/L	0	MCL = 50	Erosion of natural deposits
Radium 226 and 228	No	2/8/2019	0.33 - 0.924	pCi/L	0	MCL = 5 ⁽⁹⁾	Erosion of natural deposits
Uranium	No	2/7/2019	ND - 0.412	pCi/L	1	MCL = 300	Erosion of natural deposits
Perfluorinated Chemicals⁽¹⁰⁾							
Perfluorohexanesulfonic Acid	No	10/14/2020	ND - 2.4	ng/L	n/a	MCL = 50,000	Industrial discharge
Perfluorooctanesulfonic Acid (PFOS) ⁽¹¹⁾	No	5/4/2020	ND - 2.9	ng/L	n/a	MCL = 10	Industrial discharge
Perfluorooctanoic Acid (PFOA) ⁽¹¹⁾	No	5/4/2020	ND - 2.9	ng/L	n/a	MCL = 10	Industrial discharge
Bacteriological							
Total Coliform	No	n/a	0 positive out of 1020 samples	n/a	0	MCL = More than 5% per month	Naturally occurring in the environment