2019 drinking water quality report

HAMPTON BAYS WATER DISTRICT
TOWN OF SOUTHAMPTON
PUBLIC WATER SUPPLY IDENTIFICATION NO. 5103704

ANNUAL WATER SUPPLY REPORT **MAY 2020**

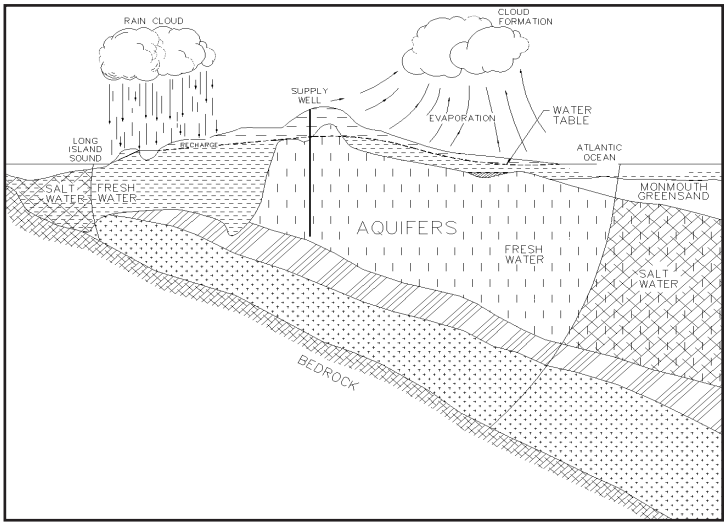
The Hampton Bays Water District is pleased to present this 2019 Water Quality Report. The report is required to be delivered to all residents of our District in compliance with Federal and State regulations. We are happy to report that our water supply is in full compliance with all Federal, State and County regulations with the exception of iron as presented on page 3. 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 Supervisor, Trustees and the District employees are committed to ensuring that you and your family receive the highest quality water.

SOURCE OF OUR WATER

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 our tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The source of water for the District is groundwater pumped from 11 active wells located throughout the community that are drilled into the Glacial and Magothy aquifers beneath Long Island, as shown on the adjacent figure. Generally, the water quality of the aquifer is good to excellent, although there are localized areas of contamination. The water from these areas is treated by the District to remove any contaminants prior to the delivery of any water to the consumer. It should also be noted that the District maintains electrical generators at many of our well sites in order to continuously provide water to the community, even during emergency situations such as power outages.



THE LONG ISLAND AQUIFER SYSTEM

WATER TREATMENT

The Hampton Bays Water District provides treatment at all of its 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 the corrosive action between the water and water mains and in-house plumbing by the addition of sodium hydroxide. A phosphate product, CALCIQUEST, is added as an iron sequestering agent to minimize the discoloring of the water and staining of laundry. The District also provides disinfection treatment by the addition of small quantities of calcium hypochlorite (chlorine). The District also maintains a granular activated carbon filtration system at Plant No. 1 for the removal of PFOS and PFOA compounds.

COST OF WATER

The District utilizes a billing schedule depending on your rate category (meter size), as shown below. Our Average customers are being billed at $1.185 per 100 cubic feet of water under minimum usage.

QUARTERLY WATER RATES

	Metric Size	Minimum Bill	Minimum Usage*
Typical Residential Rate	5/8”	$11.80	500 cf
	1”	$23.60	1,000 cf
Industrial/ Commercial/ Municipal Rate Category	1-1/2”	$35.40	1,500 cf
	2”	$47.25	2,000 cf
	3”	$106.30	4,500 cf
	4”	$127.80	5,500 cf
	6”	$165.40	7,000 cf
	8”	$189.00	12,000 cf

(cf - cubic feet) 1 cubic foot = 7.48 gallons

SOURCE WATER ASSESSMENT

The NYSDOH, with assistance from the local health department, has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how rapidly contaminants can move through the subsurface to the wells. The susceptibility of a water supply well to contamination is dependent upon both the presence of potential sources of contamination within the well’s contributing area and the likelihood that the contaminant can travel through the environment to reach the well. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. Please refer to 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 11 drilled wells. The source water assessment has rated most of the wells as having a high susceptibility to industrial solvents and nitrates. The elevated 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), and activities associated to unsewered residential land use and activities, such as fertilizing lawns. The susceptibility to industrial solvents is primarily due to point sources of contamination related to transportation routes and commercial/industrial activities in the assessment area.

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

CONTACTS FOR ADDITIONAL INFORMATION

We are pleased to report that our drinking water is safe and meets all Federal and State requirements with the exception of iron and manganese. If you have any questions about this report or the Hampton Bays Water District, please contact Water District Superintendent Richard McCuen at (631) 728-0179 or the Suffolk County Department of Health Services at (631) 852-5810. We want our residents to be informed about our water system. Major issues concerning the Hampton Bays Water District are discussed at the regularly scheduled District meetings. **Thee next meeting will be held in Southampton Town Hall at 10:00 a.m. October 10, 2020.**

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

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 Cryptosporidum, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

The USEPA established a Lead and Copper Rule that required all public water suppliers to sample and test for lead and copper at the consumer’s tap. The first testing was required in 1992. All results were excellent indicating that the District’s corrosion control treatment program was effective in preventing the leaching of lead and copper from your home’s plumbing into your drinking water. The same testing was last conducted in 2019 with the same excellent results. The next testing program is scheduled to be completed in 2022.

Some of the water from the Hampton Bays 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.

2019 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
Inorganic Contaminants							
Copper	No	June/August 2019	0.097 - 0.41 0.31[1]	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	June/August 2019	ND - 5.8 2.9[1]	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Barium	No	04/01/19	0.018 - 0.11	mg/l	2	MCL = 2.0	Naturally occurring
Sodium	No	06/19/19	10.2 - 72.7	mg/l	n/a	No MCL[2]	Naturally occurring
Zinc	No	06/19/19	ND - 0.024	mg/l	n/a	MCL = 5	Naturally occuring
Chloride	No	06/19/19	ND - 94.3	mg/l	n/a	MCL = 250	Naturally occurring
Iron	Yes	05/15/19	ND - 1800	ug/l	n/a	MCL = 300[3]	Naturally occurring
Manganese	Yes	05/08/19	ND - 470	ug/l	n/a	MCL = 300[4]	Naturally occurring
Nitrate	No	04/01/19	0.13 - 8.7	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Calcium	No	06/12/18	ND - 14.0	mg/l	None	No MCL	Naturally occurring
Magnesium	No	06/12/19	ND - 5.0	mg/l	n/a	No MCL	Naturally occurring
Ammonia	No	06/19/19	ND - 0.61	mg/l	n/a	None	Naturally occurring
Nickel	No	04/01/19	ND - 13.0	ug/l	n/a	MCL = 100	Naturally occurring
Sulfate	No	06/19/19	7.6 - 20.5	mg/l	n/a	MCL = 250	Naturally occurring
Hexavalent Chromium	No	05/15/19	0.28 - 0.69	ug/l	n/a	No MCL[5]	Natural deposits and industrial dischage
Volatile Organic Contaminants							
1,4-Dioxane	No	08/14/19	ND - 0.1	ug/l	n/a	MCL = 50	Industrial discharge[6][7]
Disinfection By-Products							
Chlorate	No	08/07/19	56.1 - 67.2	ug/l	n/a	No MCL	Disinfection by-products
Total Trihalomethanes (THHM)	No	05/08/19	ND - 5.0	ug/l	0	MCL = 80	Disinfection by-products
Radionuclides							
Gross Alpha	No	12/20/18	ND - 0.347	pCi/L	n/a	MCL = 15	Erosion of natural deposits
Gross Beta	No	12/20/18	ND - 0.972	pCi/L	n/a	MCL = 50	Erosion of natural deposits
Radium 226 & 228 Combined	No	12/20/18	ND - 0.302	pCi/L	n/a	MCL = 5[8]	Erosion of natural deposits
Uranium	No	12/20/18	ND - 0.18	ug/l	n/a	MCL = 30	Erosion of natural deposits

2019 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS (cont'd.)

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contaminant
Perfluorochemicals[9]							
Perfluorobutanesulfonic Acid	No	02/29/19	ND - 2.3	ng/l	0	MCL = 50,000	Industrial discharge
Perfluorohexanesulfonic Acid	No	02/29/19	ND - 2.2	ng/l	0	MCL = 50,000	Industrial discharge
Perfluorononanoic Acid	No	02/29/19	ND - 19.0	ng/l	0	MCL = 50,000	Industrial discharge
Perfluorooctanoic Acid (PFOA)	No	02/29/19	ND - 1.9	ng/l	0	HA = 70	Industrial discharge[10]

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.
Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Health Advisory (HA) - An estimate of acceptable drinking water levels for a chemical substance based on health effects information; a health advisory is not a legally enforceable Federal standard, but serves as technical guidance to assist Federal, State and local officials.
Milligrams per liter (mg/l) - Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Micrograms per liter (ug/l) - Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
Nanograms per liter (ng/l) - Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion - ppt).
Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.
ppt - parts per trillion
pCi/L - pico Curies per Liter is a measure of radioactivity in water.

[1] - During 2019, the District collect 30 samples for lead and copper. The 90% level is presented in the table as the maximum result. The next round of samples will occur in 2022. 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. Hampton Bays 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] - 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] - The Food and Nutrition Board of the National Research Council determined an estimated safe and adequate daily dietary intake of manganese to be 2,000-5,000 micrograms for adults. However, many peoples diets lead them to consume even higher amounts of manganese, especially those who consume high amounts of vegetable or are vegetarian. The infant population is of greatest concern. It would be better if the drinking water were not used to make infant formula since it already contains iron and manganese. Excess manganese produces a brownish color in laundered goods and impairs the taste of tea, coffee, and other beverages. Concentrations may cause a dark brown or black stain on porcelain plumbing fixtures. As with iron, manganese may form a coating on distribution pipes.

[5] - MCL for Total Chromium - There is no MCL established for Hexavalent Chromium. These may slough off, causing brown blotches on laundered clothing or black particles in the water.

[6] - 1,4-Dioxane -The New York State (NYS) proposed MCL for 1,4 dioxane is 1 part per billion(ppb).

[7] - 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.

[8] - MCL is for Radium 226 plus Radium 228 combined.

[9] - 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) proposed maximum contaminant level (MCL) is 10 ppt for PFOA and 10ppt for PFOS.

[10] - 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 at airfields. Many of these uses have been phased out by its primary U.S. manufacturer; however, there are still some ongoing uses.

WATER QUALITY

In accordance with State regulations, the Hampton Bays Water District routinely monitors your drinking water for numerous parameters. We test your drinking water for coliform bacteria, turbidity, inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, total trihalomethanes and synthetic organic contaminants. Over 135 separate parameters are tested for in each of our wells numerous times per year. The table presented on pages 3 and 4 depicts which parameters or contaminants were detected in the water supply. 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.

The Hampton Bays Water District conducts over 5,000 water quality tests throughout the year, testing for over 135 different contaminants which have been undetected in our water supply including:

Arsenic	Atrazine	Bromoacetic Acid	1,1,2-Trichloroethane
Cadmium	Metolachlor	Dichloroacetic Acid	1,3-Dichloropropane
Chromium	Metribuzin	Trichloroacetic Acid	Chlorobenzene
Methyl Tert.Butyl Ether (MTBE)	Butachlor	Dibromoacetic Acid	1,1,1,2-Tetrachloroethane
Mercury	2,4-D	Total Haloacetic Acid	Bromobenzene
Selenium	2,4,5-TP (Silvex)	Tert-Butylbenzene	1,1,2,2-Tetrachloroethane
Silver	Dinoseb	Fluoride	1,2,3-Trichloropropane
Toluene	Dalapon	N-Butylbenzene	2-Chlorotoluene
Odor	Picloram	Calcium	4-Chlorotoluene
Nitrite	Dicamba	Dichlorodifluoromethane	1,2-Dichlorobenzene
4-Isopropyltoluene (P-Cumene)	Pentachlorophenol	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene
Sec-Butylbenzene	Hexachlorocyclopentadiene	Vinyl Chloride	1,4-Dichlorobenzene
1,2,4-Trimethylbenzene	bis(2-Ethylhexyl)adipate	Bromomethane	1,24-Trichlorobenzene
Detergents (MBAS)	bis(2-Ethylhexyl)phthalate	N-Propylbenzene	Hexachlorobutadiene
Free Cyanide	Hexachlorobenzene	Trichlorofluoromethane	1,2,3-Trichlorobenzene
Antimony	Benzo(A)Pyrene	Chlorodifluoromethane	Benzene
Beryllium	Aldicarb Sulfone	1,1-Dichloroethene	Tetrachloroethane
Pentachlorophenol	Aldicarbsulfoxide	Methylene Chloride	Ethylbenzene
Thallium	Aldicarb	Trans-1,2-Dichloroethene	M,P-Xylene
Lindane	Total Aldicarbs	1,1-Dichloroethane	O-Xylene
Heptachlor	Oxamyl	cis-1,2-Dichloroethene	Styrene
Aldrin	Methomyl	2,2-Dichloropropane	Perfluoroheptanoic Acid
Heptachloro Epoxide	3-Hydroxycarbofuran	Bromochloromethane	Perfluorooctanesulfonic Acid
Dieldrin	Carbofuran	1,1,1-Trichloroethane	
Endrin	Carbaryl	Carbon Tetrachloride	
Methoxychlor	Glyphosate	1,1-Dichloropropene	
Toxaphene	Diquat	1,2-Dichloroethane	
Chlordane	Endothall	Trichloroethene	
Total PCBs	1,2-Dibromoethane (EDB)	1,2-Dichloropropane	
Propachlor	1,2-Dibromo-3-Chl.Propane	Dibromomethane	
Alachlor	Dioxin	Trans-1,3-Dichloropropene	
Simazine	Chloroacetic Acid	cis-1,3-Dichloropropene	
Methylene Chloride	Chloroethane	Chloromethane	
Total Coliform	Tetrachloroethene	Isopropylbenzene (Cumene)	

WATER CONSERVATION MEASURES

The household and commercial establishments serviced by the Hampton Bays Water District during 2019 was 7,212 with a population of 15,500. The total amount of water withdrawn from the aquifer in 2019 was 1,073.7 million gallons, of which 92 percent was billed directly to the consumers.

Residents are urged to 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 conservation is critical in protecting Long Island's groundwater system as it is the sole source of drinking water for all of Long Island, including Hampton Bays. Conservation allows us to preserve our water supply, increase water availability for emergency situations, and reduce stress on our drinking water wells and water distribution piping. Dramatic increases in water usage are seen during the warm weather months (May through September). Given the significant water use associated with lawn irrigation during these months, the District has identified water-sprinkling measures as a simple and effective method to reduce system strain and promote preservation of Long Island's precious natural resource.

This year, the Hampton Bays Water District is promoting a voluntary ODD/EVEN Lawn Water Program in which we hope you will participate. We ask odd numbered addresses to irrigate on odd-numbered days, and even numbered addresses to irrigate on even-numbered days. It is simple, yet extremely effective with everyone's participation. We also ask irrigation systems start from the hours of 9 PM to 11 PM and refrain from using the system in the middle of the night. This will allow the water to be available for household use for the early morning.

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 Hampton Bays Water District, the Town Clerk's office and the local public library. Customers can also review the Water District lab results on our website.

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

Should you have any questions concerning the Hampton Bays Water District, please contact our Water District Superintendent Richard McCuen at 631-728-0179 or visit our website: www.southamptontownny.gov and click on Table of Contents – Divisions and Departments ♦ Hampton Bays Water District.

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