2022 drinking water quality report

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

ANNUAL WATER SUPPLY REPORT **MAY 2023**

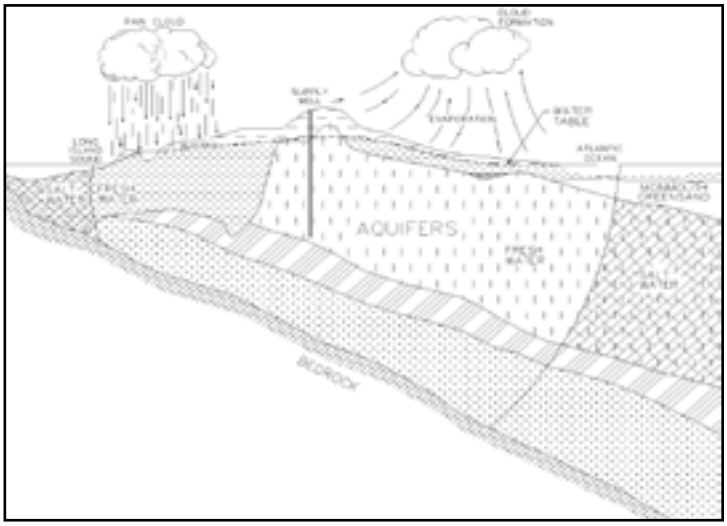
The Hampton Bays Water District is pleased to present this 2022 Water Quality Report. The report is required to be delivered to all residents of our District in compliance with Federal and State regulations. We are happy to report that our water supply is in full compliance with all Federal, State and County regulations, as presented on page 3. Our constant goal is to provide you with a safe and dependable supply of drinking water. 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. To help keep water flowing during emergencies, the District maintains electrical generators at many of our well sites.



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 blended phosphate is added as an iron sequestering agent to minimize the discoloring of the water and staining of laundry as well as inhibit corrosion. The District provides disinfection treatment by the addition of small quantities of calcium hypochlorite (chlorine) at each well. The District also maintains a granular activated carbon filtration system at Plant No. 1 for the removal of PFOS and PFOA compounds. In late 2021, the District completed commissioning of a treatment system designed to remove iron and manganese from the wells at Plant No. 4 located on Bellows Pond Road.

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 $2.35 per 100 cubic feet of water under minimum usage.

QUARTERLY WATER RATES

	Metric Size	Minimum Bill	Minimum Usage*
Typical			
Residential	**5/8”**	**$18.06**	**700 cf**
Rate	**1”**	**$36.16**	**700 cf**
Industrial/	**1-1/2”**	**$54.18**	**1,500 cf**
Commercial/	**2”**	**$72.34**	**2,000 cf**
Municipal	**3”**	**$162.70**	**4,500 cf**
Rate	**4”**	**$195.64**	**5,500 cf**
Category	**6”**	**$253.17**	**7,000 cf**
	8”	**$289.30**	**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 groundwater 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. **The next meeting will be held in Southampton Town Hall at 10:00 a.m. May 11, 2023 and October 12, 2023.**

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 2022 with the same excellent results. The next testing program is scheduled to be completed in 2025.

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.

2022 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-September 2022	0.0058 - 0.62 0.36[1]	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	No	June-September 2022	ND - 5.9 ND[1]	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits
Barium	No	06/01/22	0.014 - 0.084	mg/l	2	MCL = 2.0	Naturally occurring
Sodium	No	06/01/22	11.0 - 91.7	mg/l	n/a	No MCL[2]	Naturally occurring
Specific Conductance	No	06/01/22	94.0 - 631.0	umhos/cm	n/a	None	Naturally occurring
Zinc	No	06/01/22	ND - 0.16	mg/l	n/a	MCL = 5	Naturally occuring
Color	No	06/01/22	ND - 13.0	Units	n/a	MCL = 15	Naturally occurring
Chloride	No	06/01/22	12.2 - 138.0	mg/l	n/a	MCL = 250	Naturally occurring
Iron	No	05/04/22	ND - 0.083	ug/l	n/a	MCL = 300[3]	Naturally occurring
Manganese	No	06/22/22	ND - 0.079	ug/l	n/a	MCL = 300	Naturally occurring
Nitrate	No	04/13/22	0.068 - 8.6	mg/l	10	MCL = 10	Runoff from fertilizer and leaching from septic tanks and sewage
Ammonia	No	06/01/22	ND - 0.83	mg/l	n/a	None	Naturally occuring
Nickel	No	06/01/22	ND - 4.5	ug/l	n/a	MCL = 100	Naturally occurring
Sulfate	No	06/01/22	5.9 - 18.4	mg/l	n/a	MCL = 250	Naturally occurring
Disinfection By-Products							
Total Trihalomethanes (TTHM)[4]	No	08/03/22	ND - 0.90	ug/l	0	MCL = 80	Disinfection by-products
Chlorate	No	08/03/22	37.0 - 57.8	ug/l	0	No MCL	Disinfection by-products
Radionuclides							
Gross Alpha	No	07/16/20	ND - 1.9	pCi/L	n/a	MCL = 15	Erosion of natural deposits
Gross Beta	No	07/16/20	ND - 3.36	pCi/L	n/a	MCL = 50	Erosion of natural deposits
Radium 226 & 228 Combined	No	07/16/20	0.2 - 1.48	pCi/L	n/a	MCL = 5[5]	Erosion of natural deposits
Disinfectants							
Chlorine Residual	No	continuous	0.24 - 1.02	mg/l	n/a	MRDL = 4.0	Measure of disinfectant
Physical Characteristics							
Calcium Hardness	No	06/01/22	8.1 - 59.4	mg/l	n/a	No MCL	Naturally occurring
Synthetic Organic Contaminants							
1,4-Dioxane	No	07/13/22	ND - 0.082	ug/l	n/a	MCL = 1.0[6]	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites [7]
Perfluorooctanoic Acid (PFOA)	No	10/12/22	ND - 2.2	ng/l	n/a	MCL = 10.0[8]	Released into the environment from widespread use in commercial and industrial applications[9]
Perfluorooctanesulfonic Acid (PFOS)	No	07/06/22	ND - 2.9	ng/l	n/a	MCL = 10.0[8]	Released into the environment from widespread use in commercial and industrial applications[9]
Benzo(a)pyrene	No	06/15/22	ND - 0.047	ug/l	0	MCL = 200	Leaking from lining of water storage tanks and distribution lines

2022 DRINKING WATER QUALITY REPORT - TABLE OF DETECTED PARAMETERS (cont'd.)

Contaminants	Violation (Yes/No)	Date of Sample	Level Detected (Maximum Range)	Unit Measure-ment	MCLG or Health Advisory Level [10][11]	Regulatory Limit (MCL/AL)	Likely Source of Contaminant
Unregulated Perfluoroalkyl Substances							
Perfluorohexanesulfonic Acid (PFHxS)	No	07/06/22	ND - 1.9	ng/l	n/a	MCL = 50,000	Released into the environment from widespread use in commercial and industrial applications
Perfluorononanoic Acid (PFNA)	No	03/01/22	ND - 5.6	ng/l	n/a	MCL = 50,000	Released into the environment from widespread use in commercial and industrial applications
Perfluorobutanesulfonic Acid (PFBS)	No	10/12/22	ND - 2.4	ng/l	2000	MCL = 50,000	Released into the environment from widespread use in commercial and industrial applications
Perfluoroheptanoic Acid (PFHpA)	No	06/17/22	ND - 0.41	ng/l	n/a	MCL = 50,000	Released into the environment from widespread use in commercial and industrial applications
Perfluorohexanoic Acid (PFHxA)	No	10/12/22	ND - 2.9	ng/l	n/a	MCL = 50,000	Released into the environment from widespread use in commercial and industrial applications
Perfluorobutanoic Acid (PFBA)	No	10/12/22	ND - 5.1	ng/l	n/a	MCL = 50,000	Released into the environment from widespread use in commercial and industrial applications
Perfluoropentanoic Acid (PFPeA)	No	10/12/22	ND - 3.0	ng/l	n/a	MCL = 50,000	Released into the environment from widespread use in commercial and industrial applications
Perfluoropentanesulfonic Acid (PFPeS)	No	10/12/22	ND - 2.2	ng/l	n/a	MCL = 50,000[11][12]	Released into the environment from widespread use in commercial and industrial applications

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 2022, 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 2025. 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] - If iron and manganese are present, the total concentration of both should not exceed 500 ug/l.

[4] - Total Trihalomethanes include Chloroform, Bromoform, Bromodichloromethane and Dibromochlormethane.

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

[6] - 1,4-Dioxane -The New York State (NYS) established an MCL for 1,4 dioxane at 1 part per billion(ppb) effective August 26, 2020.

[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] - The New York State (NYS) established a maximum contaminant level (MCL) at 10 ppt for PFOA and 10ppt for PFOS effective August 2020.

[9] - 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.

[10] - USEPA Health Advisory Levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations. Health Advisory Levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available.

[11] - All Perfluoroalkyl substances, besides PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 50,000 ng/l.

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 150 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.

WATER CONSERVATION MEASURES

The household and commercial establishments serviced by the Hampton Bays Water District during 2022 was 7,219 with a population of 15,500. The total amount of water withdrawn from the aquifer in 2022 was 1.378billion gallons, of which 82.0 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 again 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.

The Hampton Bays Water District conducts over 5,000 water quality tests throughout the year, testing for over 150 different contaminants which have been undetected in our water supply including:

Arsenic	Atrazine	Total Haloacetic Acid	Chlorobenzene
Cadmium	Metolachlor	Chloroform	1,1,1,2-Tetrachloroethane
Chromium	Metribuzin	Bromodichloromethane	Bromobenzene
Fluoride	Butachlor	Dibromochloromethane	1,1,2,2-Tetrachloroethane
Mercury	2,4-D	Bromoform	1,2,3-Trichloropropane
Langlier Saturation Index	2,4,5-TP (Silvex)	Dichlorodifluoromethane	2-Chlorotoluene
Selenium	Dinoseb	Chloromethane	4-Chlorotoluene
Silver	Dalapon	Vinyl Chloride	1,2-Dichlorobenzene
Odor	Picloram	Bromomethane	1,3-Dichlorobenzene
Iron	Dicamba	Chloroethane	1,4-Dichlorobenzene
Manganese	Pentachlorophenol	Trichlorofluoromethane	1,2,4-Trichlorobenzene
Ammonia	Hexachlorocyclopentadiene	Chlorodifluoromethane	Hexachlorobutadiene
Nitrite	bis(2-Ethylhexyl)adipate	1,1-Dichloroethene	1,2,3-Trichlorobenzene
Detergents (MBAS)	bis(2-Ethylhexyl)phthalate	Methylene Chloride	Benzene
Free Cyanide	Hexachlorobenzene	Trans-1,2-Dichloroethene	Toluene
Antimony	Aldicarb Sulfone	1,1-Dichloroethane	Ethylbenzene
Beryllium	Aldicarbsulfoxide	cis-1,2-Dichloroethene	M,P-Xylene
Thallium	Aldicarb	2,2-Dichloropropane	O-Xylene
Lindane	Oxamyl	Bromochloromethane	Styrene
Heptachlor	Methomyl	1,1,1-Trichloroethane	Isopropylbenzene (Cumene)
Aldrin	3-Hydroxycarbofuran	Carbon Tetrachloride	N-Propylbenzene
Perfluorodecanoic Acid	Carbofuran	1,1-Dichloropropene	1,3,5-Trimethylbenzene
Perfluoro-3-Methoxypropanoic Acid	Carbaryl	1,2-Dichloroethane	Tert-Butylbenzene
Perfluoropentanoic Acid	Glyphosate	Trichloroethene	1,2,4-Trimethylbenzene
Perfluorotridecanoic Acid	Diquat	1,2-Dichloropropane	Sec-Butylbenzene
ADONA	Endothall	Dibromomethane	N-Butylbenzene
6:2FTS	Perfluorododecanoic Acid	Trans-1,3-Dichloropropene	Methyl Tert.Butyl Ether (MTBE)
Heptachlor Epoxide	Perfluoro-4-Methoxybutanoic Acid	Perfluoro(2-ethoxyethane) sulfonic Acid	Perfluorobutanesulfonic acid
Dieldrin	Perfluoropentanesulfonic Acid	Perfluoroundecanoic Acid	Perfluoroheptanoic acid
Endrin	NEtFOSSA	NMeFOSSA	Perfluorobutanoic Acid
Methoxychlor	HFPO-DA	11Cl-PF64dS	Perfluoro-1-heptansulfonic Acid
Toxaphene	8:2FTS	NFDHA	Perfluorohexanoic Acid
Chlordane	Chloroacetic Acid	Chromium Hexavalent	Perfluorotetradecanoic Acid
Total PCBs	Bromoacetic Acid	cis-1,3-Dichloropropene	9CL-PF3ONS
Propachlor	Dichloroacetic Acid	1,1,2-Trichloroethane	4:2FTS
Alachlor	Trichloroacetic Acid	Tetrachloroethene	Chromium
Simazine	Dibromoacetic Acid	1,3-Dichloropropane	Total Coliform
E.coli			

Hampton Bays Water District
P.O. Box 1013
Hampton Bays, New York 11946

Town Council

Supervisor Jay Schneiderman
Hon. John Bouvier
Hon. Rick Martel
Hon. Cyndi McNamara
Hon. Tommy John Schiavoni

Water District Superintendent

Richard McCuen

Water District Assistant Superintendent

James Kappers

Copies of a Supplemental Data Package, which includes the water quality data for each of our supply wells utilized during 2022, 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.