



INC. VILLAGE OF SANDS POINT

Annual Drinking Water Quality Report For 2020

PUBLIC WATER SUPPLY ID # 2902852

INTRODUCTION

The Sands Point Water Department issues this annual report describing the quality of our water in compliance with Federal and State regulations. The purpose is to inform you of the nature of our drinking water and of the need to protect its sources.

“Contaminant” is defined as any physical, chemical, microbiological or radiological substance or matter in water. In 2020, we conducted tests for over 120 potential contaminants. Low levels of some contaminants were detected, but none exceeded the level mandated by the State. This report details what our water contains and how it compares to State standards.

SOURCES OF WATER

Our drinking water comes from water stored in the naturally sandy soil beneath Long Island. This groundwater is stored in three layers called aquifers. The most readily accessible is the Upper Glacial. Directly below is the Magothy followed by the deepest aquifer called the Lloyd. On our “Manhasset Neck” Peninsula there are two smaller aquifers known as the Port Washington Aquifer and the Port Washington Confining Unit. We utilize the Upper Glacial and Port Washington aquifers in delivering water to the system.

In 2020 we utilized six separate wells located on three well fields. Two 500 gallon per minute wells are located on the Village Club property. Two 650 gallon per minute wells are located on the property behind the Village Hall on Tibbits Lane. Two wells are located at the Governor’s Lane facility. One well is designed at 600 gallons per minute and the other well produces 350 gallons per minute. Both wells are equipped with iron and manganese filtration systems. During 2020 we had three elevated storage tanks and one ground storage tank in service with a combined capacity of 1,830,000 gallons.

Please note that the Sands Point Water Department and the Port Washington Water District (PWWD) maintain an emergency interconnection. From time to time in past years, usually during summer drought conditions or tank rehabilitation projects, our Department has received water from PWWD. Because the PWWD is currently operating under a contaminant deferral for 1,4-dioxane issued by the State of New York, its water may contain contaminants at a level exceeding the New York State drinking water standard. Our Department will notify residents should it be necessary to utilize the interconnection this year.

WATER TREATMENT

Our water has long been treated with sodium hydroxide to lessen acidity, thereby reducing corrosivity before it enters the distribution system. Sodium hypochlorite is added to the water to maintain disinfection. The water from Well 6 and Well 8 is pumped from the well and treated with sodium hypochlorite to also enhance the iron and manganese removal process as it passes through the greensand and anthracite filters.

WATER USAGE

Our system serves approximately 2,900 people with 1,682 metered connections. Of those connections, 778 are for underground sprinkler systems. The total water produced in 2020 was 394 million gallons. The daily average of water treated and pumped into the system was 1,081,300 gallons. The average daily use during the Fall/Winter months was 381,344 gallons. **The average daily use during the Spring/Summer months was 1,769,758 gallons.** Our highest single day was 2,916,200 gallons. The amount of water delivered to customers was approximately 350 million gallons. The balance was used for flushing mains, fire fighting, service line leaks, filter back wash, and water main breaks. As an incentive for conservation, the charge for 1,000 gallons of water for domestic use begins at \$1.95 and rises to \$4.00. The charge for sprinkler use begins at \$4.40 and rises to \$7.30. Rates for sprinkler and domestic water use increase based on consumption level.

WATER QUALITY - ANALYTICAL TESTING RESULTS

The results of detected contaminants, obtained from distribution samples and wells, are listed in Table 1. The

highest level of a contaminant that is allowed in drinking water is known as the Maximum Contaminant Level (MCL). There were no samples obtained in 2020 exceeding the maximum contaminant level. Some of the contaminants for which tests were made include: total coliform, inorganic compounds, nitrate, lead and copper, and volatile organic compounds.

Some contaminants are regulated by an Action Level (AL) which, if exceeded, triggers treatment or other requirements by the water regulations. We are specifically required to report detections over certain limits. The MCL for nitrate is 10.0 mg/L (milligrams per liter). In one well sample, we had a nitrate level of 8.3 mg/L. Although the detected levels are less than the maximum contaminant level, they are sufficient to require the following notification:

Nitrates in drinking water at levels above 10.0 mg/L are a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

For lead and copper, the levels shown on Table 1 is the 90th percentile of 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal or below it. The action level for lead is 15 (ug/L) micrograms per liter and the action level for copper is 1.3 (mg/L) milligrams per liter. It should be noted that no samples for lead and copper exceeded the action level in 2020. Although we had no violations, we are providing you with the following information on lead in drinking water:

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. Sands Point Water Department 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 www.epa.gov/safewater/lead.

All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More

information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

NON-DETECTED CONTAMINANTS

In accordance with local and State regulations, the Sands Point Water Department routinely collects samples from the distribution system and wells for analysis. Contaminants that were analyzed for in 2020, but were not detected are listed herein:

Dichlorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, 1,1-dichloroethene, methylene chloride, trans-1,2-dichloroethene, 1,1-dichloroethane, cis-1,2-dichloroethene, 2,2-dichloropropane, bromochloromethane, 1,1,1-trichloroethane, carbon tetrachloride, 1,1-dichloropropene, 1,2-dichloroethane, trichloroethene, 1,2-dichloropropane, dibromomethane, trans-1,3-dichloropropene, 1,3-dichloropropene, 1,1,2-trichloroethane, tetrachloroethene, 1,3-dichloropropane, chlorobenzene, 1,1,1,2-tetrachloroethane, bromobenzene, 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane, 2-chlorotoluene, 2/4-chlorotoluene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, hexachlorobutadiene, 1,2,3-trichlorobenzene, benzene, ethylbenzene, m,p-xylene, o-xylene, styrene, isopropylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, tert-butylbenzene, 1,2,4-trimethylbenzene, 4-isopropyltoluene, sec-butylbenzene, n-butylbenzene, arsenic, beryllium, cadmium, chromium, selenium, silver, antimony, thallium, mercury, free cyanide, nitrogen, ammonia (as N), Nitrite as N, turbidity, chlorodibromomethane, bromoacetic acid, trichloroacetic acid, methyl tert. butyl ether, total coliform, and toluene.

For further details, a 300-page supplement is available for review at the Village Hall of all sampling done in 2020 for wells and the distribution system.

EDUCATIONAL STATEMENTS

Some people may be more vulnerable to microorganisms or pathogens in drinking water that cause disease than the general population. Immuno-compromised persons such as those 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 *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring

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SANDS POINT WATER DEPARTMENT - TABLE 1 DETECTED CONTAMINANTS ONLY - DISTRIBUTION & WELLS

Contaminant	Violation Yes/No	Date of Sample(s)	Maximum Level Detected	Average Level Detected	Range Detected Low-High	Unit Measurement	MCLG	Regulatory Limit (MCL OR AL)	Likely Source of Contamination
Inorganic Contaminants									
Chloride	No	7/21/2020	92.9	27.8	4.6 – 92.9	mg/L	N/A	MCL=250	Naturally occurring; road salt
Nitrate	No	5/19/2020	8.30	3.12	<0.050 – 8.30	mg/L	10	MCL=10	Runoff from fertilizer, leaching from septic tanks
Sulfate	No	11/10/2020	45.0	28.5	10.7 – 45.0	mg/L	N/A	MCL=250	Naturally occurring
Sodium	No	5/5/2020	40.5	17.5	8.2 – 40.5	mg/L	N/A	N/A	Naturally occurring; road salt
Manganese	No	11/10/2020	0.05	0.01	<0.010 – 0.05	mg/L	N/A	MCL=0.30	Naturally occurring
Magnesium	No	11/10/2020	17.8	9.9	6.1 – 17.8	mg/L	N/A	N/A	Naturally occurring
Calcium	No	11/10/2020	29.1	21.1	13.1 – 29.1	mg/L	N/A	N/A	Naturally occurring
Iron	No	5/5/2020	0.058	0.010	<0.020 – 0.058	mg/L	N/A	MCL=0.30	Naturally occurring
Barium	No	5/5/2020	0.042	0.030	0.018 – 0.042	mg/L	2	MCL=2	Erosion of natural deposits
Zinc	No	11/10/2020	0.042	0.001	<0.020 – 0.042	mg/L	N/A	MCL=5	Naturally occurring
Fluoride	No	11/10/2020	0.13	0.06	<0.10 – 0.13	mg/L	N/A	MCL=2.2	Naturally occurring
Lead and Copper									
Copper	No	9/17/2020	0.28*	0.10	<0.003 – 0.36	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead	No	9/17/2020	2.3*	0.79	<1.0 – 3.1	ug/L	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits
Disinfection By-products									
Total Trihalomethanes	No	9/14/2020	25.8	25.8	25.8	ug/L	N/A	MCL=80	By-product of drinking water chlorination
Total Haloacetic Acid	No	9/14/2020	3.8	3.8	3.8	ug/L	N/A	MCL=60	By-product of drinking water chlorination
Organic Contaminants									
Bromoform	No	11/10/2020	0.63	0.02	<0.50 – 0.63	ug/L	N/A	MCL=50	By-product of drinking water chlorination
Bromodichloromethane	No	5/5/2020	0.75	0.09	<0.50 – 0.75	ug/L	N/A	MCL=50	By-product of drinking water chlorination
Dibromochloromethane	No	11/10/2020	1.20	0.12	<0.50 – 1.20	ug/L	N/A	MCL=50	By-product of drinking water chlorination
Chloroform	No	3/10/2020	1.00	0.27	<0.50 – 1.00	ug/L	N/A	MCL=50	By-product of drinking water chlorination
Radioactive Contaminants⁽³⁾									
Gross Alpha	No	10/23/2018	0.934	0.327	-0.007 – 0.934	pCi/L	0	MCL=15	Erosion of natural deposits
Gross Beta ⁽¹⁾	No	10/23/2018	1.400	0.942	-0.077 – 1.400	pCi/L	0	MCL=50	Erosion of natural deposits
Combined Radium 226 & 228 ⁽²⁾	No	10/23/2018	1.312	0.848	0.568 – 1.312	pCi/L	0	MCL=5	Erosion of natural deposits
Synthetic Organic Contaminants									
DCPA – mono and di-acids (dacthal)	No	12/15/2020	18.3	3.6	<1.0 – 18.3	ug/L	N/A	MCL=50	Degradation of a herbicide

SANDS POINT WATER DEPARTMENT - **TABLE 1** DETECTED CONTAMINANTS ONLY - DISTRIBUTION & WELLS - CONTINUED

Contaminant	Violation Yes/No	Date of Sample(s)	Maximum Level Detected	Average Level Detected	Range Detected Low-High	Unit Measurement	MCLG	Regulatory Limit (MCL OR AL)	Likely Source of Contamination
1,4 – Dioxane ^(a)	No	3/10/2020	0.096	0.044	<0.021 – 0.096	ug/L	N/A	MCL=1	Released into the environment through its use as a solvent and in textile processing, printing processes and detergent preparations
PFAS ^(b)									
Perfluorooctanoic acid (PFOA)	No	1/28/2020	8.8	5.8	<1.8 – 8.8	ng/L	N/A	MCL=10	These compounds have been used to make carpets, leathers, textiles, fabrics for furniture, and other materials that are resistant to water, grease, or stains. These have been used in firefighting foams at airfields.
Perfluorooctanesulfonic acid (PFOS)	No	4/7/2020	3.7	1.5	<1.8 – 3.7	ng/L	N/A	MCL=10	
UCMR3									
Perfluorohexanesulfonic acid	No	5/5/2020	3.2	1.1	<1.8 – 3.2	ng/L	N/A	MCL=50,000	These compounds have been used to make carpets, leathers, textiles, fabrics for furniture, and other materials that are resistant to water, grease, or stains. These have been used in firefighting foams at airfields.
Perfluoroheptanoic acid	No	10/6/2020	4.8	2.0	<1.8 – 4.8	ng/L	N/A	MCL=50,000	
Perfluorobutanesulfonic acid	No	1/28/2020	3.0	1.2	<1.9 – 3.0	ng/L	N/A	MCL=50,000	
Physical Characteristics									
Calcium Hardness	No	11/10/2020	73	53	33 – 73	mg/L	N/A	N/A	Naturally occurring
Total Hardness	No	11/10/2020	136	94	58 – 136	mg/L	N/A	N/A	Naturally occurring
Total Alkalinity	No	11/10/2020	133	77	60 – 133	mg/L	N/A	N/A	Naturally occurring
Total Dissolved Solids	No	5/5/2020	264	151	60 – 264	mg/L	N/A	N/A	Naturally occurring
pH	No	7/22/2020	8.0	7.5	6.2 – 8.0	Units	N/A	N/A	Naturally occurring
Chlorine Residual	No	9/23/2020	0.90	0.55	0.20	0.20 – 0.90	mg/L	N/A	Water additive used to control microbes.

(1) The State Health Department considers 50 pCi/L to be the level of concern for beta particles.

(2) There is no separate MCL for Radium 226 and Radium 228. The combined MCL is 5 picocuries/L.

(3) Sampling for Radioactive Contaminants was not required in 2020.

(a) 1,4-Dioxane: The New York State (NYS) has regulated the MCL for 1,4-dioxane is 1 part per billion (ppb).

(b) The US Environmental Protection Agency has established a lifetime health advisory (HAL) of 70 parts per trillion (ppt) for PFOA and PFOS combined. The New York State (NYS) has regulated the MCL at 10 ppt for PFOA and 10 ppt for PFOS.

pCi/L – Picocuries per liter - A measure of the radioactivity in water.

There were no detections of microbiological contaminants of Total Coliform in the wells or treated water during 2020.

*The levels shown represent the 90th percentile of the sites tested.

ng/L – nanograms per liter – corresponds to one part of liquid in one trillion parts of liquid. (Parts per trillion- ppt)

ug/L – Micrograms per liter - corresponds to one part of liquid in one billion parts of liquid. (Parts per billion-ppb)

mg/L - milligrams per liter. – corresponds to one part of liquid in one million parts of liquid. (Parts per million -ppm)

MCL – Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water.

MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

UCMR3 = Unregulated Contaminant Monitoring Rule 3.

MRDL – Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water without causing an unacceptable possibility of adverse health effects.

MCLG – Maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, allowing an adequate margin of safety.

AL - Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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The New York State Dept. of Health, with assistance from the local health department and CDM consulting firm, has completed a source water assessment for Sands Point and Nassau County, based on available information. 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. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Drinking water is derived from six wells in Sands Point. The source water assessment has rated wells 3 and 4 located at the Village Club Facility as having a high susceptibility to industrial solvents and nitrates. The elevated susceptibility to industrial solvents is due primarily to point sources of contamination related to a commercial/industrial spill site in the assessment area. The elevated susceptibility to nitrates is due to unsewered residential land use and related practices, such as fertilizing lawns, in the assessment area. Although the two wells were rated high for susceptibility, there have been no industrial solvents in the wells. There have been low to moderate levels of nitrates detected in these wells, but no well has exceeded the 10 mg/L level allowed by health standards. These wells have never exceeded the maximum contaminant level for anything.

A copy of the assessment, including a map of the assessment area, can be reviewed at the Village Hall located on Tibbits Lane.

At the request of the Nassau County Department of Health, we have been asked to inform those residents who have unregulated private wells that the water should not be used for consumption purposes.

Brian J. Gunderson

Brian J. Gunderson
Superintendent of Public Works

SYSTEM IMPROVEMENTS

The drilling of Well 9 located on the south side of the Village Club was completed. The Village's consultant submitted water quality and monitoring well data to the NYS Department of Environmental Conservation for review on July 23, 2020. The Village has not received correspondence from the NYSDEC as to the final determination.

WATER CONSERVATION MEASURES

We ask that you practice some basic conservation measures so that saltwater does not contaminate our potable water supply here on the peninsula. Consider and think about the waste of a precious resource when watering lawns during and immediately after heavy rain, and by turning on and using irrigation systems in March and April; and leaving systems on in November and December. Proper maintenance of irrigation system heads, rain sensors, control valves, and piping will also save water.

When it rains, turn off the system for a few days or a week. Better yet, install a Smart Irrigation Controller. Contact your irrigation company for more details. The days of "set it and forget it" should change for the preservation of the aquifer systems below Sands Point.

Please do not water your lawns or gardens when it is raining, or for several days after adequate precipitation. If an effort is made by everyone, we calculate that 50 - 100 million gallons of water could be saved each year.

If you have questions about this report, or concerning your water, please contact Brian Gunderson at (516) 883-3491 or the Nassau County Health Department at (516) 227-9692. If you want to learn more, please attend the regularly scheduled Board of Trustee meetings. The meetings are usually held on the 4th Tuesday of the month at 8:00 PM at the Village Hall. Until further notice, you can contact the Village Office at (516) 883-3044 for the link to attend meetings online.

Daniel Scheyer

Daniel Scheyer
Water Commissioner



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