

GROTON LONG POINT WATER DEPARTMENT
Groton Long Point, CT 06340

2023 Water Quality Report

This annual "Consumer Confidence Report," required by the Safe Drinking Water Act (SDWA), tells you where your water comes from, what our tests show about it, and other things you should know about drinking water. Groton Long Point drinking water meets all state and federal requirements for both safety and appearance.

Overview

The Groton Long Point water system supplies drinking water purchased from Groton Utilities for domestic use and for fire protection. The system was originally installed to supply water all year round in 1932 and has been repeatedly improved and expanded since. It consists of approximately seven miles of distribution mains of a variety of materials, and service connections to 600 users. All are now lined with non-corrosive material. Episodes of discoloration will be limited to times of water main flushing or fire hydrant usage when sediment is disturbed. GLP water is sampled semi-monthly and tested by the state approved lab at Groton Utilities for coliform bacteria and for physical properties, and quarterly for trihalomethanes and haloacetic acids. Results are forwarded to the Connecticut Department of Public Health. They consistently meet all requirements. In a broad perspective, we believe that our water system is in good condition and will be able to fulfill the domestic water-based needs to GLP for the foreseeable future.

Water Service

Groton Long Point's water is received from Groton Utilities, which draws its water from the Poquonnock Reservoir in the Poquonnock Bridge section of Groton. Four reservoirs —Smith Lake, Poheganut, Ledyard, and Morgan — extend northward from there, for a total capacity of approximately 2.5 billion gallons when full, giving Groton Utilities ample reserves for the water needs of all residents of Groton Long Point. Water from other reservoirs flows by gravity into Poquonnock.

Regulated Contaminants

See enclosed Table of Water Quality Data from Groton Utilities for source water chemistry. In addition to these data, local (GLP) sample analysis done semi-monthly for fluoride, chlorine, pH, color, odor, turbidity, alkalinity, hardness and total coliform bacteria consistently show values within allowable limits, as do quarterly tests for haloacetic acids and trihalomethanes. Please see Table 1 of Water Quality results enclosed.

Trihalomethanes (TTHM)

As shown in Table 1, total trihalomethanes have a yearly rolling average of **0.0590 mg/L**, below the 0.080 regulated maximum contaminant level.

Haloacetic Acids (HAA5)

As also shown in Table 1, haloacetic acids have a yearly rolling average of **0.0240 mg/L**, below the 0.060 regulated maximum contaminant levels.

Lead and Copper

Table 1 also provides a summary of lead and copper rule sampling for 2023. Lead and copper rule sampling was conducted for both halves of 2023. A total of 20 samples were collected in each 6 month period, as summarized in Table 1.

Lead

In the first half of 2023, Lead ranged from **non-detect** (< 0.001 mg/L) to **0.029 mg/L**, and had a 90th percentile calculation of **<0.001 mg/L**. In the second half of 2023, lead ranged from **non-detect** (<0.001 mg/L) to **0.0047 mg/L**, and had a 90% percentile calculation of **<0.001 mg/L**. These 90% percentile samples, on which compliance is determined, are well below the regulated lead action level of 0.015 mg/l.

Copper

In the first half of 2023, Copper concentrations ranged from **0.005 mg/L** to **0.044 mg/L**, and had a 90th percentile value of **0.0380 mg/L**. In the second half of 2023, Copper concentrations ranged from **0.0027 mg/L** to **0.047 mg/L**, with a 90th percentile value of **0.036 mg/L**.

These 90% percentile samples, on which compliance is determined, are well below the regulated copper action level 1.3 mg/l.

In summation, drinking water quality met all State and Federal requirements for 2023.

Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The Sources of drinking water (both tap 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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by

public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 for infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the time of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

- (F) Lead: If present, 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. Groton Utilities 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>.
- (G) Copper: From corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Water Assessment Source

The State of Connecticut Department of Public Health has performed an assessment on our drinking water sources. The assessment found the Groton Utilities' drinking water sources have a low susceptibility to potential sources of contamination. The completed assessment report is available for access on the Drinking Water Division's website:

<http://www.dph.state.ct.us/BRS/Water/SWAP/swap.htm>.

Contact Information

Members of the Groton Long Point Water Commission can be contacted for additional information.

Mike Flynn (413) 374-0700

Richard Bonner (860) 572-9625

Lance Walker (860) 460-8972

City of Groton Attachment

Attached is additional information from the City of Groton, our water supplier.

Table 1 Water Quality Results
2023 Consumer Confidence Report
Groton Long Point Association
Groton , Connecticut

SAMPLE DATE	LOCATION	Total Trihalomethanes (TTHM) (mg/L)	Total Haloacetic Acids (HAA5)(mg/L)	
1/23/2023	172 South Shore		0.0345	
4/25/2023	172 South Shore		0.0531	
7/20/2023	172 South Shore		0.0642	
10/25/2023	172 South Shore		0.0597	
Rolling Average			0.059	
MCL			0.080	
1/24/2023	328 West Shore		0.0171	
4/27/2023	328 West Shore		0.0255	
7/24/2023	328 West Shore		0.032	
10/27/2023	328 West Shore		0.0215	
Rolling Average			0.0240	
MCL			0.060	
		Lead (mg/L)	Lead - 90th percentile (mg/L)	Copper (mg/L)
				Copper - 90th Percentile (mg/L)
January- June 2021	20 Samples	<0.001 to 0.029	<0.001	0.005 to 0.044
July - December 2021	20 Samples	<0.001 to 0.0047	<0.001	0.0027 to 0.047
ACTION LEVEL			> 0.015	> 1.3



GROTON UTILITIES

At Your Service

Groton Utilities 2023 Water Quality Data for Consecutive Systems For Consumer Confidence Reports

This information is being provided to you in conformance with the requirements of the Environmental Protection Agency and the Connecticut Department of Public Health, in order to enable you to accurately compile a Consumer Confidence Report for your water system. The EPA and CTDPH require your water system to distribute a CCR to all your customers by July 1, 2024. Information on electronic delivery of CCRs can be found at <http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/regulations.cfm>.

The table on the following page contains the analytical data that you will need to include in your CCR. Other information relating to Groton Utilities water quality is listed below. Please note that you need to compile information from your own water analyses (such as Lead and Copper data, Asbestos, Chlorine, Total Coliform, Total Trihalomethanes (THMs) and Haloacetic Acids (HAA5s)); the data we are providing to you is not to be construed as the only information needed for your CCR. Information provided on Source Water Assessment must be included.

For further information you may wish to consult the Federal Register dated August 19, 1998 pages 44512-44536, or log onto the EPA's web site at <http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/compliancehelp.cfm>. You can also find helpful information on the CT DPH website <http://www.ct.gov/dph/>. Click on Topics A-Z, Drinking Water, Drinking Water Topics A-Z, and then Consumer Confidence Reports.

Synthetic Organic Chemicals

No Synthetic Organic Chemicals were detected when tested in 2021. Next analysis is due in 2024.

Volatile Organic Chemicals

No Volatile Organic Compounds, other than Trihalomethanes, were detected in 2023.

Water Treatment Process

The water is treated through a process called "conventional treatment" which consists of coagulation, flocculation, Dissolved Air Flotation (DAF), and filtration. These processes take place in Groton Utilities' DAF plant, which has been in service since November 2020 and has continuously produced drinking water meeting DT DPH standards for potable water since that time. The DAF process floats those particles to the surface of the DAF basin water and skims them off, with the effluent water being removed at the bottom of the DAF basin and then going to deep bed Granular Activated Carbon (GAC) filters. Chlorine is added for disinfection, and caustic soda (sodium hydroxide) and phosphate are added to inhibit corrosion of plumbing. Fluoride is added to reduce the formation of cavities, as required by CT Department of Public Health Regulations. Manganese adsorbers—to remove manganese—were constructed as part of the new DAF plant and eliminate the need to use chlorine dioxide for reduction of manganese in the finished water.

Aerators

Aerators on kitchen and bathroom faucets are viewed as an effective water conservation practice. They introduce air into the water flow, making it seem like more water is flowing from the tap. Particles can become trapped in aerators, and it is important to advise your customers to regularly remove and clean them, since some of those particles could potentially be bits of lead solder that may break off the solder joint from time to time.

Source Water Assessment (must be included)

The Connecticut Department of Public Health has performed an assessment of our drinking water sources. The completed assessment report is available for access on the Drinking Water Division's web site at <https://portal.ct.gov/dph>. Click on Topics A-Z, Drinking Water, Drinking Water Topics A-Z, and then Source Water Assessment Program. The assessment found that Groton Utilities' drinking water sources have an overall low susceptibility to potential sources of contamination.

Corrosion Control

Groton Utilities adds a corrosion inhibitor to the drinking water. The purpose is to keep lead and copper in one's household plumbing from dissolving into the tap water when water is not in use (overnight, or during other extended periods of non-use). They use a blended phosphate—an ortho phosphate and a polyphosphate: the ortho phosphate keeps the lead and copper from coming into solution in household piping, and the poly phosphate acts to bind with minerals such as iron and manganese that may be in the water, to prevent "red water" issues. To be clear, there is no lead or copper in the water coming from their reservoirs, the purpose of the corrosion inhibitor is just to restrict the natural tendency of water (known as the "universal solvent") to dissolve household metal plumbing materials into the tap water. As with all the treatment in use at the Groton water treatment plant, this blended phosphate is approved specifically for use in potable water, in a dosage approved by the Connecticut Department of Public Health, Drinking Water Section.

Sodium

Sodium is an element that is naturally occurring and is essential for life. It is naturally present in Groton's reservoirs, and in some reservoirs it is at a higher level than others, possibly due to stormwater runoff from the roads. Groton sometimes blends water from one reservoir into their main reservoir to improve certain aspects of the water quality. In 2023, we did not exceed the Sodium Notification level of 100 mg/L. For most of our customers, sodium will not be an issue, but for customers who have been put on a very restrictive diet (less than 500 mg of sodium per day) this may be something they will want to discuss with their doctor. To put things in perspective, 28 mg/L of sodium (our highest level in 2023) is equal to 6.6 mg of sodium in an 8 ounce glass of water; in comparison, an 8 ounce glass of 1 % milk contains 104 mg of sodium. So if your customers have any concerns about sodium in drinking water please suggest they consult their physician, but for most people on a normal (i.e., non-sodium restricted) diet it would not be of concern.

Groton Utilities 2023 Annual Water Quality Data for Consecutive Water Systems

Regulated Contaminants

Parameter	Units	MCL	MCLG	Highest detected level	Range (a)	Major Source	MSDETS STANDARDS?
Barium	ppm	2	2	0.01	-----	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	YES
Chloride	ppm	250	N/A	52	29 - 52	Stormwater runoff containing road salt; erosion of natural deposits.	YES
Fluoride	ppm	4	4	0.72	0.53 - 0.72	Erosion of natural deposits; water additive which promotes strong teeth	YES
Nitrite	ppm	1	1	0.07	ND<0.05 - 0.07	Runoff from fertilizer use; leachate from septic tanks; sewage; erosion of natural deposits.	YES
Parameter	Units	TT	MCLG	Lowest RAA	Range of results	Major Source	
Total Organic Carbon	N/A	Removal ratio must be ≥ 1.00	N/A	1.6	1.2 - 1.8	Naturally present in the environment.	YES
Parameter	Units	TT	MCLG	Highest detected level	Lowest % of samples meeting limit	Major Source	
Turbidity (b)	NTU	95% of monthly samples must be ≤ 0.3 NTU	N/A	0.20	100%	Soil runoff	YES
Parameter	Units	MCL	MCLG	Highest Monthly Average	Range of results	Major Source	

Unregulated Contaminants (c)

Parameter	Units	MCL	MCLG	Average	Range	Major Source	Meets Standards?
Sodium (d)	ppm	Notification level = 100	None	25	19 - 28	Stormwater runoff containing road salt; erosion of natural deposits.	N/A
Sulfate	ppm	None	None	5	4 - 6	Naturally occurring.	N/A

Notes

MCLG = Maximum Contaminant Level Goal: 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. (MCLs are set as close to the MCLGs as feasible using best available technology.)

MRDL = Maximum Residual Disinfectant Level: 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.

MRDLG = Maximum Residual Disinfectant Level Goal: 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 contamination.

(d) When sodium level in tap water exceeds 100 mg/L, customers must be notified either by direct mail or in billing statement. It is **not** an MCL violation.

Key to Table

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

MCL = Maximum Contaminant Level: the highest level of a contaminant that is allowed in drinking water.

N/A = Not Applicable

$\leq$ = Less than

ppm = parts per million

ppb = parts per billion

PCV/L = picocuries per liter

TT = Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

NTU = Nephelometric Turbidity Units

$>$ = Greater than

ppb = parts per billion

RAA = Running Annual Average

TT = Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.