



## VILLAGE OF GROTON

143 Cortland St. - Groton, New York 13073

### Annual Drinking Water Quality Report for 2021

(Public Water Supply ID#5404415)



#### **This report is an overview of the Village of Groton's 2021 Annual Water Quality Report.**

It contains a lot of mandatory and technical information in a language that tends to detract from the original intent of an Annual Water Quality Report, which is to educate and inform the water consumer about the quality of the public water supply. While the information is accurate and important, it is also important that the public understands in simplest

terms that the public water supply meets and often exceeds minimum water quality standards as set forth by the Environmental Protection Agency (EPA).

#### **INTRODUCTION**

To comply with state regulations, The Village of Groton annually issues a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all state drinking water health standards. We are proud to report that our system has never violated a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to state standards.

If you have any questions about this report or concerning your drinking water, please contact Chad Shurtleff, Public Works Supervisor, at (607)-898-3345.

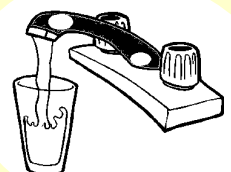
#### **WHERE DOES OUR WATER COME FROM?**

In general, 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 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 New York 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.

**Our water system serves approximately 2,363 residents with 750 service connections.** The Village of Groton uses two sources of water: the Morton Works (infiltration gallery) and the Conger Boulevard well field. Water from the Morton Works flows by gravity to the Clark Street tank where it is filtered by a microfiltration process to meet the federal guidelines for surface water treatment. It is then disinfected by chlorine gas and distributed to most of the village. The Conger Boulevard wells, derived from 2-drilled wells, (depth 110' and 115') are also disinfected and treated to reduce corrosion, and then pumped into the distribution system on command of the water level in the Clark Street tank. Pumps at Clark Street serve a second, higher-level zone with a 200,000-gallon concrete storage tank on Elm Street.



Visit us at: [www.grotonny.org](http://www.grotonny.org)



## Annual Drinking Water Quality Report for 2021

### **Water Board Meetings**

We want you to be informed about your drinking water. If you want to learn more, the Water Board meets as needed. Each pending meeting would be advertised in accordance with the Open Meetings Law.

**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. While nitrates (and other inorganic contaminants) were detected in our water, it should be noted that all drinking water, including bottled drinking water, might be reasonably expected to contain at least small amounts of some contaminants from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. See section "Are there contaminants in our drinking water?" 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.

**In accordance with** Subpart 5-1, Sections 5-1.30(b) of the New York State Sanitary Code (NYSSC), all ground water sources supplying public water systems must be evaluated for evidence of Ground Water Under the Direct Influence of Surface Water (GWUDI). Investigations began at the Groton Morton Works because the source of the water was infiltration galleries, and therefore, had GWUDI potential. Any drinking water source, once identified as GWUDI, must meet the criteria established under the Surface Water Treatment Rule (SWTR), as referenced in Subpart 5-1. Since a positive GWUDI determination has been made, the Village of Groton piloted a filtration project capable of 99.9% removal or inactivation of Giardia cysts and or viruses.

The plans for the system of membrane treatment were approved on 10/13/05, and construction began that month. The filtration equipment was delivered and installed in March 2006. The village placed the membrane filtration treatment system online on 4/13/06.

### **Village Wells**

As mentioned before, our water is also derived from 2-drilled wells. The source water assessment has rated these wells as having a medium-high susceptibility to industrial solvents and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and or federal government) to the wells and the associated industrial activity in the assessment area.

In addition, the wells draw from unconsolidated deposits, and the overlying soils are not known to provide adequate protection from potential contamination. While the source water assessment rates our well(s) as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination. Source Water Assessment Program (SWAP) has been conducted by the Tompkins County Health Department and may be reviewed at our office at 201 Conger Blvd., Groton.

- A continuous leak from a hole this size (1/16") would, over a three-month period, wastewater in the amount of 9,850 cu.ft.
- A dripping faucet or fixture can waste 3 gallons a day...a total of 1095 gallons a year (146 cu.ft.)
- **One Cubic Foot of Water Equals 7.5 gallons**





### Why does my water look dirty, have sediment and or particles in it?

Some possible causes of problems with water which appears dirty, has an unusual color, or sediment/particles include:

- ❖ Sediments or pipe materials from breaks in water mains or hydrants. Water mains in our system can fail due to age, corrosion, pressure surges or damage. In particular, when we flush our hydrants, you will notice discolored water.
- ❖ High flows in water mains due to firefighting, water system tests or maintenance, causing unusual high-flow conditions which stir up sediment or scale from water mains.
- ❖ Aging galvanized plumbing. Rust particles or scale from galvanized steel home plumbing can also produce reddish-brown water or rust particles, particularly noticeable when a tap is first turned on.

### 2022 Water Rates: (New rates effective January 24, 2022)

#### A. General consumer:

##### (1) Amount of water use (monthly net rate).

(a) For the first 150 cubic feet or fraction thereof: \$6.00. This is the minimum rate.

(b) For all usage over 150 cubic feet, for each 100 cubic feet or minor fraction thereof: \$4.00

(Village Codes; § 193-15. Water rates)

**A dripping faucet or fixture can waste 3 gallons a day...a total of 1095 gallons a year (146 cu.ft.)**

### 2022 Sewer Rates: Based on water consumption (New rates effective January 24, 2022)

(1) For the first 400 cubic feet of water used in any monthly period or any minor fraction of 400 cubic feet of water used; the rate shall be \$22.40 - this being the minimum charge.

(2) For all water used in any one monthly period in excess of 400 cubic feet and not exceeding 34,999 cubic feet, the rate for each 100 cubic feet or any minor fraction thereof shall be \$5.35

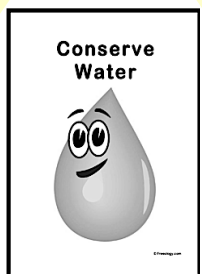
(3) For all water used in any one monthly period in excess of 35,000 cubic feet, the rate for each 100 cubic feet or minor fraction thereof shall be \$4.60.

(Village Codes; § 165-3. Sewer rents)

The Village of Groton encourages homeowners to find and fix leaks with some easy steps that you can take to help save water in our community now and for future generations.

#### Simple Steps to Big Savings

- **Drip. Drip. Drip.** The average American household wastes more than 10,000 gallons each year from easy-to-fix water leaks, adding up to more than 1 trillion gallons of water lost annually nationwide. Many of these leaks are do-it-yourself fixes that could cost only a few dollars to address.
- **FIND Leaks:** Walk around your home with eyes and ears open to find leaks, and don't forget to check pipes. You can reveal a silent toilet leak by adding a few drops of food coloring to the tank and waiting 15 minutes without flushing. If the color appears in the bowl, you have a leak. Be sure to flush afterwards so as not to stain the bowl or tank.
- **FIX Leaks:** For leaky toilets, the rubber flapper inside the tank is often the culprit. One should replace or clean it, because over time, the toilet bowl flapper decays. Both faucets and showerhead connections can be tightened or sealed with a wrench or pipe tape.
- **A continuous leak** from a hole the size of (1/16") would, over a three-month period, wastewater in the amount of 9,850 cu.ft. **One Cubic Foot of Water Equals 7.5 gallons**



For more information and tips about how to save water, visit:  
[www.epa.gov/watersense](http://www.epa.gov/watersense)

## Annual Drinking Water Quality Report for 2021

### ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the state regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, unspecified organic contaminants, disinfection byproducts, other principal organic contaminants, total trihalomethanes, microbiological and synthetic organic compounds, including pesticides and herbicides.

The table presented in this report depicts which compounds were detected in your drinking water. The state allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than a year old. It should be noted that all drinking water, including bottled drinking water, might be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Call the EPA's Safe Drinking Water Hotline at (800)-426-4791 or the Tompkins County Health Department at (607) 274-6688, and you can obtain more information about contaminants and potential health effects.

Contaminant	Violation	Date of Sample	Level Detected (Maximum Range)	MCL	MCLG	Likely source of Contamination
*Copper	No	8/19/21	(0.375) (1) 0.0702-0.611 mg/l	AL = 1.3 mg/l	1.3 mg/l	Corrosion of galvanized pipes. Erosion of natural deposits.
*Lead	No	8/19/21	(.00104) (1) <0.00102- 0.00118 mg/l	AL = .015 mg/l	.015 mg/l	Corrosion of household plumbing systems. Erosion of natural deposits.

(1) The level presented represents the 90th percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the lead values detected at your water system. In this case, 10 samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest value.

**\*HEALTH EFFECTS:** Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development and could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a short period of time could experience gastrointestinal distress. Those 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.

** Sodium 205 Cayuga	No	12/7/21	30.9 mg/l	**See health effects	n/a	Naturally occurring. Road salt; water softeners; animal waste
***Barium Conger Blvd Morton Works	No	10/5/20	0.227 mg/l	2 mg/l	2 mg/l	Discharge of drilling wastes: discharge from metal refineries: erosion of natural deposits.
	No	3/15/21	0.0526 mg/l			
Nickel	No	3/15/21	.0162 mg/l	.1 mg/l	.1 mg/l	The primary source of nickel in drinking-water is leaching from metals in contact with drinking-water, such as pipes and fittings. However, nickel may also be present in some ground waters as a consequence of dissolution from nickel ore-bearing rocks.
Chromium	No	5/8/17	0.0026 mg/l	.1 mg/l	.1 mg/l	Discharge from steel and pulp mills; Erosion of natural deposits.

**\*\*HEALTH EFFECTS:** Water containing more than 20mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used on moderately restricted diets.

**\*\*\*HEALTH EFFECTS:** Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

TURBIDITY	1/21	2/21	3/21	4/21	5/21	6/21	7/21	8/21	9/21	10/21	11/21	12/21
Avg. Monthly Value	3.80 MNTU	5.22 MNTU	41.15 MNTU	41.08 MNTU	4.57 MNTU	3.09 MNTU	17.69 MNTU	9.91 MNTU	3.70 MNTU	18.46 MNTU	4.92 MNTU	9.88 MNTU

Soil runoff. **NOTE:** Clark Street filtration turbidity results are continuously monitored, and 100% of the times are under the MCL of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

## Annual Drinking Water Quality Report for 2021

Contaminant	Violation	Date of Sample	Level Detected (Maximum Range)	MCL	MCLG	Likely source of Contamination
<b>Disinfection By-Products – WWTP – 205 Cayuga St.</b>						By-product of drinking water disinfection needed to kill harmful organisms.
<b>HAA5</b>						
1 <sup>st</sup> Qtr	No	1/26/21	<1.00 ug/l	60 ug/l	n/a	
2 <sup>nd</sup> Qtr	No	5/7/21	21.5 ug/l	60 ug/l		
3 <sup>rd</sup> Qtr	No	7/27/21	9.7 ug/l	60 ug/l		
4 <sup>th</sup> Qtr	No	10/5/21	15.4 ug/l	60 ug/l		
<b>TTHM</b>						By-products of drinking water chlorination needed to kill harmful organisms.  TTHMs are formed when source water contains large amounts of organic matter.
1 <sup>st</sup> Qtr	No	1/26/21	1.15 ug/l	80 ug/l	n/a	
2 <sup>nd</sup> Qtr	No	5/7/21	24.0 ug/l	80 ug/l		
3 <sup>rd</sup> Qtr	No	7/27/21	16.8 ug/l	80 ug/l		
4 <sup>th</sup> Qtr	No	10/5/21	24.6 ug/l	80 ug/l		
<b>Nitrate: Morton Supply</b>						Runoff from fertilizer use and septic tanks as well as leaching from septic tanks, sewage and erosion of natural deposits.
1 <sup>st</sup> Qtr	No	1/7/21	4.92 mg/l	10 mg/l	10 mg/l	
2 <sup>nd</sup> Qtr	No	4/1/21	4.43 mg/l	10 mg/l	10 mg/l	
3 <sup>rd</sup> Qtr	No	7/8/21	3.67 mg/l	10 mg/l	10 mg/l	
4 <sup>th</sup> Qtr	No	10/5/21	5.32 mg/l	10 mg/l	10 mg/l	
<b>Conger Blvd</b>	No	1/26/21	<0.40 mg/l	10 mg/l	10 mg/l	

**Definitions you need to know:**

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

**HAA5:** Haloacetic Acids

**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.

**Not-Applicable (n/a)**

**Not Detected (ND)**

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**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).

**pCi/L:** Picocuries per liter – measure of the radioactivity in water.

**TTHM:** Total Trihalomethane

**WWTP:** Wastewater Treatment Plant



**Reveal** a silent toilet leak by adding a few drops of food coloring to the tank & waiting an hour without flushing. If the color appears in the bowl, **you have a leak.**  
Over time the rubber flapper decays.

<b>Water Consumption Facts:</b>	
33%	Toilets
22%	Washing machines
21%	Showers
9%	Baths
9%	Kitchen faucets & dishwashers
6%	Bathroom faucets
100%	

# Annual Drinking Water Quality Report for 2021

## A message from our Public Works Supervisor:

Dear Water Customer,

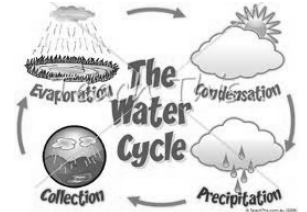
Here at the Groton Water Department, we strive to provide clean, safe and great tasting water. Without an abundant supply of water, life in our community would not thrive or survive. Many small communities across the United States are not as fortunate to have access to good, clean water. We must never take for granted our supply of safe drinking water.

I hope this report will help you understand more about your drinking water – where it comes from, what is done to protect and treat it, and what is in it. As you can see in this report, we have a comprehensive testing program for our water supply.

We monitor our water quality, treatment process and distribution system 365 days a year. We also collect multiple samples each month for testing as required by the New York State Sanitary Code and the Federal Safe Drinking Water Act.

Thank you for the opportunity to serve you and bring you one of life’s essentials – water. If you have any questions or comments about your drinking water or this report, we want to hear from you. Please call our office at 898-3345.

**Department of Public Works /201 Conger Blvd. /Office: 898-3345**  
Office Hours: M-T 6am-3pm /F- 6am – 12noon  
Noon on Friday thru 6am Monday - Phone rolls to on-call staff.



Village of Groton  
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