

*Annual Drinking Water Quality Report for 2018
Glenham Water District
Fishkill, New York 12524
Public Water Supply ID# 1305651*

INTRODUCTION

To comply with State regulations, the Glenham Water District is issuing an annual 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 did not violate 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 **CAMO Pollution Control, Inc. at (845) 463-7310**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town board meetings. The time and place of regularly scheduled town board meetings may be obtained from Becki Tompkins, Town Clerk, at (845) 831-7800 x3333.

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 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 2,260 residents through 864 service connections. Our water is purchased from the Village of Fishkill. Treatment of the water by the Village consists of disinfection with Sodium Hypochlorite prior to distribution. The quality of water from the Village meets all standards from the New York State Department of Health. A copy of the 2018 Annual Water Quality Report

issued by the Village of Fishkill to all residents is attached. During 2018 our system did not experience any restriction of our water source.

WE ASK THAT ALL OF OUR RESIDENTS BE VIGILANT IN REGARD TO SUSPICIOUS ACTIVITY IN THE AREA OF OUR WATER TREATMENT PLANTS.

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, asbestos, lead and copper, total trihalomethanes, and haloacetic acids. The attached Village of Fishkill Annual Water Quality Report for 2018 contains all water quality information. Additionally, the Town of Fishkill monitors water quality and chlorine residual on a daily basis. The table presented below 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, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Dutchess County Health Department at (845) 486-3404.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, or AL)	Likely Source of Contamination
Inorganics							
Copper See note 1	No	07/2017	0.111 (0.027-0.235)	mg/l	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead See note 2	No	07/2017	0.003 (ND-0.017)	mg/l	0	0.015	Corrosion of household plumbing systems; erosion of natural deposits
Disinfection Byproducts							
Total Trihalomethanes	No	09/2018	5.5	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids	No	09/2018	16.3	ug/l	N/A	60	By-product of drinking water chlorination needed to kill harmful organisms.

Notes:

1 – The level presented represents the 90th percentile of the 12 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 90th percentile is equal to or greater than 90% of the copper values detected at your water system. The action level for copper was not exceeded at any of the sites tested.

2 – The level presented represents the 90th percentile of the 12 samples collected. The action level for lead was exceeded at 1 of the 12 sites tested.

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.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

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

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

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).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

We are required to present 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. **CAMO Pollution Control, Inc.** 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>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2018, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. In 2016 the Town of Fishkill enacted a local law for cross-connection control. This law enabled the Town to implement a program to prevent possible contamination through distribution connections. The estimated hardness of your water is between 13-15 grains per gallon.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, 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 *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call **CAMO Pollution Control, Inc. at (845) 463-7310** if you have questions.

Annual Drinking Water Quality Report for 2018
Village of Fishkill
1095 Main Street, Fishkill, New York 12524
(Public Water Supply ID# 1302765)

INTRODUCTION

To comply with State regulations the Village of Fishkill will be annually issuing 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. Once again, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. 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 Dave Morrison, Water Superintendent, 845-896-8070. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings held the third (3rd) Monday of every month at 7:00 PM. The meeting place is at Van Wyck Hall located at 1095 Main Street in Fishkill.

WHERE DOES OUR WATER COME FROM?

Generally, 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, naturally occurring 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, herbicides, organic chemical contaminants, and radioactive contaminants. In order to ensure that tap water is safe to drink, New York State and the USEPA prescribe regulations which 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.

Our water source consists of eight groundwater wells located on twelve acres of land, which are located in the Town of Fishkill. The wells range in depth from 84 feet to 240 feet. The water is disinfected with sodium hypochlorite prior to distribution to the system. During 2018, our system did not experience any restriction of our water source.

The NYS Dept. of Health 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. See sections "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The source water assessment has rated our water source as having an elevated susceptibility to microbial and nitrate contamination. These ratings are due primarily to the close proximity of the wells to permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the related activities in the assessment area. In addition, the wells draw from fractured bedrock and the overlying sand & gravel soils may not provide adequate protection from potential contamination.

The county and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, and planning and education programs. A copy of the assessment can be obtained by contacting us, as noted below.

FACTS AND FIGURES

Our water system serves 1,197 village service connections combined with the out of Village users for an approximate total population of 11,289 people. The total amount of water produced in 2018 was 463,982,000 gallons. The daily average of water treated and pumped into the distribution system was 1,271,184 gallons per day. Our highest single day for a 24-hr. period was 1,721,000 gallons on June 10th, 2018. The amount of water delivered to customers was 436,695,886 gallons. This leaves an unaccounted-for total of 27,286,114 gallons. The unaccounted volume of water can be attributed to leaks in the system, hydrant flushing, firefighting, and unmetered users.

The Water Rates for 2018 stayed the same as 2017 and were as follows:

Village Residents: \$13.75 for 1st 1,000 cu. Ft.*
 \$ 8.94 for every 1,000 cu. Ft. after

Out of Village Residents: \$27.50 for 1st 1,000 cu. Ft.
 \$17.88 for every 1,000 cu. Ft. after

- 1 cu. Ft = 7.48 gallons.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous constituents. These contaminants include: total coliform, inorganic compounds, total trihalomethanes, haloacetic acids, radionuclides, nitrates, nitrites, lead, copper, volatile organic compounds (VOC's), and synthetic organic compounds (SOC's). The table presented below depicts which compounds were detected in your drinking water. The State has us test for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data listed in this report, though representative and within the requirements of the NYS Sanitary Code, is more than one year old.

It should be noted that all drinking water, including bottled drinking water, may 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Dutchess County Health Department at (845-486-3404).

Table of Detected Contaminants							
Disinfection By-Products							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT OR AL)	Likely Source of Contamination
TTHM (Total Trihalomethanes)	N	8/23/2018	6.4	ug/L	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Inorganic Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, OR AL)	Likely Source of Contamination
Barium	N	12/21/2016	0.00745	mg/L	2	2	Discharge of drilling waste; discharge from metal refineries, erosion of natural deposits.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, OR AL)	Likely Source of Contamination
Sodium	N	3/15/2018 6/7/2018 9/19/2018 12/12/2018	35.43 (Range = 27.3 – 45.9)	mg/L	N/A	See Note (3)	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	N	3/15/2018 6/7/2018 9/19/2018 12/12/2018	57.48 (Range = 49.8 – 61.2)	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination
Lead (2)	N	9/13/2016 – 9/15/2016	0.002 (Range = ND – 0.004)	mg/L	0	0.015	Corrosion of household plumbing systems; Erosion of natural deposits;
Copper (1)	N	9/13/2016 – 9/15/2016	0.0756 (Range = 0.0038 – 0.1190)	mg/L	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Manganese	N	8/23/2018	0.0754	mg/L	N/A	0.3	Naturally occurring; Indicative of landfill contamination
Radium 228	N	12/18/2013	0.35	pCi/L	0	5	Erosion of natural deposits.
Nitrate	N	8/23/2018	0.403	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Iron	N	8/23/2018	29.2	ug/L	n/a	300	Naturally occurring.
Sulfate	N	10/1/2013	17.5	mg/L	N/A	250	Naturally occurring.
PFOA PFOS	N	12/6/2017	1.98 2.51	ng/L	N/A	EPA Advisory 70	Used in flame retardants and non-stick coatings

Notes:

1 – The level presented represents the 90th percentile of the 20 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 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 20 samples were collected at your water system and the 90th percentile value was 0.0756. The action level for copper was not exceeded at any of the sites tested.

2 – The level presented represents the 90th percentile of the 20 samples collected. The action level for lead was not exceeded at any of the 20 sites tested.

3 – Water containing more than 20 mg/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 for drinking by people on moderately restricted sodium diets.

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.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

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

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 to one trillion parts of liquid (parts per trillion - ppt).

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

We are required to present 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. Village of Fishkill 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>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2018, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, 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 Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So, get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it, and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

SYSTEM IMPROVEMENTS

In 2018 the village worked to rehabilitate two of the systems larger gravel wells, this process increased the available yield from each well.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.