

**Annual Drinking Water Quality Report for 2021**  
**Shenandoah Water System**  
**Lime Kiln Rd Hopewell Junction, NY 12533**  
**(Public Water Supply ID#1330674)**

**INTRODUCTION**

To comply with State regulations, Shenandoah Water 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. 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 VRI Environmental at (845) 677-3839. We want you to be informed about your drinking water.

**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 quantity 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 400 people through 138 service connections. Our water source is the Town of Fishkill owned Merritt Park Water District. The Town of Fishkill Merritt Park Water District obtains it's water from a well field located off of Snook Road and from the Village of Fishkill well field located off of Clover Road. The treated water from the Town of Fishkill enters this water system through a transmission main located along Route 52. A booster pump station located off of Lime Kiln Road Extension pumps the water from the transmission main to the 100,000 gallon storage tank. Most of our customers are residential except for a few commercial customers who draw water from the transmission main located along Route 52. In 2021, we pumped 7,743,000 gallons of water at an average use of 21,213 gallons per day. Copies of the Village of Fishkill Water District and Merritt Park Water District Annual Water Quality Reports are included in this mailing.

**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, lead, copper, total trihalomethanes, haloacetic acids and free chlorine residual. 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 Department of Behavioral and Community Health at (845) 486-3404.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, AL or TT)	Likely Source of Contamination
Copper *	No	September 2019	194 (Range = 61.3 – 224)	ug/L	1300	AL = 1300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead **	No	September 2019	7 (Range = 2.23 – 8.29)	ug/L	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Total Trihalomethanes	No	9/20/2021 11/17/2021	86.9 77.7	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	7/20/2021 11/17/2021	54.89 ND	ug/L	n/a	60	By-product of drinking water disinfection needed to kill harmful organisms.
Sodium	No	Quarterly 2021	99.85 (Range = 91.3 – 111)	mg/L	n/a	See Health Effects ***	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	Quarterly 2021	164 (Range = 144 – 177)	mg/L	n/a	250	Naturally occurring or indicative of road salt contamination.

**Footnotes:**

\* The level presented represents the 90th percentile of the 5 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, 5 samples were collected at your water system and the 90th percentile value is the reported value. The action level for copper was not exceeded at any of the sites tested.

\*\* The level presented represents the 90th percentile of the 5 samples collected. The action level for lead was not exceeded at any of the sites tested.

\*\*\* 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 270mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets.

**Definitions:**

**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).

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

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

**Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.

### **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. Shenandoah Water 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 the 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 (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2021, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

### **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

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 270mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets. 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 firefighting 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 up 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 our office if you have any questions.

*Annual Drinking Water Quality Report for 2021  
Merritt Park Water District  
Fishkill, New York  
Public Water Supply ID# 1330656*

## **INTRODUCTION**

To comply with State regulations, the Merritt Park Water District is issuing this 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.

## **FACTS AND FIGURES**

Our water system serves 1,700 people through 543 service connections. Our water source is groundwater drawn from two 60-foot deep drilled wells which are located on Snook Road. The water is disinfected with sodium hypochlorite prior to distribution. The water is pumped to a one million gallon storage tank. This tank provides adequate storage for emergencies and firefighting. The average water main has 100 lbs. of pressure. We do occasionally receive low water pressure complaints from homeowners. In almost every case it is related to a faulty pressure reducing valve which is the responsibility of the individual homeowner.

During the last several years our detailed well testing program showed occasional elevated chloride levels above maximum contaminant levels set forth by the State. To ensure the water delivered to our customers is below the maximum contaminant levels for chlorides, the district used our contract with the Village of Fishkill to buy and blend Village of Fishkill water to reduce the chloride levels. We have attached a copy of the Village of Fishkill Annual Water Quality Report for 2021.

As in the past, the water for the Merritt Park Water District meets all requirements set forth by the New York State Department of Health. In order to ensure that the chloride levels are in compliance with the Dutchess County Health Department the Town has submitted a plan for approval. This has been several years in the waiting; if approved, the plan should ensure safe chloride levels in the future. The water in the Merritt Park Water System does contain levels of hardness. The estimated hardness of your water is between 10 and 12 grains per gallon.

## **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, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids radiological and synthetic organic compounds. In 2021 PFOA, PFOS and 1,4 Dioxane have been added to the requirement. 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 of Measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Inorganics</b>							
Barium	No	10/2020	18.7	ug/l	NA	NA	Discharge of wastes; Discharge from metal refineries; Erosion of natural deposits
Chloride	No	2021	169.7 (141-225) See Note 3	mg/l	N/A	250	Naturally occurring or indicative of road salt contamination.
Copper	No	08/2020	0.0957 (0.016-.0961) See Note 1	mg/l	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	No	08/2020	0.0042 (ND-0.00540) See Note 2	mg/l	0	0.015	Corrosion of household plumbing systems; Erosion of

								natural deposits
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT or AI)	Likely Source of Contamination	
Manganese	No	10/2020	2.8	ug/l	N/A	300	Naturally occurring; Indicative of landfill contamination.	
Nickel	No	10/2020	0.0014	mg/l	N/A	N/A	Naturally occurring	
Nitrate	No	11/2021	0.79	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	
Sodium	No	2021	103.4 (95.2-118) See Note 3	mg/l	N/A	See Health Effects See Note 3	Naturally occurring; Road salt; Water softeners; Animal waste.	
Sulfate	No	10/2020	24.0	mg/l	N/A	250	Naturally occurring	
Zinc	No	10/2020	0.0196	mg/l	N/A	5.0	Naturally occurring; Mining waste	
			Well 1	Well 2				
Perfluorooctanoic acid (PFOA) (ng/l)	No	2/2021 4/2021 9/2021	2.0 ND 2.48	ND ND 1.67	Ng/l	N/A	10	Released into environment from use in commercial and industrial applications
			Well 1	Well 2				
Perfluorooctanesulfonic acid (PFOS) (ng/l)	No	2/2021 4/2021 9/2021	ND ND 2.10	ND ND 1.90	Ng/l	N/A	10	Released into environment from use in commercial and industrial applications



Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT or AI)	Likely Source of Contamination
<b>Disinfection Byproducts</b>							
Haloacetic Acids	No	08/2021	4.4	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes	No	08/2021	20.6	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

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Notes:

1 – The level presented represents the 90<sup>th</sup> percentile of the 14 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 copper values detected at your water system. The action level for copper for the 14 samples was exceeded in 1 sample.

2 – The level presented represents the 90th percentile of the 14 samples collected. The action level for lead was not exceeded by any sample.

3 - This is the average of the 24 yearly samples. The test results show acceptable levels of chlorides and sodium in the water. However, as operators we are concerned with maintaining these levels. Sodium does not have a maximum contaminant level. Sodium levels in the system water are at an average level of 103.4 milligrams per liter. This level will be increased by a water softener, if you have one. Water containing more than 20 milligrams of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 milligrams per liter of sodium should not be used by people on moderately restricted sodium diets. It is the recommendation of the Town that you consult your physician regarding these levels if you are on a sodium restricted diet. The average chloride level in the water samples collected was 169.7 milligrams per liter. The presence of chloride ions in the drinking water above the maximum contaminant level of 250 milligrams per liter can result in two undesirable aesthetic effects. First, you may detect an objectionable

taste of the water. Second, the higher level of chloride may cause corrosion of the pipes within the water system. Softener backwash into septic systems is contributing to the elevated levels of sodium and chlorides in the well water. All homeowners with softeners should check and adjust their softeners in order to limit the amount of brine solution discharged into septic systems and groundwater.

**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).

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

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

**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 2020, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. In 2016 the Town of Fishkill enacted local law for cross-connection control. This law enabled the Town to implement a program to prevent possible contamination through distribution connections.

There are parts of the distribution system that pressures exceed 85 lbs. It is the homeowner's responsibility to maintain a pressure reducing valve if required. The newer version of these valves, are not as robust as the older ones. When they fail water service can be depleted to the home or the homes over pressurized. It is plumbing code as well as critical that each home have a working shut off valve inside the home. This valve should be a ball valve. This valve can prevent flooding and water damage if there is plumbing issue within the home. Many times, the outside buried curb valves are not locatable or functioning and time consuming to operate.

## **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.

## **HELPFUL INFORMATION REGARDING THE WATER SUPPLY**

The average pressure on the water mains is in excess of 100 lbs. In order to protect appliances and internal plumbing, the Town building code states that each home is responsible for providing and maintaining a pressure reducing valve. The service life for pressure reducing valves in this district is three to five years. When they fail, the customer usually loses pressure.

## **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. We ask that all of our residents be vigilant in regard to suspicious activity in the area of our water treatment plants.

Please call **CAMO Pollution Control, Inc. at (845) 463-7310** if you have questions.

**Annual Drinking Water Quality Report for 2021**  
**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 6:00 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 2021, 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 2021 was 498,338,000 gallons. The City of Beacon purchased 100,983,000 gallons. The Town of Fishkill purchased 110,683,273 gallons for several of their water districts, The Town of Wappingers purchased 16,357,264 gallons for the Fleetwood water district, and Chelsea Ridge Complex purchased 32,302,230 gallons. The total amount of water treated and pumped into the Village distribution system to actual village metered customers was 167,340,854 gallons. The actual billed amount 427,666,621 gallons, this left 70,671,379 gallons unaccounted for. Unaccounted for water can be attributed to hydrant flushing, fire prevention, and leaks in the system. The daily average of water usage in the village system was 1,088,644 gallons per day. Our highest single day for a 24-hr. period was 1,426,000 gallons on September 12, 2021.

**The Water Rates for 2021:**

**Village Residents:** \$16.44 for the 1<sup>st</sup> 1,000 cubic feet - then \$ 10.69 for every 1,000 cubic feet after.

**Village Commercial:** \$ 21.37 for the 1<sup>st</sup> 1,000 cubic feet - then \$ 13.89 for every 1,000 cubic feet after.

**Out of Village Residents:** \$32.88 for 1<sup>st</sup> 1,000 cubic feet- then \$21.38 for every 1,000 cubic feet after.

**Out of Village Commercial:** \$ 42.74 for the 1<sup>st</sup> 1000 cubic feet- then 27.78 for every 1,000 cubic feet after.

1 cubic foot = 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	8/24/2021	7.3	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	12/04/2019	0.0276	mg/L	2	2	Discharge of drilling waste; discharge from metal refineries, erosion of natural deposits.
Wells 1,2,6,8		12/04/2019	0.0201				
Wells 3,4,5,11							
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	3/11/2021 6/17/2021 11/10/2021 12/02/2021	31.0 26.1 53.6 31.4	mg/L	N/A	See Note (3)	Naturally occurring; Road salt; Water softeners; Animal

							waste.
Chloride	N	3/11/2021 6/17/2021 11/10/2021 12/02/2021	47.7 44.6 74.8 45.4	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination
Lead (2)	N	7/30/2019 – 8/2/2019	0.00243  (Range = ND – 0.00327)	mg/L	0	0.015	Corrosion of household plumbing systems; Erosion of natural deposits;
Copper (1)	N	7/30/2019 – 8/2/2019	0.0625  (Range = 0.0014 – 0.0697)	mg/L	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Manganese	N	6/7/2021	0.028	mg/L	N/A	0.3	Naturally occurring; Indicative of landfill contamination
Radium 228	N	9/16/2019	0.66	pCi/L	0	5.	Erosion of natural deposits.
Nitrate	N	6/7/2021	0.33	mg/L	10	10.	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Iron	N	6/7/2021	<0.2	mg/L	n/a	0.3	Naturally occurring.
PFOA	N	3/23/2021 6/22/2021 9/29/2021 12/7/2021	Avg. 2.31 (Range= 1.62-3.86)	ng/L	N/A	10.0	Released into the environment from widespread use in commercial and industrial applications.
PFOS	N	3/23/2021 6/22/2021 9/29/2021 12/7/2021	Avg. 2.0 (Range= 1.69-2.75)	ng/L	N/A	10.0	Released into the environment from widespread use in commercial and industrial applications.

**Notes:**

1 – The level presented represents the 90<sup>th</sup> 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 90<sup>th</sup> 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 90<sup>th</sup> 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 90<sup>th</sup> 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 2021, 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 2021, as part of the well field expansion project the village has continued the improvements to the well fields. Two new replacement wells were drilled over the past year. The village is now in the process of getting approvals from the NYS and Dutchess County Health Department's to add these new wells to the village's distribution system.

#### **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.