

**Annual Water Quality Report for 2017**  
**Fishkill Plains Water System**  
**76 Wright Blvd, Hopewell Junction, NY 12533**  
**(Public Water Supply ID# 1302805)**

## **INTRODUCTION**

To comply with State regulations, Fishkill Plains 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 Services 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. To ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the number of certain contaminants in water provided by public water systems. The State Health Department and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The Public water system serves a total population of 2050 through a total of 591 service connections; 900 of those people are located within the Fishkill Plains Water District and 1150 within the Brettview Water District within the Brettview Acres Water Co. The 258 service connections located within the Fishkill Plains Water District consist of residential homes and commercial properties. The 333 service connections located within the Brettview Acres Water Co. consist of residential homes. The Commercial properties include the Van Wyck Junior High School, the Fishkill Plains School, Brettview, Brookmeade Plaza, Summerlin Plaza and the 1203 Business Park, LLC. Our water source is from 2 groundwater wells, which are approximately 50' deep. These wells are located off of Wright Boulevard on a private lot owned by the water company. The water is chlorinated with a sodium hypochlorite solution and pumped into a storage tank. The water is then pumped from the storage tank to a pneumatic tank, which provides system pressure. The facility is also equipped with an emergency generator in case of power failures. A new green sand filter was installed in 2011 to remove iron and manganese. Last year we pumped a total of 70,273,500 gallons at an average daily usage of 192,530 gallons per day.

The NYS DOH 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 "Table of Detected Contaminants" 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.

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 residential land use and related activities in the assessment area. In addition, the wells are located in an area which is prone to flooding.

## WHERE DOES OUR WATER COME FROM?

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, planning and education programs. A copy of the assessment can be obtained by contacting us, as noted above.

## 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, nitrate, principal organic compounds, primary inorganic compounds, lead and copper, disinfection byproducts, synthetic organic compounds and radiologicals. 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) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL or TT)	Likely Source of Contamination
Chlorine Residual (Entry Point)	No	Yearly Average	1.65 (Range = 1.07 – 2.07)	mg/L	N/A	4.0	Chemical additive for the disinfection of microbes.
Iron **** Well #1	No	2/7/2017 4/20/2017	270 240	ug/L	N/A	300	Naturally occurring.
Manganese **** Well #1	No	2/7/2017 4/20/2017	310 280	ug/L	N/A	300	Naturally occurring; Indicative of landfill contamination.
Iron **** Well #2	No	2/7/2017 4/20/2017	340 350	ug/L	N/A	300	Naturally occurring.
Manganese **** Well #2	No	2/7/2017 4/20/2017	360 360	ug/L	N/A	300	Naturally occurring; Indicative of landfill contamination.
Sodium	No	6/15/2017 9/7/2017	50 53	mg/L	N/A	See Health Effects *	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	6/15/2017 9/7/2017 12/28/2017	81 110 130	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination.
Barium	No	12/28/2017	0.043	mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL or TT)	Likely Source of Contamination
Nickel	No	12/28/2017	0.032	mg/L	N/A	N/A	
Copper **	No	8/10/2016 8/11/2016 8/12/2016 9/12/2016	229 (Range = 70 – 530)	ug/L	1300	AL = 1300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead ***	No	8/10/2016 8/11/2016 8/12/2016 9/12/2016	4.95 (Range = ND – 15)	ug/L	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
POC – MTBE Well #1	No	2/7/2017 6/15/2017 12/29/2017	0.64 0.61 0.58	ug/L	N/A	10	Releases from gasoline storage tanks. MTBE is an octane enhancer in unleaded gasoline. Atmospheric deposition.
POC – MTBE Well #2	No	12/29/2017	0.54	ug/L	N/A	10	Releases from gasoline storage tanks. MTBE is an octane enhancer in unleaded gasoline. Atmospheric deposition.
Nitrate	No	2/7/2017 4/20/2017 9/7/2017 12/28/2017	0.30 0.44 0.58 0.51	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Haloacetic Acids	No	3/31/2017 4/20/2017 6/15/2017 9/7/2017 12/28/2017	9.4 9.7 3.0 12.1 6.9	ug/L	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes	No	3/31/2017 4/20/2017 6/15/2017 9/7/2017 12/28/2017	17 18 29 33 18	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.

**Footnotes:**

\* 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.

\*\* The level presented represents the 90th percentile of the 11 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, 11 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 11 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 lead values detected at your water system. In this case, 11 samples were collected at your water system and the 90th percentile value is the reported value. The action level for lead was met at one of the sites tested.

\*\*\*\* Samples are from the raw well water before Greensand filters are used. All Entry Point Iron and Manganese samples are Non-Detect.

**Definitions:**

**N/A-** Means not applicable

**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

**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

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

**Picocuries per liter (pCi/L)** – A measure of the radioactivity in 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 because of materials used in your home's plumbing. Fishkill Plains 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 2017, 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 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.