# Annual Drinking Water Quality Report for 2014
# 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 a 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 concentration of certain contaminants in water provided by public water systems. The State Health Departmentôs and the FDAôs 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.

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 ñAre there contaminants in our drinking water?ò 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 2014 was 563,825,000 gallons. The daily average of water treated and pumped into the distribution system was 1,544,726 gallons per day. Our highest single day for a 24 hr period was 2,033,000 gallons on June 29,2014.

**The Water Rates for 2014 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.** |

- **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 constituents include: total coliform, inorganic compounds, total trihalomethanes, haloacetic acids, radionuclides, nitrates, nitrites, lead, copper, volatile organic compounds (VOCôs), and synthetic organic compounds (SOCôs). 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 in 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, contains 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 EPAôs Safe Drinking Water Hotline (800-426-4791) or the Dutchess County Health Department at (845-486-3400).

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, total trihalomethanes, and synthetic organic compounds.

## 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 | 9/10/14 | 4.27 | ppb (Parts per billion) | 0 | MCL = 80.0 | **By-product of drinking water chlorination** |

| Contaminant | Violation Yes/No | Date of Sample | Level Detected | Unit Measurement | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Total Coliform | Yes | 5/22/13 | 2 positive samples | N/A | N/A | MCL=2 or more positive samples in 1 month | Naturally present in the environment |

Systems that collect fewer than 40 total coliform samples per month, must report the highest number of positive samples collected in any one month. If 2 or more samples are positive for total coliforms a MCL violation has occurred. Follow up sampling was performed, public notification occurred; all follow up sample results were absent of total coliform

| 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** |
| **Mercury** | **N** | **12/18/13** | **0.2** | **ppb** | **2** | **2** | **Erosion of natural deposits; discharge from refineries** |
| **Barium** | **N** | **12/18/13** | **24.7** | **ppb** | **2000** | **2000** | **Discharge of drilling waste; discharge from metal refineries, erosion of natural deposits.** |
| **Cadmium** | **N** | **12/18/13** | **0.5** | **ppb** | **5** | **5** | **Corrosion of galvanized pipes, erosion of natural deposits; discharge from metal refineries, run off from waste batteries & paints** |
| **Nitrate** | **N** | **5/7/14** | **0.26** | **mg/L** | **10** | **10** | **Fertilizers runoff. Septic tank leachate.** |
| **Nickel** | **N** | **12/18/13** | **1.1** | **ppb** | **N/A** | **100** | **Discharge from steel metal factories** |
| **Sodium (3)** | **N** | **12/19/14** | **20.2** | **ppm** | **N/A** | **No Limit** | **Naturally occurring and road salt contamination.** |
| **Selenium** | **N** | **12/18/13** | **3.0** | **ppb** | **50** | **50** | **Discharge from metal & petroleum refineries; erosion from natural deposits, discharges from mines** |
| **Chloride** | **N** | **12/19/14** | **51.5** | **ppm** | **N/A** | **250** | **Naturally occurring or indicative of road salt contamination** |
| **Cyanide** | **N** | **12/18/13** | **100** | **ppb** | **200** | **200** | **Discharge from steel/metal factories; discharge from plastic and fertilizer factories** |
| **Total Dissolved Solids Well #11** | **N** | **11/6/13** | **326** | **mg/L** | **N/A** | **N/A** | |
| **Alkalinity Well #11** | **N** | **11/6/13** | **130** | **mg/L** | **N/A** | **N/A** | |
| **Hardness Well #11** | **N** | **11/6/13** | **136** | **mg/L** | **N/A** | **N/A** | **Naturally occurring /mineral deposits** |
| **Sulfate Well #11** | **N** | **11/6/13** | **22.2** | **mg/L** | **N/A** | **250** | **Naturally occurring** |
| **Iron Well #11** | **N** | **11/6/13** | **0.015** | **mg/L** | **N/A** | **0.3** | **Naturally occurring** |
| **Magnesium Well #11** | **N** | **11/6/13** | **10.9** | **mg/L** | **N/A** | **N/A** | **Naturally occurring / mineral deposit** |
| **Manganese Well #11** | **N** | **11/6/13** | **0.060** | **mg/L** | **N/A** | **0.3** | **Naturally occurring; Indicative of landfill contamination** |

| Contaminant | Violation Yes/No | Date of Sample | Level Detected (Avg/Max) (Range) | Unit Measurement | MCLG | Regulatory Limit (MCL, OR AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| Copper Well #11 | N | 11/6/13 | 0.0018 | mg/L | 1.3 | 1.3 | Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives |
| Lead (2) | N | 6/6/14 6/17/14 | 0.0022 (Range = <0.0005 – 0.0030) | mg/L | 0 | 0.015 | Corrosion of household plumbing systems; Erosion of natural deposits; |
| Copper (1) | N | 6/6/14 6/17/14 | 0.0845 (Range = 0.0079 – 0.330) | mg/L | 0 | 1.3 | Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives. |
| Manganese | N | 5/7/14 | 0.070 | mg/L | N/A | 0.3 | Naturally occurring; Indicative of landfill contamination |

**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 0.0845. 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 did not exceed at any of the 20 sites tested.

**Advisory:** Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children 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. 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 higher than at other homes in the community as a result of materials used in your home's plumbing. The 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 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

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.

***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).

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

**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 2014, 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**

Due to approval delays the water main improvements for Rt-9 south of Clove Rd. was moved to the spring and summer of 2014 when the Village will be replacing the 10ò cast iron water main from Clove Rd south to the Putnam Co. line; this 100-year-old section of main has been a source for multiple water main breaks in the past; with this replacement the number of dirty water issues should be greatly reduced as will water loss volumes. The village has awarded the bid for this work and work is expected to start as soon as the spring weather arrives. A new 2 MG storage tank is continuing through the design and planning phase, this improvement will occur once the new main has been installed on Rt-9 south of the water supply. Once again the Village has performed its semiannual flushing during day light hours reducing over time costs and providing for a more efficient system wide flushing. Dirty water issues during 2014 were very minor and related to localized water main repairs.

**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.