Annual Drinking Water Quality Report for 2015

Village of Fultonville
10 Erie Street, Fultonville, NY 12072
(Public Water Supply Identification Number NY2800140)

INTRODUCTION

To comply with State regulations, the Village of Fultonville, 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. We are very pleased to provide you with this year's Annual Water Quality Report. 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, we conducted tests for over 80 contaminants. We detected 1 of those contaminants at a level higher than the State allows. As we told you at the time, our water temporarily exceeded a drinking water standard and we modified our treatment process to rectify this problem. This report is 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 New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. Paul Daley, Street and Water Commissioner, Village of Fultonville, 10 Erie Street, Fultonville, NY 12072; Telephone (518) 853-3815 ext. 4.* We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 4th Monday of each month, 7:00 PM at the Village Hall, 10 Erie Street, Fultonville, NY 12072; Telephone (518) 853-3815, *The Village of Futlonville is an equal opportunity provider and employer. Discrimination is prohibited by Federal Law. Complaints of discrimination may be filed with USDA, Director, Office of Civil Rights Room 326-W, Whitten Building, 14th and Independence Ave., SW, Washington, DC 20250-9410; TDD# 1-800-662-1220.*

WHERE DOES OUR WATER COME FROM?

The Village of Fultonville draws its water from "groundwater" sources. Groundwater or well water is stored below the surface of the earth in deep, porous rocks called "aquifers." Groundwater is purified naturally as it filters through layers of soil, clay, rock and sand. This process, known as "percolation" takes years to complete. As a result, groundwater requires less treatment than surface water. The Village of Fultonville water source consists of two deep wells. Well #1 is located at 10 Erie Street while Well #2 is 400 feet east of 10 Erie Street. Each well is 190 feet deep. Pumping capacity for each well is 170 gallons per minute. Treatment of the water consists of softening through a Culligan Softening unit to remove hardness, iron and manganese followed by chlorination using sodium hypochlorite to protect against contamination from harmful bacteria. After treatment, water is pumped into the distribution system and to a 632,000 gallon storage tank to meet consumer demand and to provide adequate fire protection.

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 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

The Village provides water through 300 service connections to a population of approximately 740 people. Our average daily demand is 95,000 gallons. Our single highest day was 250,000 gallons. The total water produced in 2015 was 42,572,000 gallons. The higher than normal total water produced was due to a leak that took six months to find and then repair.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In accordance with State regulations, the Village of Fultonville routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, and synthetic organic contaminants. In addition, we test (1) sample for coliform bacteria each month. The table presented below depicts which contaminants were detected in your drinking water. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old and is noted.

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 pose 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 New York State Department of Health, Herkimer District Office at (315) 866-6879.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table on page 4, our system exceeded the MCL for iron. A water softener is used to remove and control iron and manganese levels in addition to hardness. We are in the process of replacing the water softener with a new unit. We are in the testing stage now and expect work to be completed in 2016. This will bring down the iron concentration. The state does allow higher levels if there is no adverse effect such as increased color or discoloration of plumbing fixtures. When iron and manganese are both present the state allows an MCL of 500 ppb for the sum of both if there are no problems such as discoloration and staining of plumbing fixtures. The Village of Fultonville has been found to be in violation of the New York State Sanitary Code Drinking Water Regulations and the National Primary Drinking Water Regulations. The violation results from exceeding the MCL for iron during the 1/1/15 to 12/31/15. We are providing public notice to our customers with this Annual Report. We are required to provide the following information:

Iron has no health effects. At 1000 ug/l a substantial number of people will note the bitter astringent taste of iron. Also, at this concentration, it imparts a brownish color to laundered clothing and stains plumbing fixtures with a characteristic rust color. Staining can result at levels of 50 ug/l, lower than those detectable to taste buds. Therefore, the MCL of 300 ug/l represents a reasonable compromise as adverse aesthetic effects are minimized at this level. Many multivitamins may contain 3000 or 4000 ug/l of iron per capsule.

The Village is in the process of evaluating the water quality from each well so the engineers can determine the best water softener to remove iron and manganese. We will collect samples in 2016 to evaluate the softener performance as far as iron and manganese removal.

Additionally, we did not exceed the Action Level for lead but did have one sample greater than the Action Level and must furnish the following information concerning lead *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. Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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.*

We have learned through our monitoring and testing that some constituents have been detected; however, these compounds were detected below New York State requirements. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2015, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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 about drinking water 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 microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

INFORMATION ON LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Fultonville 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 or at *http://www.epa.gov/safewater/lead*

WHAT IS THE SOURCE WATER ASSESSMENT PROGRAM (SWAP)?

To emphasize the protection of surface and ground water sources used for public drinking water, Congress amended the Safe Drinking Water Act (SDWA) in 1996. The amendments require that New York State Department of Health's Bureau of Public Water Supply Protection is responsible for ensuring that source water assessments are completed for all of New York's public water systems.

A source water assessment provides information on the potential contaminant threats to public drinking water sources:

- each source water assessment will: determine where water used for public drinking water comes from (delineate the source areas)
- Inventory potential sources of contamination that may impact public drinking water sources
- Assess the likelihood of a source water area becoming potential contaminated

A SWAP summary for our water supply is attached to this report.

WATER CONSERVATION TIPS

The Village of Fultonville encourages water conservation. There are a lot of things you can do to conserve water in your own home. Conservation tips include:

- Only run the dishwasher and clothes washer when there is a full load.
- Use water saving showerheads.
- Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute.
- Water gardens and lawn for only a couple of hours after sunset.
- Check faucets, pipes and toilets for leaks and repair all leaks promptly.
- Take shorter showers.

CLOSING

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. We ask that all our customers help us protect our water sources. Please call our office if you have questions.

Village of Fultonville
PWSID NY2800140
Source Water Assessment Summary

The NYSDOH has completed a source water assessment for this system, based on available information. Possible arid 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 section "Are there contaminants in our drinking water?" for a list of contaminants, if any, that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from 2 drilled wells. The source water assessment has rated these wells as having a very-high susceptibility to industrial organic compounds, a high susceptibility to bacteria, viruses, halogenated solvents, herbicides, pesticides, nitrates, metals and protozoa; and a medium-high susceptibility to petroleum products. These ratings are due primarily to the proximity of the wells to a permitted discharge facility (industrial/commercial facility that discharges wastewater into the environment and is regulated by the state and/or federal government), a hazardous waste site, a hazardous substance spill, low intensity residential activities and high intensity residential

activities and the proximity of the New York State Thruway in the assessment area. In addition, the wells draw from an unconfined aquifer of high hydraulic conductivity.

While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us at the number provided in this report.

VILLAGE OF FULTONVILLE TABLE OF CONTAMINANTS
Public Water Supply Identification Number NY2800140

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants (sample data from 6/12/15 unless otherwise noted)						
Barium (sample from 7/23/13)	N	220	ppb	2000	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chloride	N	162	ppm	N/A	250	Geology; Naturally occurring
Copper (data from 6/11/15-6/12/15) Range of copper concentration	N	190[1] ND-370	ppb	1300	AL=1300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (sample from 7/23/13)	N	370	ppb	N/A	2200	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (data from 6/11/15-6/12/15) Range of lead concentration	N	4[3] ND-16	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nickel (sample from 7/23/13)	N	3.9	ppb	N/A	100	Discharge from steel /metal factories
pH	N	7.61	units	N/A	6.5-8.5	
Sodium[4]	N	250	ppm	N/A	N/A	Geology
Sulfate	N	20.6	ppm	N/A	250	Geology;
Disinfection Byproducts (THM sample from 7/23/13)						
TTHM[Total Trihalomethanes]	N	21	ppb	0	80	By-product of drinking water chlorination
Chlorine Residual (average) range (based on daily samples)	N	0.5 0.2-2.0	ppm	MRDLG N/A	MRDL 4	Used in the treatment and disinfection of drinking water
Radiological Contaminants (sample from 7/15/10						
Gross Alpha	N	4.36	pCi/L	0	15	Erosion of natural deposits

NOTES

1. The level presented represents the 90th percentile of 10 test sites. The action level for copper was not exceeded at any of the 10 sites tested.
2. When iron and manganese are both present the state allows an MCL of 500 ppb for the sum of both if there are no problems such as discoloration and staining of plumbing fixtures. Iron has no health effects. At 1000 ug/l a substantial number of people will note the bitter astringent taste of iron. Also, at this concentration, it imparts a brownish color to laundered clothing and stains plumbing fixtures with a characteristic rust color. Staining can result at levels of 50 ug/l, lower than those detectable to taste buds. Therefore, the MCL of 300 ug/l represents a reasonable compromise as adverse aesthetic effects are minimized at this level. Many multivitamins may contain 3000 or 4000 ug/l of iron per capsule.
3. The level presented represents the 90th percentile of 10 test sites. The action level for lead was exceeded at 1 of the 10 sites tested.
4. Water containing more than 20 mg/l should not be consumed by persons on severely restricted sodium diets.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.
Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.
Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
90th Percentile Value- The values reported for lead and copper represent the 90th percentile. 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 and copper values detected at your water system.
Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal - The "Goal" (MCLG) is 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.
N/A- not applicable