Annual Drinking Water Quality Report for 2017
Tannersville Village, Tannersville, NY 12485
(Public Water Supply ID# NY1900033)

INTRODUCTION

To comply with State regulations, the Village of Tannersville, 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. This report provides an overview of last year's (Jan 1-Dec. 31 2017) 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 Joe Myers, Water System Operator at (518) 263-4333. 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. The meetings are held on the second Tuesday of each month at 6:00 pm in the Tannersville Village Hall. Please check our website for any changes in this schedule.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source consists of three reservoirs and flows into the water plant, which is located at the end of Leach Drive in Tannersville, an auxiliary source at Dibbles Dam. We also have one back up well located adjacent to the Rip Van Winkle Lake which is capable of producing 60 gallons per minute and is treated prior to distribution, and another back up well located by the Sunview Water Tower and is treated prior to distribution.

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, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. 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 Health Department at (607) 432-3911.

Table of Detected Contaminants

Contaminant/ Where sample taken	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Nitrate[1] Filter Plant	No	1/4/17	Filter Plant .31	Mg/l	10	MCL	Fertilizer runoff, leaching of septic systems, erosion of natural deposits
Nitrate	No	10/1/15	Dibbles Dam RAW – Schoharie Creek .005	Mg/l	10	MCL	Fertilizer runoff, leaching of septic systems, erosion of natural deposits

[1]**Nitrate**. Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from you health care provider.

Nitrate	No	04/9/15	Dibbles Dam RAW – Schoharie Creek 0.45	Mg/l	10	MCL	Fertilizer runoff, leaching of septic systems, erosion of natural deposits
Lead (90th percentile)[2] Distribution System	No	09/27/17	<.10	Ug/l	.015	MCL	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper (90th percentile) Distribution System	No	9/27/17	.242	Mg/l	1.3	MCL	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
TTHM Distribution	No	9/21/17	27.9	Ug/l	80	MCL	By-product of drinking water disinfection needed to kill harmful organisms
HAA5 Distribution	No	9/21/17	37	Ug/l	60	MCL	By-product of drinking water disinfection needed to kill harmful organisms, formed when source water contains large amounts of organic matter
Arsenic Dibbles Dam	No	05/09/2013	1	Ug/l	10	MCL	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Arsenic Filter Plant	no	9/21/17	.6	Ug/l	10	MCL	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Arsenic[3] Rip Van Winkle Well	Yes	Quarterly 2014	Average is 23.5[3] Range is ND-46	Ug/l	10	MCL	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium Filter Plant	No	9/21/17	Filter Plant .005	Mg/l	2	MCL	Erosion of Natural Deposits
Fluoride Rip Well	No	2/23/12	.31	Mg/l	2.2	MCL	Erosion of Natural Deposits, water additive that promotes strong teeth,
Fluoride Filter Plant	No	9/21/17	.18	Mg/l	2.2	MCL	Erosion of Natural Deposits, water additive that promotes strong teeth,
Iron Filter Plant	No	04/07/16	Filter Plant 6	Ug/l	300	MCL	Naturally occurring.
Iron Rip Well	No	2/23/12	Rip Well 255	Ug/l	300	MCL	Naturally occurring.
Manganese Filter Plant	No	04/07/16	Filter Plant 26	Ug/l	300	MCL	Naturally occurring; Indicative of landfill contamination.
Manganese Rip Well	No	2/23/12	Rip Well 19	Ug/l	300	MCL	Naturally occurring; Indicative of landfill contamination.
Sulfate Filter Plant	No	3/11/10	Filter Plant 3.5	Mg/l	250	MCL	Naturally occurring.
Sulfate Rip Well	No	2/23/12	Rip Well 4.2	Mg/l	250	MCL	Naturally occurring.

[2]The level presented represents the 90th percentile of the 10 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, ten samples were collected at your water system and the 90th percentile value was the second highest value (.001 ug/l) & (.005 ug/l). The action level for lead was not exceeded.

[3]**Arsenic.** NYS and EPA have promulgated a drinking water arsenic standard of 10 parts per billion. While your drinking water meets the standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Sodium Filter Plant	No	4/7/16	Filter Plant 7.65	Mg/l	N/A	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Sodium Rip Well	No	2/23/12	Rip Well 47.1	Mg/l	N/A	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride Filter Plant	No	04/07/16	Filter Plant 7.2	Mg/l	250	MCL	Naturally occurring or indicative of road salt contamination.
Chloride Rip Well	No	2/23/12	Filter Plant 5.9	Mg/l	250	MCL	Naturally occurring or indicative of road salt contamination.
Zinc Filter Plant	No	4/7/16	Filter Plant .007	Mg/l	5.0	MCL	Naturally occurring; Mining waste
Zinc Rip Well	No	2/23/12	Filter Plant .0610	Mg/l	5.0	MCL	Naturally occurring; Mining waste
Chromium Filter Plant	No	9/29/11	ND	Mg/l	.10	MCL	Erosion of Natural Deposits
Antimony Filter Plant	No	9/29/201 1	ND	Mg/l	.006	MCL	Discharge of petroleum refineries, runoff from orchards, runoff from electronics/solder
Bis(2-ethylhexyl) phthalate Filter Plant	No	11/15/12	.79	Ug/l	6	MCL	Used in plastic products such as polyvinyl chloride, plastic toys, vinyl upholstery, adhesives and coatings. Compound likely to be released to the environment during production and waste disposal of these products. Also used in inks, pesticides, cosmetics and vacuum pump oil.
Color Filter Plant	No	04/07/16	10 Units	Mg/l	15	MCL	Large quantities of organic chemicals, inadequate treatment, high disinfectant demand and the potential for production of excess amounts of disinfectant by-products such as trihalomethanes, the presence of metals such as copper, iron and manganese; Natural color may be caused by decaying leaves, plants, and soil organic matter.
Nickel Filter Plant	No	4/7/16	.018	Mg/l	n/a	n/a	Naturally Occurring

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.

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

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

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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 – 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, it shows that our system uncovered some problems in 2014 with arsenic detected at the Rip Van Winkle emergency well. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. **Please note that this well had only been used in 2014 and 2017 as an emergency source during certain periods containing a pressure problem or in the event of extreme drought conditions when tower levels had dropped. It had not been run continuously during those years. It was not used at all in 2015 or 2016.**

Arsenic is a metal found in ores of copper, lead, and other minerals, and in soil, ground water, and surface water. Arsenic compounds are used in commercial pesticides, wood preservatives and veterinary drugs. Contamination of drinking water may occur if arsenic gets into surface or groundwater after dissolving from minerals in the ground. It may also occur after the use of arsenic pesticides and improper waste disposal by smelting operations.

Some people exposed to high levels of arsenic in drinking water for long periods of time developed skin effects, including warts and corns on the hands and feet and darkening of the skin. Long-term exposure to high levels of arsenic can also cause nerve, liver, and blood vessel damage and may lead to hearing and learning deficiencies. Long-term exposure to high levels of arsenic in drinking water and in medicines is associated with an increased risk of skin cancer. Chemicals that cause adverse health effects in humans after high levels of exposure may pose a risk of adverse health effects in humans exposed to lower levels over long periods of time.

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?

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 demands, there are a number of reasons why it is important to conserve water:

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

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

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

CLOSING

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