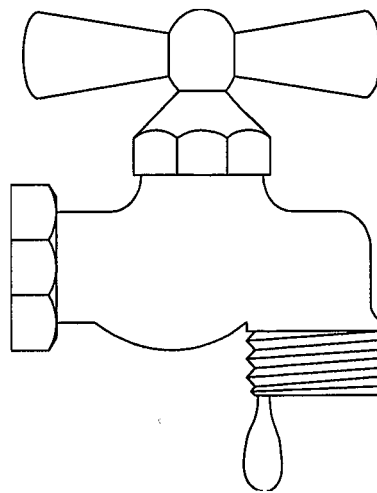


The Village of Dansville

**Water Department 2018
Annual Statement**

*Providing Quality Water
To Home and Industry*



Annual Drinking Water Quality Report for 2018
Village of Dansville Water System
9880 Highland Ave. Dansville, NY 14437
(Public Water Supply ID# NY2501015)

INTRODUCTION

To comply with State regulations, The Village of Dansville Water System 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 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 **Scott Tracy**, Superintendent of Public Works at 585-335-5330 or 585-335-5270. 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 the third Tuesday of each month, 7:00 pm at the North Dansville Town Hall.

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.

Source of Water: The Village of Dansville obtains its water from two sources, a **surface supply** and a **backup well site** with two wells.

Water Impoundment Reservoir: The Village maintains a 15-acre impoundment reservoir on Reservoir Road in the Town of Wayland. This impoundment contains a cement core earth dam located on Little Mill Creek. An emergency response plan is on file in the Mayor's office.

Mill Creek Supply: Currently, the primary source of raw water for the Village is the Little Mill Creek, which is located southeast of the Village. An impounding reservoir approximately 15 acres in area is located three miles east of the Village on Reservoir Road in the Town of Wayland. The outflow from this reservoir flows into Little Mill Creek, to the surface water intake located on the creek approximately two miles southwest of the impounding reservoir and approximately two miles southeast of the Village. The water is diverted to the intake by a small concrete dam, which creates a shallow impoundment. Two sets of manually cleaned screens remove large materials from the water which then enters a 12-inch transmission main. The water is conveyed by gravity flow to the existing treatment facility.

While the Mill Creek supply is currently the main source of water for the Village of Dansville, the Perkinsville wells are used to supplement our water supply when the quality of the creek water drops below our filtration facility's ability to treat it. (i.e. during storm runoff periods).

Perkinsville Well Supply: The Village well site is located off County Route 91 in the Town of Wayland in Steuben County just north of the Hamlet of Perkinsville. There are two wells at the site, both of which were installed in 1964. The water is

conveyed to the treatment site by a 12-inch water main that runs west from the well site to an abandoned railroad right of way then north to the treatment site.

During 2018, our system did not experience any restriction of our water source.

Water Treatment: The Dansville Water Treatment Plant is located at 9880 Highland Ave., just East of the Village. The water filtration facility was constructed in 2001 and has supplied treated water to the Village of Dansville ever since. Prior to distribution, the water is treated using coagulation and filtration, liquid chlorination, fluoridation, and a sequestering agent for lead and copper corrosion control.

Executive Summary of the Village of Dansville Source Water Susceptibility Assessment

The NYSDOH has evaluated this Public Water System's susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraphs below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

The assessment area for this drinking water source contains no discrete Potential Contaminant Sources (PCS), but agricultural land in the watershed for this drinking water source poses a variety of risks to drinking water quality. The greatest risks are associated with microbial contaminants, followed by pesticides, phosphorus, and Disinfection-Byproduct (DBP) precursors.

The Livingston County Department of Health and the NYSDOH will use this information to assist in the direction of future source water protection activities. These may include additional water quality monitoring, resource management, planning, and education programs. A copy of this assessment, including a map of the assessment area, can be obtained by contacting us, as noted below.

FACTS AND FIGURES

People Served: The Village of Dansville supplies water to 2,694 units. Village customers, account for 2,323, a population of 4,581 and 281 units with a population of 824 are located in the Town of North Dansville. In 2011, 22 units were added in the Town of West Sparta. The village also sells bulk water at our highway garage located on Mill Street.

The total water distributed in 2018 was 182,469,800 gallons. The daily average of treated water supplied to the distribution system was 474,000 gallons per day. Our highest single day usage was 865,000 gallons on 11/25/2018 The Village pumped 27,044,310 gallons from the Perkinsville well source. This was 14.82% of the total raw water intake for 2018. There was an unaccounted for total of 64,223,239 gallons. This water was used to flush mains, fight fires, leakage, fire training and internal usage Water and waste water treatment plants),Town Hall, Ambulance, Fire Hall, etc.) This accounts for 27.19% of the total amount produced.

In 2018, water customers were charged as follows:

Effective Water & Sewer Rates 2018			
BASE CHARGES			
	Water	Sewer	Total
Village	83.00	83.00	166.00
Outside Village	98.00	98.00	196.00
USAGE RATES PER 1000 GALLONS			
	Water	Sewer	Total
Village	3.50	3.50	7.00
Outside Village	4.00	4.00	8.00
Please note, all base water charges include a capital improvement chg of \$38.53 associated with the construction of the water treatment plant.			

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, lead and copper, volatile organic compounds, radiological contaminants, Total Trihalomethanes (TTHM), Haloacetic Acids (HAA) 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, might 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 Department of Health at 585-243-7280.

Table of Contaminants							
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
Disinfectant: Chlorine Residuals Measured in Distribution:							
Chlorine Residual	No	Monthly	Range (0.14-1.0)	mg/l	N/A	MRDL=4.0	Water additive used to control microbes
Microbiological Contaminants/Turbidity							
Turbidity	No	Daily	0.18 (Max) (0.04-0.18)	NTU	N/A	1 NTU (TT)	Soil Runoff
Turbidity	No	Daily	100%<0.3	NTU	N/A	95% of samples <0.3 NTU (TT)	Soil Runoff

Table of Contaminants

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
Turbidity ¹ Distribution	No	5 Per Week	0.19 (Max) (.05-.19)	NTU	N/A	5 NTU	Pipe corrosion
Inorganic Contaminants							
Barium	No	2/6/18	0.029	mg/L	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chloride	No	2/6/18	26	mg/L	N/A	250	Naturally occurring or indicative of road salt contamination.
Chromium	No	2/6/18	0.0026	mg/L	0.10	0.10	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	No	Monthly	0.6 to 0.8 0.7 Avg.	mg/L	N/A	2.2	Erosion of natural deposits. Water additive that promotes strong teeth. Discharge from fertilizer and aluminum factories.
Nitrate	No	2/6/18	1.7	mg/L	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nickel	No	2/6/18	0.00030	mg/L	NA	NA	Nickel enters groundwater and surface water by dissolution of rocks and soils, from atmospheric fallout, biological decays and waste disposal.
Sodium	No	2/6/18	13.14	mg/L	N/A	N/A	Naturally occurring; road salt; water softeners; animal waste.
Lead and Copper							
Lead	No	9/2017	0.0018 ² (<.001-0.0044 ³)	mg/L	0	0.015 (AL)	Corrosion of household plumbing systems.
Copper	No	9/2017	0.24 ² (<0.018-0.28 ³)	mg/L	0	1.3 (AL)	Corrosion of household plumbing systems.
Disinfection Byproducts							
Bus Garage							
Total Tri-halomethanes (TTHMs)	No	10/20/17 1/2/18 4/9/18 7/2/18 10/1/18	23-86 54 ⁴	ug/L	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. THMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids (HAA)	No	10/20/17 1/2/18 4/9/18 7/2/18 10/1/18	12-29 26.5 ⁴	ug/L	N/A	MCL=60	By-product of drinking water chlorination.
Town Hall							

Table of Contaminants

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
Total Tri-halomethanes (TTHMs)	No	10/2/17 1/2/18 4/9/18 7/2/18 10/1/18	15-57 36.25 ⁴	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 (HAA)	No	10/2/17 1/2/18 4/9/18 7/2/18 10/1/18	8.9-34 21.48 ⁴	ug/L	N/A	60	By-product of drinking water chlorination.

Long Term 2 Enhanced Surface Water Treatment Rule

E. Coli is a bacteria present in varying concentrations in many surface waters and is removed/inactivated through a combination of filtration and disinfection. From October 2017 through September 2018 samples were collected every two weeks as part of a special sampling plan. Samples were collected from pretreated (raw) water from the system's water source. The samples were part of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), whose purpose was to improve control of cryptosporidium in source water. These samples represent *E. Coli* levels in **raw** water and **not** water that has been filtered and treated at our water plant. The results are below.

Containment	Violation (Yes/No)	Dates of Samples	Level Detected Avg. (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Escherichia Coli (E. Coli)	No	Every two weeks	23.92 (0-160)	cfu/100mL	0	Yearly average over 100	Naturally present in the environment

Notes:

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 5/21/18 (0.15 NTU). State regulations require that turbidity must not exceed 1 NTU and that 95% of the turbidity samples collected must measure less than or equal to 0.3 NTU. Five distribution turbidity samples are required at five different locations each week. Turbidity values in the distribution system may not exceed 5 NTU.

2 – The level presented represents the 90th percentile of the 20 sites tested for lead and copper. 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. The action levels for lead and copper were not exceeded in any of the samples collected.

3 - The level presented represents the range of the 20 samples.

4 – The sample water was collected and analyzed each quarter. The level presented is the highest average of the -samples collected.

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.

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.

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).

Million Fibers per liter (MFL): A measure of asbestos in water.

Haloacetic acids (five) (HAA5): means the sum of the concentrations in milligrams per liter of five specific haloacetic acid compounds.

Total Trihalomethane (TTHM): means the sum of the concentration of trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform)

Colony forming unit(cfu): Measurement of a colony of cells

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.7 mg/l. During 2018 monitoring showed fluoride levels in your water were within 0.1 mg/l of the target level for 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

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 below the levels allowed by the state. We are required to present the

following information on lead in drinking water.

LEAD

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. The Village of Dansville 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 it for drinking or cooking. If you are concerned about lead in your drinking 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 2018 our system was in compliance with all applicable State drinking water operating, monitoring and reporting requirements. However, on May 31, 2018, we issued a boil water notice to Dogwood Day Treatment, 311 Main St, due to a service line break.

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 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 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.
- 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 MAINTANENCE

The Department of Public Works began a project on Clay St during the summer of 2018. This project included replacing the water main on Seward St between Clay St and Sophia St. There were multiple valves and hydrants placed on this line. The Village also replaced 5 hydrants in various locations in the Village.

The Village infrastructure was electronically mapped during the year.

There was a new Variable Frequency Drive (VFD) installed in pump house one at the Perkinsville Well Site.

The Department of Public Works upgraded the electric panel and installed underground electric to both well houses.

At the Water Plant, the SCADA system was updated including a new PLC throughout 2018. The cyber security at the plant was also updated during this time.

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 and our way of life. Please call our office (335-5270) if you have questions.