

*Annual Drinking Water Quality Report for 2018  
Hopewell/Canandaigua Water Districts  
4439 Lakeshore Drive  
Canandaigua, New York 14424-8304*

**Report # 1**

## **INTRODUCTION**

To comply with State regulations, Hopewell/Canandaigua Water Districts 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.

## **WATER SYSTEM INFORMATION**

Hopewell/Canandaigua Water Districts is comprised of four (4) water districts: Hopewell Water District #I (Public Water System #3401168), Hopewell Water District #II (PWS #3401182), Canandaigua/Hopewell W.D. (PWS #3411948), and Hopewell Central W.D. (PWS # 3430031). The combined system serves approximately 5000 people through 900 service connections in the towns of Hopewell and Canandaigua.

If you have any questions about this report or concerning your drinking water, please contact **Ken Potter, Water Superintendent, at (585) 394-3960 or the New York State Department of Health at (315) 789-3030**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The meetings are held on the first and third Wednesday of each month at the Hopewell Town Hall, 2716 County Road #47. Board Meetings begin at 7:00 P.M.

## **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 and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

We purchase our water from the City of Canandaigua, which is treated surface water from Canandaigua Lake. The water is disinfected by injection of gaseous chlorine, and sodium hydroxide is added for pH control to reduce corrosion in the distribution system. Carbon can also be added at this point to control taste and odors. **Fluoride** is added before the water enters the distribution system.

## **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. Fluoride is added to your water by the City of Canandaigua before it is delivered to us. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.7 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires the City of Canandaigua to monitor fluoride levels on a daily basis. Canandaigua's average fluoride concentration was 0.84 mg/L. None of the monitoring results showed fluoride at levels that exceeded the 2.2mg/ L Maximum Contaminate Level for fluoride.

## SOURCE WATER ASSESSMENT

New York State completed a source water assessment of our water. This assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa, phosphorus, DBP (disinfection by product) precursors, and pesticide contamination. There is also a moderate density of sanitary wastewater discharges, but the ratings for the individual discharges do not result in elevated susceptibility ratings. However, it appears that the total amount of wastewater discharged to surface water in this assessment area is high to further raise the potential for contamination (particularly for protozoa). There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: hazardous waste sites, chemical bulk storage, landfills, and mines.

Further information on the Source Water Assessment of our community water supply is available on the U.S. Geological Survey (USGS) website at [ny.water.usgs.gov](http://ny.water.usgs.gov).

## 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 Geneva District Office of the New York State Department of Health at (315) 789-3030.

**Table of Detected Contaminants**

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Microbiological Contaminates</b>							
Total Coliform Bacteria 1*	No	2018 monthly	No Positive Samples	N/A	0	MCL -2 Or more positive samples	Naturally present in the environment
Turbidity 2* Combine Filter Effluent	No	2018	0.19 Max 0.02- 0.19	NTU	N/A	TT = 0.3	Soil Run-off
Turbidity Individual Filter	No	2018	99% - < 0.3 N/A	NTU	N/A	TT = 0.3	Soil Run-off
<b>Radiological</b>							
Gross Alpha	No	12/2013	None Detected N/A	pCi/L	0	MCL = 15	Erosion of natural deposits
Radium 226	No	2/2013	None Detected N/A	pCi/L	0	MCL 5	Erosion of natural deposits
Radium 228	No	2/2013	0.4 0.4	pCi/L	0	MCL 5	Erosion of natural deposits

<b>Inorganic Contaminates</b>							
Fluoride * 3	No	2018	0.84 0.58 – 1.15	ppm	N/A	MCL 2.2	Erosion of natural deposits; water additive; discharge from aluminum and fertilizer factories.
Barium	No	2/2018	0.023 N/A	ppm	2	MCL 2	Discharge of drilling wastes, metal refineries; erosion of natural deposits

Inorganic Contaminant	Violation Yes/No	Date of Sample	Level Detected (Maximum Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Nickel	No	2/2018	1.1 N/A	ppb	100	MCL 100	Erosion of natural deposits, discharge from stainless steel factors.
Nitrate	No	2/2018	0.27 N/A	ppm	10	MCL 10	Run off from fertilizer use, leaching from septic tanks, erosion of natural deposits
Chromium	No	2/2018	2.5 N/A	ppb	100	MCL 100	Erosion of natural deposits, discharges from stainless steel factories
Alkalinity	No	2018	117 112 - 122	ppm	N/A	N/A	Naturally present in the environment
Total Organic Carbon	No	2018	2.2 1.3-2.7	ppm	N/A	N/A	Naturally present in the environment
Dissolved Organic Carbon	No	2018	2.2 1.9-2.6	ppm	N/A	N/A	Naturally present in the environment
UV 254	No	2018	0.0254 0.0164-0.0330	cm-1	N/A	N/A	
Specific Ultra-Violet Absorbance	No	2018	1.16 0.82 – 1.46	L/mg-m	2	N/A	

### Lead and Copper

Copper *4	No	9/2017	0.047 0.0061– 0.047	mg/l	N/A	AL 1.3	Corrosion of household plumbing
Lead *4	No	9/2017	2.5 *6 1-2.5	ug/l	N/A	AL 15	Corrosion of household plumbing

### Disinfection By-Products

Total Trihalomethanes	No	2018	59 *5 43 - 72	ppb	N/A	MCL 80	By-products of drinking water chlorination
Total Haloacetic Acids	No	2018	32 *5 27 - 42	ppb	N/A	MCL 60	By-products of drinking water chlorination

#### \*Reference Notes

1 – Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

2 – Turbidity is a measure of the cloudiness of the water, and is monitored as an indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of monthly samples be below 0.3 NTUs.

3 – Fluoride is added to the water supply to help promote strong teeth. The Department of Public Health recommends an optimal fluoride concentration range of 0.8 ppm to 1.2 ppm measured on laboratory's finished water.

4 – The level presented represents the 90<sup>th</sup> 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 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

5 - This level represents the highest locational running annual average calculated from data collected.

6 - During 2018 we collected and analyzed 3 samples for lead. The action level for lead was not exceeded at any of the sites tested.

## 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, 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.

Lead:

As you can see by the table, our system had no violations. 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 as a result of materials used in your home's plumbing. Hopewell/Canandaigua Water Districts 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 (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 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 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 at 585-394-3960.