



Annual Drinking Water Quality Report for 2016

NEWTON FALLS WATER DISTRICT

Town of Clifton

PO Box 684

Cranberry Lake, NY 12927

Public Water Supply ID# NY4404403

INTRODUCTION

To comply with State regulations, the *Newton Falls Water District* 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 proud to report that our system did not violate a maximum contaminate 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.

If you have any questions about this report or concerning your drinking water, please contact Town Supervisor Charles Hooven at (315) 848-2915. 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. Town Board meetings are held at 6:30 pm on the second Wednesday of each month. Meetings alternate between the Community Center in Cranberry Lake and the Town Barn in Newton Falls.

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 system serves approximately 626 people through 100 service connections. Our water source is surface water drawn from the Oswegatchie River in Newton Falls. The water is Filtered and Chemically Disinfected prior to distribution.



The NYS DOH has evaluated our Public Water Supply (PWS'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 untreated drinking water sources to be impacted by 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 dominant considerations for defining natural sensitivity ratings for rivers are their relatively shallow depth and high flow rates and directionality. Microbial contaminant categories are rated high for rivers, because some of the contaminants can travel great distances in flowing water with little die-off or sedimentation. The organic and chemical categories are rated medium because they tend to show some volatilization and inactivation. The phosphorus category is rated low because phosphorus does not generally limit alga growth in low residence time (high flow rate) water bodies such as rivers. This emphasizes the high natural sensitivity of river systems to these contaminants. In these cases, small changes in land cover can result in substantial degradations in water quality.

Recreational uses (swimming, boating, etc.) are stressed by domestic sewage discharged to the Oswegatchie River from community septic tanks serving many homes in the hamlet of Newton Falls. Other homes in the area discharge to tributary streams and other conveyances, which ultimately reach the Oswegatchie River. Potential sources of contamination of this source include: transportation routes, pipelines, landfills, mines, Inactive Hazardous Water Site (IHWS), chemical bulk storage, oil storage facilities, agricultural land, and permitted discharges from wastewater treatment plants.

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 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, is 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 NYS Health Department Office in Canton at (315) 386-1040.



Turbidity

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity ¹	NO	07/16	96.7% ≤ 0.3	NTU	N/A	TT=95% of all samples ≤ 0.3	Soil Runoff.
Turbidity ¹	NO	7/30/16	0.97	NTU	N/A	TT= <1.0 NTU	

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 7/30/16 (0.97 NTU). State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU.

Disinfection Byproducts

Contaminant	Violation Yes/No	Date of Sample	Level Detected Avg (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	NO	2016	67.8 ² (44.6-74.1)	ug/l	N/A	MCL= 80 ug/l Based on a running annual average.	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-HAA5	NO	2016	14.8 ² (2.0-20.0)	ug/l	N/A	MCL= 60ug/l Based on a running annual average.	By-product of drinking water chlorination

² This level represents the highest locational running average calculated from the data collected.



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 Organic Carbon – Raw Water	NO	2016	5.2/8.4 3.8-8.35	Mg/l	NA	TT	Naturally present in the environment.
Total Organic Carbon – Filtered Water	NO	2016	2.3/4.3 0.96-4.3	Mg/l	NA	TT	Naturally present in the environment.

Microbiological

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 Coliform	No	2016	0	N/A	N/A	MCL=2 or more positive samples in 1 month ³	Naturally Present in the environment.

³ A violation occurs at systems collecting 40 or more samples per month when more than 5% of the total coliform samples are positive. A violation occurs at systems collecting less than 40 samples per month when two or more samples are total coliform positive.



Inorganics

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
Nitrate	NO	9/21/16	<0.10	mg/l	10	MCL= 10mg/l	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Fluoride	NO	9/21/16	0.088	mg/l	N/A	MCL= 2.2 mg/l	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Copper	NO	9/27-9/28/2016	0.3 ⁴ .07713- .4908	mg/l	1.3	AL= 1.3 ⁴	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead	NO	9/27-9/28/2016	1.6 ⁵ ND-1.78	ug/l	0	AL=15 ⁵	Corrosion of household plumbing systems
Barium	NO	9/21/16	0.00672	mg/l	2.0	MCL=2.0	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

⁴ The level presented represents the 90th percentile of the 5 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.

⁵ The level presented represents the 90th percentile of the 5 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. The action level was not exceeded at any of the sites tested. 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. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).



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.

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).

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

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.

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 Star Lake Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in household 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 2016, 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.

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. Remember to notify the water department in plenty of time if you need your service turned on or off for the season. You also might consider turning the water valve off inside your home if you leave your home unattended for an extended period of time. Please call our office if you have questions.

For a full size report, please visit the town website "townofcliftonny.org" or stop and pick one up at the Clifton Town Offices.