



## ***Annual Drinking Water Quality Report for 2015***

**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.



**Table of Detected 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
<sup>(1)</sup> <b>Turbidity</b>	YES	Daily	0.01-2.41	NTU	n/a	0.30 NTU	Naturally present in the environment
<sup>(2)</sup> <b>Haloacetic Acid (HAA5's)</b> (mono-,di-, and trichloroacetic acid, and mono- and di-bromoacetic acid)	NO	Quarterly	36 0 - 71	mcg/L	60	60 (MCL)	By-product of drinking water disinfection needed to kill harmful organisms.
<sup>(2)</sup> <b>Trihalomethanes (TTHM's)</b> (chloroform, Bromodichloromethane Dibromochloromethane And bromoform)	NO	Quarterly	70 48 - 83	mcg/L	80	80 (MCL)	By-product of drinking water disinfection needed to kill harmful organisms. TTHM's are formed when source water contains large amounts of organic matter.
<sup>(3)</sup> <b>Copper</b>	NO	9/14/10	0.105 0.023-0.18	mg/L	1.3	1.3 (AL)	Corrosion of household plumbing systems; Erosion of natural deposits. Leaching from wood preservatives.
<b>Alkalinity</b>	NO		6 <5 - 8	mg/L		0-54	
<b>Barium</b>	NO	3/23/15	0.010	mg/L	2.0	2.0 (MCL)	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Nitrate</b>	NO	6/9/15	0.22	mg/L	10	10 (MCL)	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>TOC Raw</b>	NO	Monthly	4.9 3.9 - 6.97	mg/L			Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection byproducts included in THMs and HAA5s. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems or nervous system effects and may lead to an increased risk of getting cancer.
<b>TOC Finished</b>	NO	Monthly	2.4 1.5 - 4.85	mg/L			



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**FootNotes:**

(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 (11/4/15) as was recorded at (2.41 NTU). State regulations require that turbidity must always be below 1.0 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.30 NTU.

(2) - This level represents the annual quarterly average calculated from data collected.

(3) - The level presented represents the 90<sup>th</sup> 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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten samples were collected at your water system and the 90<sup>th</sup> percentile value was the 0.40 mg/l. The action level for copper 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.

**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).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.



## 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?

### Monitoring Violations:

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2015, we had two treatment technique violations where more than 5% of the composite filtered turbidity measurements exceeded the turbidity standard of .30 Nephelometric Turbidity Unit (NTU) for September and October. 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. The turbidity measuring devices have been replaced and we have had no violations since.



## **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](http://townofcliftonny.org)" or stop and pick one up at the Clifton Town Offices.