

**Annual Drinking Water Quality Report for 2012**  
**Village of Saranac Lake Water System**  
**39 Main Street, Saranac Lake, New York**  
**(Public Water Supply ID#1600011)**

**INTRODUCTION**

To comply with State regulations, the Village of Saranac Lake 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 contaminant level or any other water quality standard. Last year, we conducted tests for over 80 contaminants. We detected some of those contaminants, and none of those contaminants were at a level higher than the State allows. 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 **Mr. Jeff Dora, DPW Superintendent, 891-4160**. 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 second and fourth Monday of each month at 5:30 p.m. in the Village Office Building located at 39 Main Street, Saranac Lake.

**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 regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The old source of water for the village is a surface water source McKenzie Pond, which will be disconnected from the system in 2013. The water from McKenzie Pond can flow by gravity or be pumped through a 14-inch diameter transmission main to the treatment plant. The water is disinfected with sodium hypochlorite, treated for corrosion control and pumped into a two million-gallon covered concrete reservoir. In 2012 two new 20" diameter drilled wells were connected to the system, each approximately 150' deep and each capable of producing 3000gpm. The water is pumped to the new well head control building where it is disinfected with chlorine solution. There is a new 1.15 million gallon storage tank. There were no water usage restrictions during 2012.

**FACTS AND FIGURES**

Our water system serves approximately 5,800 individuals through 1900 service connections. The total water produced in 2011 was **362.73** million-gallons with an average of 994,000 gallons per day. In 2012, water customers paid **\$7.09** per 1,000-gallons of water for metered customers and **\$133.72** per quarter for flat-rate customers in a 2 bedroom house.

**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, 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 Saranac Lake District Office of the New York State Health Department at (518) 891-1800.

**Table of Detected Contaminants**

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Turbidity <sup>1</sup>	No	10/23/12	1.37	NTU	n/a	<5 NTU (TT)	Soil Runoff
<b>Radioactive Contaminants</b>							
Gross Alpha	No	2008	0	pCi/L	0	15 (MCL)	Erosion of natural deposits.
Radium 228	No	2008	0	pCi/L	0	5 (MCL)	
Radium 226	No	2008	0.16	pCi/L	0	5 (MCL)	Erosion of natural deposits.
<b>Inorganic Contaminants</b>							
Barium	No	2012	0.0033	mg/l	2	2(MCL)	Erosion of natural deposits
Copper	No	2012	0.32 <sup>2</sup> 0.034-0.41 <sup>3</sup>	mg/L	1.3	1.3 (AL)	Corrosion of household plumbing systems.
Lead	No	2012	.0046 <sup>2</sup> ND-.0092 <sup>3</sup>	mg/L	0	0.015 (AL)	Corrosion of household plumbing systems.
Fluoride	No	2012	0	mg/L	n/a	2.2 (MCL)	Naturally occurring.
Nitrate	No	2012	0.22	mg/L	10	10 (MCL)	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.
<b>Disinfection Byproducts - Stage 1</b>							
Total Trihalomethanes (chloroform, bromoform, bromodichloromethane, dibromochloromethane, and)	No	2012	76.4 <sup>4</sup> 60.7-84.8 <sup>5</sup>	ug/l	n/a	80 (MCL)	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 (mono-, di-, and trichloroacetic acid, and mono- and di-bromoacetic acid)	No	2012	56.85 <sup>4</sup> 41-62.6 <sup>5</sup>	ug/l	n/a	60 (MCL)	By-product of drinking water chlorination.
<b>Disinfection Byproducts - Stage 2</b>							
Total Trihalomethanes	n/a	2009	41.4 – 61.3 Range of 12 samples	ug/l	n/a	80 (MCL)	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	n/a	2009	32.9-66.5 Range of 12 samples	ug/l	n/a	60 (MCL)	By-product of drinking water chlorination.

#### Notes:

- 1 – Turbidity is a measure of the cloudiness of our water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Last year our highest single turbidity measurements for turbidity occurred on 10/23/12 (1.37 NTU). This value is below the turbidity standard (5 NTU) that is assigned to our system.
- 2 – The level presented represents the 90<sup>th</sup> percentile of the 20 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 lead values detected at your water system. In this case, 20 samples were collected at your water system and the 90<sup>th</sup> percentile value was the 18th highest value.
- 3 – The levels presented represent the range of the 20 samples collected. The action level for lead & copper was not exceeded at any site.
- 4 – This level represents the highest running annual average calculated from samples collected on a quarterly basis.
- 5 – The levels presented represent the range of the samples collected on a quarterly basis.

#### 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.

**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).

**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 water quality 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 and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Saranac Lake Village 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 or at <http://www.epa.gov/safewater/lead>.

#### IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

The Village of Saranac Lake was granted avoidance from filtration in 1991. A condition of the avoidance approval was that the water supply meet all water quality standards. In 2007 the NYS Department of Health rescinded Saranac Lake's avoidance approval because the water quality exceeded the maximum contaminant level for Total Haloacetic Acids, a disinfection by-product. The village is currently using the new drilled wells, treatment plant and storage tank and plans to disconnect the McKenzie Pond source from the system in 2013.

#### 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).

#### Source Water Assessment Summary

The NYS Dept. of Health completed a source water assessment for this system based on available information.

Based on the analysis of available information, the McKenzie Pond source does not have an elevated susceptibility to contamination. There are no regulated facilities within this watershed and the corresponding land cover does not pose any substantial risks to the source water quality.

The source water assessment for the drilled wells has rated these wells as having an elevated susceptibility. No significant sources of contamination were identified. The wells draw water from an unconfined aquifer however the overlying soils will provide adequate protection from potential contamination.

Please note that our water supply is disinfected to ensure that the finished water delivered to your home meets the New York State's drinking water standards for microbiological contamination.

The health department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us as noted below.

#### 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 IMPROVEMENTS

In 2012 the Village has continued to repair leaks in the distribution system and reduce wasted water. The Village connected the drilled wells and a new 1.15 million gallon storage tank to the system. There is a SCADA system so that the water system operation can be automatically controlled. The Village plans to disconnect McKenzie Pond from the water system in 2013. The Village is finishing the project to install water meters throughout our water system.

#### CLOSING

Thank you for allowing us to continue to provide you and 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, our way of life and our children's future. Please call if you have questions.