

**Annual Drinking Water Quality Report for 2015**  
**Livingston County Water & Sewer Authority**  
**1997 D'Angelo Drive, Lakeville, New York 14480**  
www.co.livingston.state.ny.us/lcwsa.htm

**Federal ID Numbers**

LCWSA District: NY2501019 Village of Livonia District: NY2501030

**INTRODUCTION**

To comply with State and Federal regulations, the Livingston County Water & Sewer Authority annually issues 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, we conducted over 108 tests bacteriological contamination and only found 4 samples at a level higher than the State allows. These exceedances were found in the Hemlock and Groveland Station service areas. As Water Operators reported at that time, the water in the Groveland Station Service area temporarily exceeded a drinking water standard and the issue was rectified by flushing the system and resampling to assure compliance. The Hemlock service area was not in violation of a 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 Mark Kosakowski, Director of Operations, at (585) 346-3523. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Livingston County Water & Sewer Authority board meetings. The meeting times, dates and locations can be obtained by calling the Authority office at (585) 346-3523 or on our website at <http://ny-livingstoncounty.civicplus.com/index.aspx?NID=553>.

**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 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 that must provide the same protection for public health.

The Livingston County Water & Sewer Authority water supply is obtained from the City of Rochester and is delivered through a connection to the City transmission main located just north of Big Tree Road in Hemlock. This water originates in the Hemlock and Canadice Lakes watersheds and is treated at the City of Rochester's Hemlock Lake Water Treatment Facility located on Rix Hill Road in Hemlock. The water is treated at the Hemlock Lake Plant using coagulation, filtration, disinfection, and fluoridation. In addition, chlorine is added in South Livonia, Lakeville, Conesus, Groveland Station Lower Tank, East Lake Road and Scottsburg to maintain adequate disinfection, and free chlorine residuals throughout the entire distribution system. During 2015, our system did not experience any restriction of our water source.

The New York State Department of Health (NYSDOH) has evaluated the susceptibility of water supplies statewide for potential contamination under the Source Water Assessment Program (SWAP). Though their assessment of the Hemlock/Canadice Lake watershed identified several sources of potential contamination. None were particularly noteworthy. The City of Rochester's ownership was transferred to the NYSDEC and control of a large amount of property surrounding the lakes, coupled with its routine surveillance and testing programs, helps assure on-going protection of this resource. Testing performed to date confirms that contamination from human activity is negligible.

**FACTS AND FIGURES**

The Consolidated water system serves a population of about 7,385 people through 2,954 service connections. The Livonia Village water system serves a population of about 1303 people through 521 service connections. The total water purchased in 2015 was approximately 247,631,000 gallons. The daily average of water pumped into the distribution system is 679,640 gallons per day. Our highest single day was 1,166,000 gallons. The amount of water delivered to customers was 173,277,682 gallons. This leaves an unaccounted for total of 74,353,000 gallons. Unaccounted for water represents 30% of the total amount purchased from the City of Rochester. This water was used to flush hydrants, fight fires and for fire drills, and normal flushing of mains. All other unaccounted for water was a result of, 8 water main breaks, slowed retail meters, un-metered water, and leakage (see also System Improvements). Over 114 retail meters were replaced throughout all service areas, as a result of our meter replacement program. In 2015, most water customers were charged \$3.50 per 1,000 gallons of water with an annual minimum water charge per connection of \$140 per year.

**ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, the Livingston County Water and Sewer Authority routinely tests your drinking water for total coliform bacteria and disinfection by-products (Total Trihalomethanes - TTHM, Haloacetic Acids - HAA). The City of Rochester routinely tests for over 80 inorganic, synthetic organic and volatile organic chemicals, microorganisms, and disinfection by-products regulated by the U. S. Environmental Protection Agency (EPA). The EPA has established maximum allowance standards for many, but not all of these substances. Most substances tested for were not detected. 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, may be 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 Safe Drinking Water Hotline (800-426-4791) or the Livingston County Health Department at (585) 243-7280.

Contaminant	Violation ?	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Total Coliform	No No Yes Yes	4/8/15 9/8/15 9/10/15 9/11/15	1-Positive 1-Positive 1-Positive 1-Positive	N/A	N/A	MCL=2 or more positive samples in 1 month	Naturally present in the environment
E.coli Bacteria	Yes	9/10/15	1-Positive	N/A	N/A	One or more positive samples in 1 month	Naturally present in the environment

Contaminant	Unit Measurement	MCLG	MCL	Average (Range)	Violation ?	Likely Source of Contamination
Barium	mg/L	2000	2000	17	No	Erosion of natural deposits
Nitrate	mg/L	10	10	0.10	No	Fertilizers; erosion of natural deposits; septic tank leachate
Sodium	mg/L	N/A	50	20	No	Fertilizers; erosion of natural deposits; septic tank leachate
Fluoride	mg/L	2.2	2.2	0.69 (0.50-0.97)	No	Water treatment additive to promote dental health
Stage 2 Disinfection Byproducts - LCWSA Consolidated District <sup>3</sup>						
TTHM - Site 1	ug/L	N/A	80	(37-83) <sup>3</sup> 84.18	Yes	Byproduct of drinking water chlorination
TTHM - Site 2				(37-65) <sup>3</sup> 69.45		
HAA - Site 1	ug/L	N/A	60	(6.2-31) <sup>3</sup> 40.15	No	Byproduct of drinking water chlorination
HAA - Site 2				(6.1-24.1) <sup>3</sup> 36.07		
Stage 2 Disinfection Byproducts - Village of Livonia Sites <sup>3</sup>						
TTHM - Site 1	ug/L	N/A	80	(40-73) <sup>3</sup> 67.8	No	Byproduct of drinking water chlorination
HAA - Site 2	ug/L	N/A	60	(11.9-16) <sup>3</sup> 28.7	No	Byproduct of drinking water chlorination

Contaminant	Detection Level Based on 90 <sup>th</sup> Percentile	Unit Measured	AL	Likely Source
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	<b>Sample</b>			
Copper <sup>2</sup>	305.2 (24-860)	ug/L	1300	Corrosion of household plumbing
Lead <sup>2</sup>	2.62 (ND - 5.8)	ug/L	15	Corrosion of household plumbing

<b>Contaminant</b>	<b>Regulatory Limit</b>	<b>Detection Levels</b>	<b>Lowest Monthly Percentage Meeting Limit</b>	<b>Likely Source</b>
Turbidity <sup>1</sup>	TT= (mo.avg <0.3NTU for 95% of samples) (0.04-0.16)	Single Highest Reading (Average)	100% Compliance	Soil Runoff

**Notes:**

- 1 - A violation occurs when two or more samples are total coliform positive or when a total coliform sample is positive for E. coli.
- 2 -Disinfectant By-Products (DBPs) - Average and Range are listed.
- 3 - Stage 2 TTHM and HAA samples were collected quarterly: 2/09/15, 5/11/15, 8/12/15, 11/10/15. This represents the highest running annual quarterly average calculated from data collected. LCWSA Consolidated System Site 1: Groveland Station Upper Tank, Site 2: 6170 East Lake Rd. Village of Livonia Site 1: 55 Washington St, Site 2: Livonia Fire Department.
- 4 - Lead and Copper (collected between 6/11-7/20/2015) - 90% of samples must be less than the Action Level (AL) 90th percentile.
- 5 - Treatment Requirements - 95% of samples each month must be less than 0.3 NTU. Range and lowest monthly percentage are listed. Turbidity is a measure of water clarity and is used to gauge filtration process.

**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.

**No Standard (NS):** No Standard for this particular contaminant

**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).

**TTHM:** Total Trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane and bromoform)

**HAA:** Haloacetic Acids (mono-,di- and trichloroacetic acid, and mono- and di-bromoacetic acid)

**IS OUR WATER SYSTEM MEETING ALL RULES THAT GOVERN OPERATIONS?**

In 2015 the table shows that the consolidated water system did have a total Coliform positive sample in the Hemlock service area in April. The verification sample was taken and the samples were negative for total coliform. Also in September we had three positive total coliform samples along with one positive e-coli sample in the Groveland Station service area. On September 12, 2015 the Groveland Station service area was put on a boil water advisory and was lifted on September 16, 2015, as the samples for two consecutive days were negative for total coliform and e-coli. LCWSA was in violation of meeting the TTHM Annual Running Average in the first quarter of 2015. The LCWSA published notices as required by the New York State Department of Health, to notify the public of the violations. In the 2013 Annual Water quality Report LCWSA reported on a violation regarding the 4<sup>th</sup> quarter DBP samples were not taken within the 90 day sampling requirements. This violation actually occurred in the 3<sup>rd</sup> quarter for the consolidated and Village of Livonia service areas. The LCWSA and the Livingston County Department of Health will continue to closely monitor the water system to ensure that the water quality is acceptable for all individuals being served. If you have any further questions, you may contact the LCWSA at (585) 346-3523.

We are required to provide the following information regarding 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. The LCWSA, along with The City of Rochester Water Treatment Plant, 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 [www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water](http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water).

### **INFORMATION ON FLUORIDE**

The Hemlock Water Treatment Plant is one of the many drinking water plants 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 an optimal level of 0.7 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the NYDOH requires that the City of Rochester monitor fluoride levels on a daily basis. According to the above table, none of the monitoring results showed fluoride at levels that approach the 2.2 mg/L MCL for fluoride.

### **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).

### **INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS**

#### **Spanish**

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

### **HOW CAN I SAVE MONEY ON WATER?**

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.
- ◆ 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.

For more information, log on to [www.dec.ny.gov/lands/5009.html](http://www.dec.ny.gov/lands/5009.html)

### **SYSTEM IMPROVEMENTS**

The Livingston County Water & Sewer Authority operates & maintains the Village of Livonia district via an agreement with the Village of Livonia. The remainder of the service areas are leased/owned and operated by the LCWSA. Wholesale water is supplied to the Town of Geneseo and the Village of Geneseo. The following improvements were completed in 2015:

- Flushing was conducted in Hemlock, South Livonia, East Lake Road, Groveland Station and Conesus;

- All automatic valves were service by Ross Valves - 2 valves were rebuilt;
- Chlorine analyzers are maintained on a semi-annual basis by HACH Instruments;
- The Lakeville and Sliker Hill water tanks were inspected - generally tanks are in good shape;
- Leak detection was performed in South Livonia, East Lake Road, Conesus and Lakeville Service areas;
- Following leak detection, at least six major leaks were discovered and repaired.
- Backflow Prevention program implemented for LCWSA customers.

The following projects are in-progress and/or scheduled for completion in 2016:

- Leak detection will be on-going;
- Hydrants and Valve maintenance will take place in all service areas;
- Curb box replacements will be take place in all service areas;
- Water main extension upgrade planned in Conesus and Livonia.

### **CLOSING**

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, additional improvements may be necessary in the future. We will keep you informed of any significant changes in services. Please call our office at (585) 346-3523 if you have any questions.