

Annual Drinking Water Quality Report for 2018
Long Lake Water District #2, Public Water Supply ID NY2000129
PO Box 307, Long Lake NY 12847

To comply with State and Federal regulations, Water District #2 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 your tap water met all State drinking water health standards. 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 Water Superintendent Keith Austin at (518) 624-2199. We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. They are held the last Wednesday of every month at 7:30 PM unless otherwise advertised.

One question that comes up periodically can be answered by clarifying the fact that the Town of Long Lake is responsible for two water districts. One is in Long Lake (Water District #2) and the other is in Raquette Lake (Water District #1). The two districts are in no way connected: they are located in geographically unique areas and serve a totally different customer base.

Where does our water come from?

In general, all 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 or inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and even 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 contaminants in water provided by public water systems. The New York State Health Department's ("DOH") 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 over 800 permanent residents and a seasonal population of about 2,000 persons through about 813 service connections. The Long Lake Water District #2 now has 3 sources of drinking water. We take water from *Big Sandy Creek* and at times from *Little Sandy Creek*. This water is filtered by diatomaceous earth, treated with chlorine for disinfection and an orthophosphate corrosion control additive prior to distribution. There are two well fields; the Bissell wells and the Stanton Hill wells. The 2 Bissell wells are both 10" diameter wells, 31' deep and are each capable of pumping 200gpm – the wells are intended to be used one at a time. The wells are disinfected by chlorinating with calcium hypochlorite before entering the distribution system. Stanton Well #1 is 140' deep, Stanton Well #2 is 158' deep and both wells produce 85 gpm. The wells are disinfected with calcium hypochlorite. The disinfected water is pumped directly into the storage tank.

The NYS Department of Health completed a source water assessment for this system based on available

information. The assessment area for the Big and Little Sandy Creek contains no discrete potential contamination sources, and the land cover contaminant prevalence ratings are low. However, the high mobility of microbial contaminants in surface reservoirs results in this drinking water intake having medium-high susceptibility ratings for protozoa and enteric bacteria and viruses. Furthermore, reservoirs can be highly susceptible to water quality problems caused by phosphorus additions to the reservoir.

The source water assessment has rated the drilled wells as having an elevated susceptibility. No significant sources of contamination were identified. The well draws water from an unconfined aquifer and overlying soils are not known to provide adequate protection from potential contamination. Please note that our water supply is disinfected with chlorine and that the finished water delivered to your home meets the New York State's drinking water standards for microbiological contamination.

Are there contaminants in our drinking water?

As DOH regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The table below depicts which compounds were detected. The DOH allows us to test for some contaminants less than once per year because concentrations of these do not change frequently. Therefore, some of our data, though representative, is more than one year old. Turbidity and chlorine residual levels are monitored 24 hours a day.

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 New York State Health Department (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
Microbiological Contaminants – Filter Plant							
Turbidity ¹	No	7/13/2018	1.01	NTU	n/a	TT=<5NTU	Soil Runoff
Turbidity ¹	No	2018	99% < 1.0	NTU	n/a	TT=95%of samples <1.0NTU	Soil Runoff
Radioactive Contaminants							
Radium 226 & 228	No	2014	0.25	PCI/L	0	5 (MCL)	Erosion of natural deposits
Gross Alpha	No	2014	0	pCi/L	0	15 (MCL)	Erosion of natural deposits.
Gross Beta	No	2014	0	pCi/L	0	50 (MCL)	Decay of natural deposits and man-made emissions.
Inorganic Contaminants							
Barium	No	2016	0.0072	mg/L	2	2(MCL)	Erosion of natural deposits
Nitrate (water plant)	No	2018	0.30	mg/L	10	10 (MCL)	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrate (Stanton Well)	No	2018	0.67				
Nitrate (Bissell Well)	No	2018	0.85				
Fluoride	No	2017	0	mg/l	2.2	n/a	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Copper	No	2018	0.74 ² 0.067-1.6 ³	mg/L	1.3	1.3 (AL)	Corrosion of household plumbing systems.
Lead	No	2018	0.0044 ² ND-0.0092 ³	mg/L	0	0.015 (AL)	Corrosion of household plumbing systems.
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	No	2018	13.9 ⁴ 2.2 – 17 ⁵	ug/L	n/a	80 (MCL)	By-products of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains measurable amounts of organic matter.
Haloacetic Acids (HAA5s)	No	2018	13.1 ⁴ 1.3 – 20 ⁵	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 the effectiveness of our filtration system. Our single highest measurement for the year occurred on 7/13/2018 (1.01 NTU). State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU. 99% of the samples collected last year were below 1.0 NTU.

2 – We collected 2 rounds of 20 samples in 2017. The level presented represents the highest 90th 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 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

3 – The level presented represents a range of the lead and copper samples collected. The action level for lead was exceeded at one location during each round of samples. The action level for copper was exceeded at one location during the first round of sampling, the action level for copper was exceeded at three locations during the second round of sampling.

4 – The value represents the highest Locational Running Annual Average of the quarterly samples collected.

5 – The values represent the range of the quarterly samples collected.

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).

Pico curies per liter (pCi/L) – Pico curies per liter is a measure of the radioactivity in water

What does this information mean?

As you can see from the table, our system had no violations during 2018. During 2017, we exceeded the action level for copper. Since that time, we have adjusted our corrosion control chemicals, and the copper levels in the system are now below the action level. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

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. The Town of Long Lake 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?

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 2017, we did not complete all monitoring or testing for inorganic chemicals from the filter plant and therefore cannot be sure of the quality of your drinking water during that time.

Do I need to take special precautions?

Health Risks:

Although our drinking water met or exceeded DOH and federal regulations it should be noted that some people may be more vulnerable to contaminants 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 about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lesson the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline.

"Lake-Lines"

Water District #2 has a lake-line system which serves many homes. The Town will, *at some unknown point in the future*, be required by the DOH to phase out the use of lake lines. **If you know that a lake-line has been broken - please let us know immediately.** It can save water personnel countless hours of searching for the break and return water service more quickly to all who are affected. In addition, if your home or camp is served by one of these lines and you lose water pressure at your home or camp, you must assume there is a break in the line and **prepare your drinking water by boiling it for one minute at a rolling boil before consuming it.** The water department will notify you once the line is safe to drink from.

Why save water and how to avoid wasting it?

While it may seem counterintuitive to economize water in an area where lakes, ponds and streams abound, there is still a need to protect and conserve this resource. Climate changes can have a significant effect on the supply and in fact, in the recent past, some scientific data has indicated that the Adirondacks have experienced less annual precipitation. In periods of drought, our water system has struggled to meet demands during times of peak usage. Conserving water also preserves a vital resource which our lives depend upon: since it is not endless, it should not be abused.

But there are more reasons why it is important to conserve water. Saving water saves costs associated with providing potable water. Saving water reduces energy consumption and the need to construct costly pumping systems. 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's not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle: load it to capacity before you run it.
- Turn off the tap when brushing your teeth.
- Take shorter showers.
- When washing dishes or pots & pans by hand, only turn the tap on when rinsing them.
- Check every faucet in your home for leaks and repair them.
- Check your toilets for leaks: put a few drops of food coloring in the tank and watch 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!
- Install water saving devices in your home. For more details, talk to the Water Department.
- Report possible water main leaks to the Water Department.
- Correct conditions in your water service that will prevent the need to run "bleeders" in the winter. (For financial help or incentives to make corrections, read further.)
- Commercial or residential water users whose properties are next to a lake or a pond could rig up a system to pump water from the lake or pond for lawn or garden watering.
- Water gardens, flowers, and lawns smartly: use drip lines or soaker hoses when possible to target plants.
- Water plants early morning or late in the day (not during the 'heat' of the day).
- For more information and tips about how to save water, visit www.epa.gov/watersense.

DID YOU KNOW?

A dripping faucet could waste from 1000 to 6000 gallons in a year? A continuous leak from a hole sized as follows, at 60 psi water pressure, would, over a three month period, waste water in the following amounts:

Diameter of stream	Number of Gallons
1/4"	1,181,500
3/16"	666,000
1/8"	296,000
1/16"	74,000

A word about “bleeders”. It is the practice of a number of home owners to run a hose all winter to prevent the freezing of the home’s water lines. In most cases, this practice is the result of a faulty design in the plumbing and it can be corrected. Be advised that at in the future, *(date unknown at this time)*, the Town will be forced (by regulatory oversight agencies) to adopt a law against running bleeders. Those of you who practice this should begin thinking about and planning how to fix your problem. Remember that the water flowing out of your hose adds cost to the entire District; using the diameter example above, you can calculate how many gallons you are “bleeding”. FYI, there are funds available through the Hamilton County “Home Improvement Program”: some homeowners may qualify for this assistance to remedy a water line freezing problem. Call Avalon Associates, Inc. at (518)798-0777 if you want to pursue this.

Closing

Thank you for allowing us to continue to provide your family with water. The Long Lake Water Department works diligently to provide top quality water to every tap. We ask that all our customers do their part in protecting our water sources: this means not only from pollution, but from vandalism or from acts of terrorism. Our water system is at the heart of our community, our way of life and our children’s future.

Sincerely, Keith Austin and Josh Lewis