

Annual Drinking Water Quality Report for 2021
Sandy Creek/Lacona JWW & Sandy Creek Water District #2
P.O. Box 240, Sandy Creek, NY 13145
Public Water Supply ID # 3704365 & 3730203

INTRODUCTION

To comply with State and Federal regulations, the villages of Sandy Creek and Lacona will be issuing an annual report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water awareness and the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality statement.

If you have any questions about this report or concerning your drinking water, please contact Jill Mattison, Clerk/Treasurer for the villages of Sandy Creek and Lacona at (315) 387-5781. We want you to be informed about your drinking water, and we will be available to discuss any drinking water issues in person. If you want to learn more, please attend any of our regularly scheduled monthly meetings. Please call your village office for the exact time and location

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 New York State Department of Health (NYS DOH) and the Environmental Protection Agency (EPA) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The NYS DOH and the Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

FACTS AND FIGURES:

Our water system serves approximately 1500 people which includes 652 service connections. This system population includes customers within the village limits of Sandy Creek, Lacona and outside service connections in the Town of Sandy Creek. The JWW has two separate sources or well fields. The Cable Trail well field consists of one drilled and three dug wells and the Hanson well field consists of two drilled wells. Water from the Hanson wells is also filtered with greensand media to remove iron and manganese. The well water is pumped into a 300,000-gallon water tower storage tank. The JWW has an average daily production of 110,500 gallons. The water is disinfected with liquid sodium hypochlorite (chlorine) prior to distribution.

SOURCE WATER ASSESSMENT:

The NYSDOH has completed a source water assessment for this system. Possible and actual threats to this drinking water source were evaluated by reviewing limited existing mapped data and available information from past sanitary surveys. The state source water assessment provides a susceptibility rating based on the potential risk posed by each possible source of contamination and how easily contaminants could move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water. It does not mean that the water delivered to consumers or will become contaminated. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected. The source water assessment was completed to provide owners and operators with additional information to help them protect your source waters into the future.

As mentioned above, our water is derived from four drilled wells that draw from an unconfined aquifer with an unknown hydraulic conductivity. The source water assessment rated these wells as having a high susceptibility rating for viruses, protozoa, bacteria, and nitrates due to the location of nearby septic systems and land use activities. They were also assigned a medium-high risk rating for petroleum products, halogenated solvents, pesticides, metals, and other industrial organics due to the unconfined aquifer. No other significant sources of possible contamination were identified.

Please note that the finished water delivered into your home meets the New York State's drinking water standards.

County and State Health Departments will use this risk assessment information to direct future source water protection activities. These may include water quality monitoring, wellhead protection, resource management, planning, and education programs. A copy of the assessment can be obtained by contacting us, as noted below.

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, 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, are 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 Oswego County Health Department at (315) 349-3557.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL 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.

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 2021, our system was in compliance with applicable State monitoring and reporting requirements. However, our system has not been able to operate the greensand filtration plant and the Hanson wells since December 2021 because of water operator staffing issues. The Hanson wells serve as the required backup water supply the system. As a result of this issue, the health department issued a violation to the system for not having well sources sufficient to meet the maximum daily demand with the largest well out of service.

DO I NEED TO TAKE PRECAUTIONS? IS OUR WATER SAFE FOR EVERYONE?

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). Please note that testing of the water at this system has shown that this water is suitable for drinking water purposes, and contains very low amounts of contaminants and should not pose any health risks.

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.

French:

Ce rapport contient des informations importantes sur votre eau potable. Traduisez le ou parlez en avec quelqu'un qui le comprend bien.

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.

CLOSING

Thank you for allowing us to continue providing 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 to address improvements. We ask that all our customers help us protect our water sources, which are the heart of our community.

Table Of Detected Compounds

Contaminant	Violation (Yes/No)	Date of Sample	Detected (Avg/Max Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Inorganic Contaminates							
Barium Original Well	No	8/7/2019	0.65 mg/L	ppm	2 mg/L	2mg/L	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Barium Hansen Well	No	6/14/2016	0.02 mg/L	ppm	2 mg/L	2mg/L	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chloride Hansen Wells	No	8/19/2019	6.79 mg/L	ppm	N/A	250mg/L	Naturally occurring or indicative of road salt.
Chloride Original Wells	No	8/19/2019	6.35	mg/L	N/A	250mg/L	Naturally occurring or indicative of road salt.
Copper* 90th percentile	No	9/9/2017	74.4 (1.0 - 99.8)	ug/l	1,300	AL = 1300 ug/l	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Manganese Hanson Well	No	10/16/19	2 ug/L	ppb	N/A	300ug/L	Naturally Occurring
Nitrate (As Nitrogen) Hansen Well	No	8/7/2019	0.65 mg/L	ppm	10 mg/L	10 mg/L	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate (As Nitrogen) Original Well	No	8/10/2018	0.63 mg/L	ppm	10 mg/L	10 mg/L	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium Hansen Well	No	8/19/2019	4.04 mg/L	ppm	N/A	2 mg/L ***	Naturally occurring, road salt, water softener treatment, animal waste.
Sodium Original Well	No	8/19/2019	4.54 mg/L	ppm	N/A	2 mg/L ***	Naturally occurring, road salt, water softener treatment, animal waste.
Sulfate Original Well	No	8/19/2019	5.15 mg/L	ppm	N/A	250 mg/l	Naturally Occurring
Sulfate Hansen Wells	No	8/19/2019	3.2 mg/L	ppm	N/A	250 mg/l	Naturally Occurring
Zinc Original Well	No	8/19/2019	12 ug/L	ppb	N/A	5,000 ug/l	Naturally occurring; Mining waste
Zinc Hansen Well	No	6/14/2016	10 ug/L	ppb	N/A	5,000 ug/l	Naturally occurring; Mining waste

Table Of Detected Compounds (Cont.)

Contaminant	Violation (Yes/No)	Date of Sample	Detected (Avg/Max Range)	Unit Measurement	MCLG	Limit (MCL, TT, or AL)	Likely Source of Contamination
Disinfection By-Products							
Total Trihalo-methanes (TTHM)	No	8/19/2019	12.3 ug/L	ppb	N/A	80 ug/L	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	8/19/2019	7.7 ug/L	ppb	N/A	60 ug/L	By-product of drinking water disinfection
Radioactive Contaminates							
Combined Radium 226 & 228 Original Well	No	12/10/2015	0	pCi/L	0 pCi/L	5 pCi/L	Erosion of natural deposits
Combined Radium 226 & 228 Hansen Well	No	2014 & 2015	0.26 (0-1.04)	pCi/L	0 pCi/L	5 pCi/L	Erosion of natural deposits
Gross Alpha Original Well	No	12/10/2015	0.203	pCi/L	0 pCi/L	15 pCi/L	Erosion of natural deposits
Gross Alpha Hansen Well	No	2014 & 2015	0.838 (0.51-1.19)	pCi/L	0 pCi/L	15 pCi/L	Erosion of natural deposits
Gross Beta Original Well	No	12/10/2015	0.694	pCi/L	0 pCi/L	50** pCi/L	Decay of natural deposits and man-made emissions
Gross Beta Hansen Well	No	1/14/2015	2.49	pCi/L	0 pCi/L	50** pCi/L	Decay of natural deposits and man-made emissions
Notes:							
* - The level presented represents the 90th percentile of the 10 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. In this case, ten samples were collected at your water system and the 90th percentile value was the 9th highest value. The action level for copper was not exceeded at any of the sites tested.							
** - The State considers 50 pCi/l to be the level of concern for beta particles.							
*** - Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets.							
DEFINITIONS:							
Action Level – The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.							
Maximum Contaminant Level – The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.							
Maximum Contaminant Level Goal – The “Goal” (MCLG) is 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.							
Non-Detects (ND or <number value) – Laboratory analysis indicates that the tested compound is not present in the sample.							
Parts per million (ppm) or Milligrams per liter (mg/L) – Corresponds to one part of liquid in one million parts of liquid (parts per million – ppm). Or one part per million corresponds to one minute in two years or a single penny in \$10,000.							
Parts per billion (ppb) or Micrograms per liter (ug/L) – Corresponds to one part of liquid in one billion parts of liquid (parts per billion – ppb). Or one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.							
Picocuries per liter (pCi/L) – A measure of radioactivity in water.							