

**Sharon Sewer and Water Commission
Town Hall – 63 Main Street
PO Box 385
Sharon, CT 06069**

Consumer Confidence Report for 2020

The drinking water that we supplied you during the past year met, and continues to meet, all state and federal standards for Safe Drinking Water. We are pleased to formally report this to you, and to provide you the following information documenting the quality of the water for the year beginning January 1, 2020.

Why are we sending you this report?

We are obligated to do this each year now, by state and federal regulations. In 1974 congress passed the Safe Drinking Water Act, and gave the U.S. Environmental Protection Agency (EPA) the job of making rules – National Primary Drinking Water Regulations (NPDWR) - to ensure that drinking water in the U.S. is safe. In 1996, Congress amended the Act requiring drinking-water systems to give consumers important information about their water, including where it comes from, what is in the water, and how that water complies with federal standards. This report is compiled in accordance with EPA's Code of Federal Regulations.

What if you have questions about your water or your water system?

You are welcome to call VRI Environmental Services at 860-364-0457 or the Sharon Sewer and Water Commission office at 364-8009. You can also reach us electronically at sharonswc@sbcglobal.net or by fax at 860-364-0760. Please take note that we have monthly Commission meetings in Town Hall. Meeting dates are posted in the Town Clerk's office. The meetings are normally at 7:00 pm on the second Thursday of each month, these meetings are open to the public, and you are welcome to attend.

Where does the water come from that we supply to you?

The majority of our "raw" water is collected in the Calkinstown Reservoir from a "diversion" of a small-unnamed tributary to Beardsley Pond Brook. During dry periods water is pumped from the Beardsley Reservoir to augment this source. Both of these sources are considered "surface water" and must go through a filtration/treatment process in order to meet the safe drinking water requirements.

The State of Connecticut Department of Public Health (DPH) has recently completed an assessment of our drinking water sources. The completed assessment report is available for access on the Drinking Water Division's web site. This site can be found at www.dph.state.ct.us/BRS/Water/DWD.htm.

What do we do to protect your drinking water?

Preventing harmful pollutants from entering the two reservoirs is very important to us. The "watersheds" for these two sources are inspected regularly. Plans for new land use projects are reviewed for possible impact on water quality. When pollution problems are found, we work with property owners and state and local agencies to correct them. Connecticut has some of the toughest laws and regulations in the United States, to help utilities protect public drinking water supplies.

How can you help?

You will note blue signs on Sharon roads, warning where the watersheds begin and end. Residents in these areas can help protect your drinking water supplies by ensuring that septic systems are working properly, being cautious and wise in using chemicals such as pesticides, and properly disposing of all waste chemicals and used automobile products. Do NOT simply dump them on the ground. Additionally, report chemical spills, illegal dumping, or any other activities you suspect are polluting, to the CT DEP on their 24-hour hotline at 1-860-424-3339.

Why must we treat your water?

Drinking water, including bottled water, may reasonably be expected to contain some contaminants, in very small amounts. The presence of very low levels of contaminants does not mean 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 1-800-426-4791.

Water from your reservoirs is piped into the Dr. Malcolm Brown Water Filtration Plant where we use multiple processes to treat the water. The first stage of treatment is the addition of a coagulating chemical to help make the size of particles in the water larger, so they can be removed in the two stage filters. Filtration is necessary to reduce turbidity (a measure of cloudiness in the water), and to remove and inactivate microorganisms. After filtration, sodium hypochlorite (chlorine) is added to the finished (post-filtered) water to assure that remaining microorganisms are destroyed, and to also provide a protective barrier to formation of bacteria in the pipes that serve the town.

What contaminants might be in water?

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surfaces or through the ground, it dissolves naturally occurring minerals and in some cases radioactive material. It can also pick up substances resulting from the presence of animals or human activity.

Contaminants that might be present in raw or source water before it is treated are broken down into several classifications:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from storm water runoff, wastewater discharges, oil and gas production, mining, or farming.
- Herbicides and pesticides, which may come from a variety of sources, such as agricultural and residential, uses.
- Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can, also, come from gas stations, storm water runoff, and septic systems.

Are there contaminants in your water?

After the mention of all the possible dangers that can be found in one's water, we are very pleased to inform you that Sharon's water met all State and Federal drinking water standards last year.

However, even with the best treatment, it is not possible to remove all contaminants. Earth and rock act as natural filters to remove many of these contaminants. The EPA sets limits on the amounts of a contaminant that can be in drinking water. Our operators from United Water test your water on a daily basis in our lab at the filtration plant. In addition, many samples are sent to outside state approved laboratories for very extensive testing. In 2019, we performed testing to assure consistency of treatment. This testing includes continuous monitoring of turbidity and chlorine residual, daily tests of pH and color, and monthly tests for coliform bacteria, of which the latter are designed to show the presence of microorganisms that could cause illness.

In November 2013 Sharon began monitoring to comply with the current stage of Stage 2 Enhanced Surface Water Treatment Rule (LT2). This regulation built upon earlier rules, strengthens protection against microbial contaminants, and at the same time, reduces potential health risks of byproducts (DBPs) associated with the chlorine disinfection process. The most notable changes involve separate monitoring sites for DBPs, as well as revised calculations to determine compliance.

Is Sharon water safe for everyone?

Some people may be more vulnerable to drinking water contaminants than the general population. Immuno-compromised persons, such as people 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/Centers for Disease Control guidelines on appropriate means to lesson the risk of infection by Cryptosporidium and other microbial contaminants are available from their Safe Drinking Water Hotline 1-800-426-4791.

INFORMATION ON LT2 MICROBIAL MONITORING

As the first (of two) major provisions of LT2, Escherichia Coliform (E-Coli) levels were monitored in each of the reservoirs on a by-weekly basis for one year from 10/1/2008 through 9/30/2009 to determine treatment requirements. E-Coli is naturally occurring in most bodies of surface water and this initial evaluation concluded that current treatment was sufficient to meet the microbial protection component of this rule.

What is the status of Disinfection by-Products, and current EPA regulations?

Disinfection by-Products (DBPs) are chemicals that are formed during the disinfection process when naturally occurring organic matter reacts with the chlorine that we add to the water to eliminate bacteria and other microorganisms. Currently there are limits on two types of DBPs known as Trihalomethanes and Haloacetic Acids. Treatment changes in late 2012 brought a significant reduction in DBP levels, and levels continue to fall through 2020.

The EPA limit for Total Trihalomethanes is 80 parts per billion (ppb), and the limit for Haloacetic Acids is 60 ppb, based on a running annual average. Compliance is calculated on a quarterly basis. The highest quarterly result at the highest site in 2020 was 83.10ppb for Total Trihalomethanes and 55.8ppb for Haloacetic Acids. The system is in compliance with the limits for both parameters with the year-end averages of 50.73 and 34.43 ppb respectively.

What is the latest information on Lead and Copper?

Information on Lead

10 sites were sampled for lead in 2020, and the results were well below the Action Level (the level that requires treatment). Sampling has been reduced to once every three years and will be sampled again in 2023. The major source of lead in drinking water is the corrosion of household plumbing systems, or the erosion of natural deposits.

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. Sharon Water is responsible for providing high quality drinking water, but can not 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 Water Drinking Water hotline or at <http://www.epa.gov/safewater/lead>.

Information on Copper

10 sites were sampled for copper in 2020, and the results were well below the Action Level (the level that requires treatment). Sampling has been reduced to once every three years and will be sampled again in 2023. The major source of copper in drinking water is the corrosion of household plumbing systems; erosion of natural deposits and leaching from wood preservatives.

Copper is an essential nutrient, but some people drinking water in excess of the action level over a relatively short period 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.

Why Save Water, and How to Avoid Wasting It?

- ◆ 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.

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.

Definitions of Terms:

The final page of this report contains a summary of regulated contaminants that were detected in 2020 water quality monitoring. Definitions for the scientific terms that are used are listed below.

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).

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion - ppq).

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

Summary of Water Quality for the Calander Year 2020

Substance	MCLG	MCL	Compliance	Average	Range
Bacteriological					
Total Coliform	0	routine and resample test positive***	yes	0	0-0
Inorganic Compounds					
Barium	2ppm	2ppm	yes	0.037	0.037**
Chloride	N/A	250ppm	yes	36	36**
Nitrate	10ppm	10ppm	yes	0.09	0.09**
Sodium	N/A	N/A	yes	16.2	16.2**
Sulfate	N/A	250	yes	12.2	12.2**
Copper*	1.3ppm	AL=1.3ppm	yes	0.154	0.032 - 0.765
Lead*	15ppb	AL=15ppb	yes	0.0019	<0.001 - 0.0079
Microbials					
Turbidity	N/A	TT= 5ntu max	yes	0.31	<0.20 - 0.44
Volatiles					
Bromodichloromethane	N/A	N/A		9	
Chloroform	N/A	N/A		19	
Dibromochloromethane	N/A	N/A		2.5	
Organic Compounds					
Total Haloacetic Acids	0	60ppb Annual Average	yes	34.43	14.9 - 55.8
Total Trihalomethanes	0	80ppb Annual Average	yes	50.73	26.50 - 83.10
Physical Characteristics					
Color	N/A	15cu	yes	6.66	<1 - 10
Odor	N/A	2units	yes	2.2	<1 - 4
pH	N/A	6.4 - 10.0 units	yes	7.95	7.40 - 8.16

* Lead and Copper are reported as the 90th percentile.

** There is no range of samples only one sample was taken per year.