

A close-up photograph of water being poured from a glass pitcher into a clear glass. The water is in motion, creating ripples and bubbles. The background is a wooden surface.

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2018



Presented By
**The Torrington
Water Company**

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Thank you,

Susan M. Suhanovsky

President



Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process 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. Here are a few tips:

- 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 an invisible toilet leak. 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.

Important Health Information

Sources of lead in drinking water include corrosion of household plumbing systems and erosion of natural deposits. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Sources of copper in drinking water include corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives. 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.



Source Water Assessment

A water assessment of the Torrington Water Company was completed by the Department of Public Health, Drinking Water Section, in 2002. The assessment found that this public drinking water source has a low susceptibility to potential sources of contamination. The assessment report can be found on the Department of Public Health's website: <https://www.dir.ct.gov/dph/Water/SWAP/Community/CT1430011.pdf>.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Fred Rogers, Operations Manager, at (860) 489-4149. Please visit our website at www.torringtonwater.com for more information about the Torrington Water Company.

Where Does My Water Come From?

The water for Torrington and the surrounding towns we serve comes from two primary reservoirs. The Torrington Water Filtration Plant draws water from Reuben Hart Reservoir, located in Torrington, which is supplemented by North Pond, located in Norfolk.

This source has been the primary source of water for Torrington since 1930. Allen Dam, located in Torrington, is an integral part of our reservoir system. It is supplemented by Whist Pond, located in Goshen. It is primarily used during drought conditions or emergencies.

Drinking water travels to your home via a 169-mile network of water mains, five booster pumping stations, and eight distribution system storage tanks. We produced a total of 894 million gallons of water in 2018 and delivered approximately 2.4 million gallons per day to our customers.

Testing for *Cryptosporidium*

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100-percent removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

We tested monthly for 24 months. Our results indicate that we are in the lowest category and require no additional monitoring at this time.





BY THE NUMBERS

The number of Olympic-sized swimming pools it would take to fill up all of Earth's water. **800 TRILLION**

1¢ The average cost for about 5 gallons of water supplied to a home in the U.S.

The amount of Earth's water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers. **99%**

50 GALLONS The average daily number of gallons of total home water use for each person in the U.S.

The amount of Earth's surface that's covered by water. **71%**

330 MILLION The amount of water on Earth in cubic miles.

The amount of Earth's water that is available for all of humanity's needs. **1%**

75% The amount of the human brain that contains water.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.



Source Water Protection

The Torrington Water Company's commitment to providing the highest-quality water is evidenced by the efforts we take to protect our reservoirs from contamination. We own over 70 percent of our total watershed and maintain it in a forested state. We are vigilant in monitoring activities on those lands. There are no industrial or commercial activities on the watershed that could lead to chemical contamination of our supply.

Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source is important. Here are some things that you can do to help make sure that your water supply is protected:

- Pump and inspect your septic systems regularly.
- Use chemicals such as pesticides and cleaning products wisely.
- Dispose of waste chemicals and used motor oil properly. That is, don't pour chemicals on the ground or down the sink drain, toilet, or storm drain.
- Report illegal dumping, chemical spills, or other polluting activities to CT DEEP's 24-hour hotline at (860) 424-3338, Torrington Water at (860) 489-4149, or your local police.

Test Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Our public water system recently violated drinking water reporting requirements. As a supplier of public drinking water, we are required to monitor the water quality of our water supply to insure that it meets the current drinking water standards. Failure to report results of such monitoring to the State Department of Public Health Drinking Water Section constitutes a violation. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

During the first two weeks of February, a chart recorder for one of our four water filtration units malfunctioned. While out of service, the filter's performance was monitored by an electronic analyzer, and samples were taken daily. However, because of the recording device failure, this is considered a monitoring violation, and public notification is required. The recording device has since been replaced, and at no time did this pose a threat to public health and safety. If you have any questions please contact Fred Rogers, Operations Manager at 860 489-4149 or f.rogers@torringtonwater.com.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2016	15	0	0.164	NA	No	Erosion of natural deposits
Barium (ppm)	2018	2	2	0.0088	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Combined Radium (pCi/L)	2016	5	0	0.805	NA	No	Erosion of natural deposits
Haloacetic Acids [HAAs] (ppb)	2018	60	NA	30.8	15–32	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	51	27–51	No	By-product of drinking water disinfection
Turbidity ¹ (NTU)	2018	TT	NA	0.12	0.057–0.12	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2018	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2017	1.3	1.3	0.09	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2017	15	0	<1.0	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2018	200	NA	36.5	10.2–36.5	No	Erosion of natural deposits; Residual from some surface water treatment processes
Chloride (ppm)	2018	250	NA	8.30	NA	No	Runoff/leaching from natural deposits
Color (Units)	2018	15	NA	ND	ND–30	No	Naturally occurring organic materials
Copper (ppm)	2018	1.0	NA	0.002	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	2018	2.0	NA	0.71	0.58–0.87	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Manganese (ppb)	2018	50	NA	5.2	NA	No	Leaching from natural deposits
pH (Units)	2018	6.5–8.5	NA	7.3	5.54–8.2	No	Naturally occurring
Sulfate (ppm)	2018	250	NA	12.5	NA	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Calcium Hardness (ppm)	2018	9.1	NA	Naturally occurring
Chloroform (ppb)	2018	3.33	NA	By-product of drinking water disinfection
Sodium (ppm)	2018	10.1	NA	Naturally occurring

¹Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.