



TOWN of TOLLAND / 21 Tolland Green, Tolland Connecticut 06084

Tolland Water Commission

2021 Water Quality Report *Tolland Water Department – Main System*

Public Water System ID# CT1423011

The Tolland Water Commission (TWC) is pleased to present a summary of the quality of the water provided to you during the past year. This report was prepared under the requirements of the Federal Safe Drinking Water Act to report annually the details of where your water comes from, what it contains, and the risks that our water testing and treatment are designed to prevent.

Water Source

The Tolland Water Department - Main System serves 406 residential, commercial, and public facility customers in Tolland. Water for the Tolland Water Department – Main System comes from two gravel pack wells located on South River Road in the Willimantic River Valley. We also have an interconnection with Connecticut Water which can be used as an emergency source of supply. Over the past year, our system underwent routine flushing in the Spring and Fall. This past year we also operated all curb valves and completed leak detection on the distribution system.

Sources of tap water and bottled water include reservoirs, ponds, wells, and springs. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and in some cases, radioactive material, and pick up substances resulting from the presence of animals or from human activity, including:

- Viruses and bacteria, which may come from septic systems, livestock, or wildlife.
- Salts and metals, which can be natural or may result from storm water runoff and farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, or farming.
- Organic chemicals, which originate from industrial processes, gas stations, storm runoff, and septic systems.
- Radioactive substances, which can be naturally occurring.

To ensure safe tap water, the U.S. Environmental Protection Agency (EPA) prescribes limits on these substances in water provided by public water systems.

www.tolland.org

Tolland Water Commission
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System Administration and Operations

The Tolland Water System is managed by the TWC which meets routinely on the third Monday of every month at 7:00 pm. Due to Corona Virus concerns those meetings are currently scheduled virtually using the Town's zoom account. Under normal circumstances meetings are held in the Conference Room C, located on the second floor of the Town Hall located at 21 Tolland Green.

Contact information for the Water Commission can be found on the Town web site

<https://www.tolland.org/tolland-water-commission>. New England Water Utility Services (NEWUS), a non-regulated arm of the Connecticut Water Company provides operational and maintenance services on a contractual basis. The contract operation includes the services of a State certified operator who monitors the water system for compliance with all State and Federal drinking water regulations. Regional Water Authority of New Haven, CT was our certified laboratory that performed all of our water quality testing. The operating contract also includes services such as making emergency repairs when needed, making recommendations for improving water quality and increasing system reliability. For more information contact Michael LaBianca, Chief Operator at 10 Snipsic St, Rockville, CT 06066 or at (860) 292-2864.

Source Water Assessment:

The Source Water Assessment and Protection (SWAP) program assesses the susceptibility of public water supplies to potential contamination by microbial and chemical contaminants. The susceptibility ranking was assigned using information collected during assessment by the Department of Public Health (DPH).

The following table summarizes the SWAP assessments for the Tolland Water Department Main System. The assessments are not an indication of water quality from our water sources. The completed SWAP reports can be found at

<https://www.dir.ct.gov/dph/Water/SWAP/Community/CT1423011.pdf>

Town	Water Supply Source	Type	Overall Susceptibility
Tolland	Well 1	Groundwater	Moderate
Tolland	Well 2	Groundwater	Moderate

Comprehensive level A mapping has been completed along with hydrogeological and engineering work leading to an updated Diversion Permit approved in 2012. Additional land has been purchased upland to the north and west of the well field as open space but with the knowledge this increases protection of the water supply. There has been improvement over time.

Protecting Water Sources

Many people don't know that most contaminants enter rivers, lakes, and reservoirs from storm water runoff of streets, parking lots, golf courses, athletic fields, construction sites, farms, and residential neighborhoods. You can help reduce polluted runoff using the following guidelines:

- Restrict the use of lawn chemicals, especially before heavy rains.
- Dispose of pet or animal waste properly so that it does not wash into a nearby stream or storm drain.
- Have septic tanks inspected every two years, and cleaned as needed. Make septic system repairs as soon as possible.
- Do not pour used motor oil on the ground or into storm drains. Contact your town for proper disposal of household chemicals.
- Report muddy runoff from construction sites to your town's zoning or wetland officials.

Health Information

Consumer Confidence Reports are required to contain public health information for certain contaminants and compounds, even if the levels detected in the system were less than the Maximum Contaminant Levels (MCL) established for those parameters. The presence of contaminants does not necessarily indicate that the 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).

Special Considerations

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/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline website <https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>.

PFAS (Per-and Polyfluoroalkyl substances)

PFAS are a large group of man-made chemicals that have been manufactured and used around the world since the 1940s for many industrial and consumer purposes including the coating of fabrics, nonstick cookware, food packaging, and firefighting foam.

These chemicals can accumulate over time and have been found in both the environment and the human body. They do not break down easily in the environment or the human body and are sometimes called "forever chemicals".

Of these chemicals, the most extensively produced and studied have been PFOA and PFOS.

At this time, the EPA and regulators in Connecticut and states across the country are working to develop appropriate standards for these chemicals in drinking water.

Educational Information on Lead & Copper

We believe it is important to provide you with information about the sources of lead and copper in drinking water and the health effects associated with them.

What is Lead?

Major Sources in Drinking Water: Corrosion of household plumbing systems; erosion of natural deposits.

Health Effects Statement: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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.

Tolland Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components in your home where they could potentially cause result in lead in your drinking water. If you are concerned about the potential for lead in your drinking water from in-home plumbing and fixtures, 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. This is important especially in cases where you may not have used your water over a period of several hours and it's been sitting in the pipes. You may also 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 (<https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>) or www.epa.gov/safewater/lead

We have a comprehensive corrosion control program, to reduce risk of lead leaching from our customers' service line or internal plumbing. This includes pH monitoring and adjustment. And, we fully comply with EPA requirements regarding sampling for lead in drinking water. We provide documentation to the Connecticut Department of Public Health to demonstrate our results.

What is Copper?

Major Sources in Drinking Water: Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Health Effects Statement: 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 you are concerned about elevated lead or copper levels, you may wish to have your water tested. Running your tap for 30 seconds to two minutes before use will significantly reduce the levels of lead and copper in the water. Additional information is available from the U.S. Environmental Protection Agency's Safe Drinking Water Hotline website <https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>.

For information on the levels of lead and copper detected in your drinking water system, please refer to the table in this water quality report.

Water Quality Data – Tolland Water Department - Main System

The results of the tests conducted from entry point into our system and from sample locations within our distribution are summarized in the table below. The Safe Drinking Water Act allows us to monitor 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. If levels were tested prior to 2021, the year is identified in the sample year column. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The “Range of Detection” column represents the lowest and highest concentration detected throughout the monitoring period.

INORGANIC CHEMICALS								
Analyte	Unit	MCL	MCLG	Range of Detection		Sample Year	Met Drinking Water Standards	Typical Source
				Low	High			
Arsenic	Ppb	10	0	ND	ND	2019-2020	Yes	Erosion of natural deposits
Barium	ppm	2	2	0.016	0.018	2019-2020	Yes	Erosion of natural deposits
Chloride	ppm	250	NA	40.2	49.2	2019-2020	Yes	Erosion of natural deposits
Fluoride	ppm	4	4	0.04	0.61	2019-2020	Yes	Water additive for dental health
Nickel	ppb	100	100	ND	ND	2019-2020	Yes	Erosion of natural deposits
Nitrate	ppm	10	10	0.72	1.04	2021	Yes	Runoff from fertilizer
Nitrite	ppm	1	1	ND	ND	2021	Yes	Runoff from fertilizer
Selenium	ppb	50	50	ND	ND	2019-2020	Yes	Erosion of natural deposits
Sodium	ppm	NL = >100	NA	25	25.8	2019-2020	Yes	Erosion of natural deposits
Sulfate	ppm	NA	250	6.2	13.3	2019-2020	Yes	Erosion of natural deposits

Nitrate:

Tolland Water’s system is in compliance with the EPA’s standard of less than 10 ppm for nitrate in drinking water. However, you should know that a nitrate level in drinking water above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you may want to ask for advice from your health care provider.

RADIONUCLIDES								
Analyte	Unit	MCL	MCLG	Range of Detection		Sample Year	Met Drinking Water Standards	Typical Source
				Low	High			
Uranium	ppb	30	0	ND	ND	2019-2020	Yes	Erosion of natural deposits
Beta/photon emitters	pCi/L	NA	50	ND	ND	2019	Yes	Decay of natural and man-made deposits
Combined Radium	pCi/L	5	0	ND	1.5	2019-2020	Yes	Erosion of natural deposits

MICROBIOLOGICAL							
Analyte	MCL	MCLG	Detected in Water System		Sample Year	Met Drinking Water Standards	Typical Source
Total Coliforms	> 1 **		Absent		2021	Yes	Naturally present in environment
<i>E. coli</i>	See below †	0	Absent		2021	Yes	
Turbidity	TT >5 NTU	0	0.05	0.2	2021	Yes	Soil runoff

** Total Coliform

This report reflects compliance with the Revised Total Coliform Rule (RTCR) issued April 1, 2016. The RTCR requires water systems to continue to monitor for coliform contamination, and replaced the monthly MCL for total coliform with a TT for total coliform. The TT dictates that when coliform contamination exceeds a specified frequency, water systems must conduct an assessment of the system to identify and correct any potential routes of contamination in order to remain in compliance with Drinking Water Standards.

† *E. coli*

Any routine sample that shows the presence of total coliform triggers repeat samples that must be analyzed for total coliform and *E. coli*. If *E. coli* is found in any repeat sample, the system is considered to be in violation of the MCL.

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Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

LEAD AND COPPER									
Analyte	Unit	MCL	MCLG	Range of Detection		90 th %ile value	Sample Year	Met Drinking Water Standards	Typical Source
				Low	High				
Lead	ppb	AL = 15	0	ND	50	4	2021	Yes	Corrosion of household plumbing systems
							(1 sample > AL)		
Copper	ppm	AL = 1.3	1.3	0.01	0.21	0.16	2021	Yes	Corrosion of household plumbing systems

Educational Information about Lead and Copper:

Tolland Water Department believes it is important to provide you with information about the sources of lead and copper in drinking water and the health effects associated with them. The primary source of lead and copper in tap water is household plumbing, and plumbing can vary from house to house within the same neighborhood. For information on the levels of lead and copper detected in your drinking water system, please refer to the table above.

What is lead:

Major sources of lead in drinking water are corrosion of household plumbing systems and erosion of natural deposits. Health Effects: 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 water containing lead in excess of the action level over many years could develop kidney problems or high blood pressure.

You should know lead is rarely found in surface water (lakes, streams) and groundwater (aquifers, wells). The primary way lead enters tap water is when the water comes in contact with lead service lines or household plumbing (pipes, faucets) made from lead.

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. Tolland Water Department 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 (<https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>) or www.epa.gov/safewater/lead.

We have a comprehensive corrosion control program, including pH monitoring and adjustment, to reduce risk of lead leaching from our customers' service line or internal plumbing. Further, we fully comply with the EPA requirements regarding sampling for lead in drinking water and have provided documentation to the Connecticut Department of Public Health to demonstrate our results.

What is copper:

Major sources of copper in drinking water are corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives. Health Effects: 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. Anyone with Wilson's Disease should consult their personal doctor.

If you are concerned about elevated lead or copper levels, you may wish to have your water tested. Running your tap for 30 seconds to two minutes before use will significantly reduce the levels of lead and copper in the water. Additional information is available from the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at <https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>.

TERMS AND ABBREVIATIONS

AL = Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that 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 4 calendar quarters. The LRAA is used for direct comparison to the MCL.

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.

MRDL = Maximum Residual Disinfectant Level: 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.

MRDLG = Maximum residual disinfectant Level Goal: 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.

NA = Not Applicable

ND = Not Detected

NL = Notification Level: There is no MCL for sodium. However, the Connecticut Department of Public Health requires that customers be notified if sodium levels exceed 100 ppm.

NTU = Nephelometric Turbidity Unit: A measure of water clarity.

ppm = parts per million, or milligrams per liter (mg/L) This is equivalent to one second in 11.5 days.

ppb = parts per billion, or micrograms per liter (µg/L) This is equivalent to one second in 32 years.

ppt = parts per trillion, or nanograms per liter (ng/L) This is equivalent to one second in 32,000 years.

pCi/L = picocuries per liter (a measure of radioactivity)

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

90th %ile = 90th percentile value: The calculated value that is equal to or greater than 90 percent of the individual sample concentrations for the water system. The 90th percentile value is used for direct comparison to the AL.

Conserving Water Indoors and Outdoors

Conserving water helps to ensure that we have an adequate supply of water for public health and safety, and reduces demands on the state's water resources. You can play a role in conserving water by becoming conscious of the amount of water your household is using. Conserving can lower your water bill, and depending on the community where you live, may reduce your sewer bill.

Here are some things you can do to conserve:

- Repair leaking toilets - check for toilet leaks by putting a drop of food coloring in the tank. If the food coloring seeps into the bowl without flushing, there is a leak.
- Consider installing a low-flow 1.6 gallon per flush toilet.
- Don't use toilets as a wastebasket.
- Fix leaking fixtures.
- Run full loads in the dishwasher.
- Set the water level in the washing machine to match the amount of clothes being washed.
- Water lawns and gardens in the early morning.
- Use mulch around plants and shrubs.
- Use a bucket rather than a running hose to wash cars.

We at Tolland Water Commission, work hard to provide top quality water to every tap. Water is a limited resource so it is vital that we all work together to maintain it and use it wisely. We ask that all our customers help us protect and preserve our drinking water resources, which are the heart of our community, our way of life, and our children's future. Please contact us with any questions. Thank you for working together for safe drinking water.