



TOWN OF  
**WATERTOWN**  
WATER AND SEWER AUTHORITY

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**2019 WATER QUALITY REPORT**

PWS ID#: CT1530021



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## Dear Valued Customer:

The Watertown Water and Sewer Authority (WSA) is pleased to provide its consumers with this report on the drinking water supplied to its customers in Watertown. The information contained in this report explains where your water comes from, what tests are performed to insure the safety of your water as well as where you can acquire additional information about your water supply. We trust you will find this information both interesting and helpful. We want you to know more about the quality of your drinking water.

## WATER SOURCE

The primary source of your water is the City of Waterbury's surface reservoirs located in two separate and distinct watersheds in Litchfield County. The Shepaug and Cairns Reservoirs are located in the Shepaug Watershed and the Wigwam, Morris, and Pitch Reservoirs are located in the West Branch Watershed. Before the water is sent to you, it receives complete conventional treatment at Waterbury's Harry P. Danaher Water Treatment Plant located in Thomaston, CT.

The water is then pumped thru a 36" pipe thru the Town of Watertown. There are (2) metered connection points off the 36" where we receive water, the Fern Hill Road water booster station and the Carvel meter pit. The Fern Hill Road water booster station pumps the water to the Scoville water storage tank on Buckingham Street which distributes the water to the "High Pressure Zone", located in northern section of town, and the Carvel pit distributes the water to the "Oakville Zone" and feeds the Bunker Hill Road water booster pump station. The Bunker Hill Road water booster station pumps to the Straits water storage tank which then distributes the water to the "Watertown Pressure Zone".

The water distribution system contains approximately 61 miles of 16-inch to 1.5" diameter water mains, three water booster pump stations, two water meter pits, two water storage tanks and over 650 fire hydrants. It serves over 4,150 water customers and approximately 10,500 people. During 2018, approximately 2,500 feet of 12" and 1,000 feet of 8" water main and 7 fire hydrants were added to our water system.

## SUBSTANCES THAT COULD BE IN WATER

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 originates from industrial processes, gas stations, storm runoff, and septic system.
- Radioactive substances, which can be naturally occurring.

The U.S. Environmental Agency (EPA) prescribes limits on these substances in water provided by public water systems.

To insure that our sources of supply remain protected, the Waterbury Bureau of Water conducts annual Watershed Sanitary Surveys as well as semi-annual Water Quality and Pollution Source Assessments. This information is available by contacting the Waterbury Bureau of Water at 203-574-8251, also the completed SWAP (Source Water Assessment and Protection) program can be found at: [www.ct.gov/dph/water/SWAP/community/ct1510011.pdf](http://www.ct.gov/dph/water/SWAP/community/ct1510011.pdf). The Shepaug and Wigwam Reservoir systems, surface water and the overall susceptibility to potential contamination is "moderate".

**Educational Information About Lead & Copper:** The Water and Sewer Authority 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 in this water quality report.

**What is Lead?** - Major sources of lead in drinking water are 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 water containing lead in excess of the action level over many years could develop kidney problems or high blood pressure.

**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. 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 1-800-426-4791.*

**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/Center of Disease Control (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(1-800-426-4791).

## **WATER MAIN FLUSHING**

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen, disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use and avoid using hot water, to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule. Our water main flushing schedule is posted on our website: [watertownct.org](http://watertownct.org) , departments: water and sewer; and will also be advertised in the newspaper.

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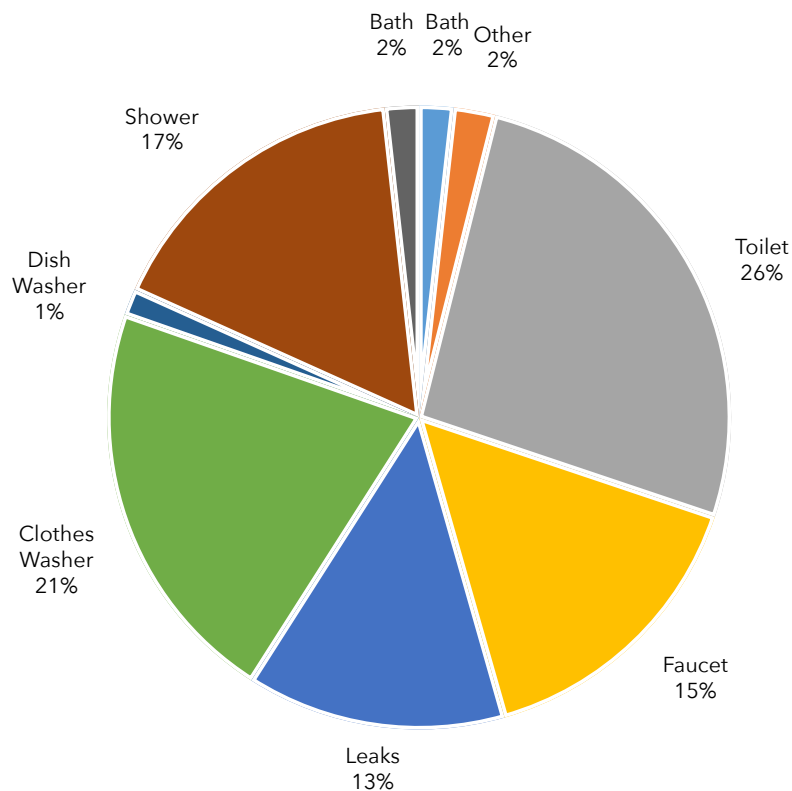
## CONSERVING WATER INDOORS & OUTDOORS

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. The typical residential customer uses 15,000 gallons of water per quarter or 60,000 per year. 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.

### 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.**
- **Use mulch around plants and shrubs.**
- **Use a bucket rather than a running hose to wash cars.**

### INDOOR HOUSEHOLD WATER USAGE



## CITY OF WATERBURY TESTING RESULTS AT TREATMENT PLANT || 2019

PARAMETER					
<b>MICROBIALS</b>	<b>MCL</b>	<b>MCLG</b>	<b>RESULTS</b>	<b>RANGE</b>	<b>SOURCE</b>
TURBIDITY (NTU)	TT=5 NTU Max Distribution	0		0.10-0.28	SOIL RUNOFF  Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
	TT=<0.30 NTU 95% of the time T-Plant Eff	0	Percentage 100%	N/A	
TOTAL COLIFORM BACTERIA	PRESENCE OF COLIFORM BACTERIA IN >5% OF MONTHLY SAMPLES	0	0%	N/A	NATURALLY PRESENT IN THE ENVIRONMENT
TOTAL ORGANIC CARBON (MG/L)	TT	N/A	1.82	1.57-2.08	NATURALLY PRESENT IN THE ENVIRONMENT
<b>INORGANIC COMPOUNDS 1</b>	<b>A/L</b>	<b>90<sup>th</sup> Percentile</b>	<b>Highest Level Detected</b>		<b>SOURCE</b>
LEAD*1 (PPB) (2019)	15	4	13 53 Sites Tested (Number of sites above AL = 0)		CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS
COPPER*1 (PPM) (2019)	1.3	0.21	0.38 53 Sites Tested (Number of sites above AL = 0)		CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS
<b>INORGANIC COMPOUNDS 2</b>	<b>RANGE DETECTED</b>	<b>HIGHEST TTHM</b>	<b>MCLG(mg/L)</b>	<b>MCL(mg/L)</b>	<b>SOURCE</b>
NITRATE+NITRITE both as N (PPM)	0.002	0.058	10	10	RUNOFF FROM FERTILIZER USE; EROSION OF NATURAL DEPOSITS
NITRATE as N	0.002	0.058	10	10	
NITRITE as N	0.002	0.002	1	1	
SULFATE (PPM)	13.5	13.5	SDWR 250		
FLUORIDE (PPM)	0.60-0.84	0.84	SDWR 2		WATER ADDITIVE WHICH PROMOTES STRONG TEETH
<b>ORGANIC COMPOUNDS</b>	<b>RANGE DETECTED</b>	<b>Average - TTHM</b>	<b>MCL</b>	<b>MCLG</b>	<b>SOURCE</b>
TOTAL TRIHALOMETHANES (TTHM) (PPB)	18-84	43.6	80	0	BY PRODUCT OF DRINKING WATER CHLORINATION
TOTAL HALOACETIC ACID (THAA) (PPB)	19-56	37.0	60	N/A	
<b>RADIOCHEMICAL *1</b>	<b>RANGE</b>	<b>HIGHEST</b>	<b>MCL</b>	<b>MCLG</b>	<b>SOURCE</b>
GROSS ALPHA (α)*1(PCi/L)	3	3	15 (MRMEM/Y)*	0	DECAY OF NATYRAL AND MAN MADE DEPOSITS
RADIUM 226 + 228 *1	1	1	5 (PCi/L)	0	

\* The State of Connecticut measures for the Radiochemical NET Gross ALPHA in Picouries per Liter (pCi/L), the Federal measurement is in millirems per year(mrem/yr)  
\*1 The State of Connecticut, Department of Public Health, requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

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## CITY OF WATERBURY TESTING UCMR4 • "UREGULATED CONTAMINATES"

Analyte	Range-ug/L
Chromium (total)	0.21
Strontium	30.3 - 41.8
Vanadium	ND
Chromium-6	<0.03
Chlorate	80-136
Maganese	5.5 -5.6

You can find more information regarding unregulated contaminants at the following sites:

<http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm#ucmr2013>.

<http://www.drinktap.org/home/water-information/water-quality/ucmr3.aspx>.

## TOWN OF WATERTOWN WATER & SEWER AUTHORITY WATER TESTING RESULTS || 2019

Inorganic	MCL	MCLG		Range of Detection	Met Drinking Water Standards	Typical Source of Contaminate
Copper (PPM) Tested in 2018	AL 1.3	AL 1.3	0.19 (90th Percentile)	0.04 - 0.23	Yes	Corrosion of household plumbing system
Lead (PPB) Tested in 2018	AL 15	0	2 (90th Percentile)	1 - 6	Yes	Corrosion of household plumbing system
<b>Microbiological</b>						
Total Coliform Bacteria	More than 1	0	Absent	Absent	Yes	Naturally present in the environment
<b>Organic</b>						
TTHMs (PPB) Total Trihalomethanes	80	0	60 LRAA	29 - 91	Yes	By-product of drinking water disinfection
HAAs (PPB) Haloacetic Acids	60	N/A	47 LRAA	32 - 57	Yes	By-product of drinking water disinfection
Chlorine	MRDL 4	MRDLG 4	1.3	0.2 - 1.3	Yes	Water additive used to control microbes

## TERMS & 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: Average of four quarterly results used to evaluate compliance.

**MCLG** = Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**MCL** = Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

**MRDL** = Maximum Residual Disinfection 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

**mREM/yr** = Millirems per year: A measurement of radiation absorbed by the body.

**NL** = Notification Level: There is no MCL for sodium, however, the Connecticut DPH requires customers to be notified if sodium exceeds 28 ppm.

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

**ppm** = Parts per million, or milligrams per liter, mg/l

**ppb or ug/L** = Parts per billion, or micrograms per liter ug/l

**pCi/l** = Picocuries per liter: A unit of measure of radioactivity.

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

**N/A** = Not Applicable

**N/R** = Not Regulated

**mg/L** = Milligrams per liter

**ND** = Non-Detectable

\* The State of Connecticut measures for the Radiochemical Gross Beta in Picoocuries Per Liter (pCi/L), the federal measurement is in millirems per year (MREM/YR).

\* 1 Last data available.

\* 2 The State of Connecticut, Department of Public Health, requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

## QUESTIONS?

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For more information about this report, or for any questions relating to your drinking water, please call The Watertown Water & Sewer Authority, at (860) 945-5299, or e-mail at: [caterino@watertownct.org](mailto:caterino@watertownct.org)

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**2018 WATER QUALITY REPORT**

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