

# TOWN OF WATER AND SEWER AUTHORITY

# **2018 WATER QUALITY REPORT**

PWS ID#: CT1539031 WESTGATE

#### **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

Your water source is groundwater pumped by wells, which are located along the Nonnewaug River in Woodbury, (the Hart Well Fields). The Watertown Fire District owns and operates two surface reservoirs: Lockwod Reservoir, which is located in Bethlehem, and Judd Pond, which is located in Watertown. These reservoirs are used to augment the flow of water in the Nonnewaug River to replenish the groundwater removed by the wells, located off of Route 61 (the Hart Well Fields), which are owned and operated by the Watertown Fire District.

The water is then pumped from the Neil Drive pump station to the Bald Hill water storage tank, located off of Neil Drive. From there it is metered thru a water meter pit located on Westgate Road, then distributed thru the Watertown Water and Sewer Authority system to your home.

## 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.

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. The Shepaug and Wigwam Reservoir systems, surface water and the overall susceptibility to potential contamination is "moderate".

# SOURCE WATER PROTECTION

Source water in untreated water from streams, rivers, lakes, or ground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health sense, good economic sense, and good environmental sense. You can be aware of the challenges of keeping drinking water safe and take an active role in protecting drinking water. There are lots of ways that you can get involved in drinking water protection activities to prevent the contamination of the groundwater sources. Dispose properly of household chemicals, help clean up the watershed that is the source of your community's water, and attend public meetings to ensure that the community's need for safe drinking water is considered in making decisions about land use. For more information on source water protection contact the Environmental Protection Agency (EPA) at (800) 426-4791 or visit their web site at www.epa.gov/sourcewaterprotection.

**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 a relatively short amount 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-comprised 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.

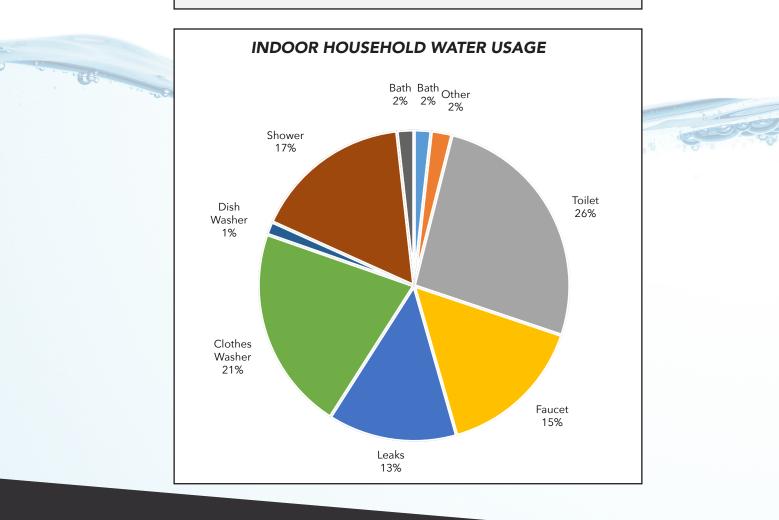
Please contact us if you have any questions or if you would like more information on our water main flushing schedule. Our water main flushing schedule is posted on our website: <u>watertownct.org</u>, departments: water and sewer; and will also be advertised in the newspaper.

# **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.



# WATER TESTING RESULTS BY THE WATERTOWN FIRE DISTRICT

| REGULATED SUBSTANCES                                                                                      |                 |               |                 |                    |                   |           |                                                                                               |  |  |
|-----------------------------------------------------------------------------------------------------------|-----------------|---------------|-----------------|--------------------|-------------------|-----------|-----------------------------------------------------------------------------------------------|--|--|
| SUBSTANCE<br>(UNIT OF MEASURE)                                                                            | YEAR<br>SAMPLED | MCL<br>[MRDL] | MCLG<br>[MRDLG] | AMOUNT<br>DETECTED | RANGE<br>LOW-HIGH | VIOLATION | TYPICAL SOURCE                                                                                |  |  |
| Alpha Emitters (pCi/L)                                                                                    | 2018            | 15            | 0               | 0.634              | NA                | No        | Erosion of natural deposits                                                                   |  |  |
| Barium (ppm)                                                                                              | 2018            | 2             | 2               | 0.0242             | NA                | No        | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits    |  |  |
| Chlorine (ppm)                                                                                            | 2018            | [4]           | [4]             | 0.88               | 0.72-1.07         | No        | Water additive used to control microbes                                                       |  |  |
| Combined Radium (pCi/L)                                                                                   | 2018            | 5             | 0               | 0.229              | NA                | No        | Erosion of natural deposits                                                                   |  |  |
| Haloacetic Acids [HAAs] (ppb)                                                                             | 2018            | 60            | NA              | 5                  | 4-5               | No        | By-product of drinking water disinfection                                                     |  |  |
| Nitrate (ppm)                                                                                             | 2018            | 10            | 10              | 0.674              | NA                | No        | Runoff from fertilizer use; Leaching from septic tanks<br>sewage; Erosion of natural deposits |  |  |
| TTHMs [Total<br>Trihalomethanes] (ppb)                                                                    | 2018            | 80            | NA              | 13                 | 9–13              | No        | By-product of drinking water disinfection                                                     |  |  |
| Turbidity <sup>1</sup> (NTU)                                                                              | 2018            | TT            | NA              | 1.34               | ND-1.34           | No        | Soil runoff                                                                                   |  |  |
| Tap water samples were collected for lead and copper analyses from sample sites throughout the community. |                 |               |                 |                    |                   |           |                                                                                               |  |  |
| SUBSTANCE                                                                                                 |                 | AMOUNT        | SITES A         | BOVE               |                   |           |                                                                                               |  |  |

| (UNIT OF<br>MEASURE) | YEAR<br>SAMPLED | AL  | MCLG | DETECTED<br>(90TH %ILE) | AL/TOTAL<br>SITES | VIOLATION | TYPICAL SOURCE                                                       |
|----------------------|-----------------|-----|------|-------------------------|-------------------|-----------|----------------------------------------------------------------------|
| Copper (ppm)         | 2017            | 1.3 | 1.3  | 0.49                    | 0/20              | No        | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead (ppb)           | 2017            | 15  | 0    | 4                       | 0/20              | No        | Corrosion of household plumbing systems; Erosion of natural deposits |
| SECONDARY            | SUBSTANC        | FS  |      |                         |                   |           |                                                                      |

| SECONDART SUBSTAINCES                                                                                                                                      |                                                 |                 |      |                                                                       |                    |                                                                         |                                                          |                                       |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------|------|-----------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------|--|
| SUBSTANCE<br>(UNIT OF MEASURE)                                                                                                                             | 5                                               | YEAR<br>SAMPLED | SMCL | MCLG                                                                  | AMOUNT<br>DETECTED | RANGE<br>LOW-HIGH                                                       | VIOLATION                                                | TYPICAL SOURCE                        |  |
| Chloride (ppm)                                                                                                                                             |                                                 | 2018            | 250  | NA                                                                    | 27.9               | NA                                                                      | No                                                       | Runoff/leaching from natural deposits |  |
| Sulfate (ppm) 2018                                                                                                                                         |                                                 | 250             | NA   | 8.38                                                                  | NA                 | No                                                                      | Runoff/leaching from natural deposits; Industrial wastes |                                       |  |
| UNREGULATED S                                                                                                                                              | UNREGULATED SUBSTANCES                          |                 |      |                                                                       |                    |                                                                         |                                                          |                                       |  |
| SUBSTANCE YEAR AMOUNT RANGE<br>(UNIT OF MEASURE) SAMPLED DETECTED LOW-HIGH TYPICAL SOURCE                                                                  |                                                 |                 |      |                                                                       |                    |                                                                         |                                                          |                                       |  |
| Sodium (ppm)                                                                                                                                               | ium (ppm) 2018 25.9 NA Naturally present in the |                 |      | enviroment; Added to adjust drinking water pH; Runoff from road salts |                    |                                                                         |                                                          |                                       |  |
| UNREGULATED CONTAMINANT MONITORING RULE-PART 4 (UCMR4) <sup>1</sup> Turbidity is a measure of the cloudiness of the water. It is monitored because it is a |                                                 |                 |      |                                                                       |                    |                                                                         |                                                          |                                       |  |
| SUBSTANCE<br>(UNIT OF MEASURE)                                                                                                                             |                                                 |                 |      | RAN<br>LOW-                                                           |                    | good indicator of water quality and the effectiveness of disinfectants. |                                                          |                                       |  |
| Manganese (ppb)                                                                                                                                            | 2                                               | 018             | 10   | 5.7                                                                   | 14.1-              | -19.3                                                                   |                                                          |                                       |  |

# TOWN OF WATERTOWN WATER & SEWER AUTHORITY TESTING RESULTS || 2018

| Inorganic<br>Tested 2015                | MCL                      | MCLG   | Highest<br>Detected Level             | Range of<br>Detection | Met<br>Drinking<br>Water<br>Standards   | Typical Source of<br>Contaminant                |
|-----------------------------------------|--------------------------|--------|---------------------------------------|-----------------------|-----------------------------------------|-------------------------------------------------|
| Copper (ppm)<br>Tested in 2015          | AL 1.3                   | AL 1.3 | 0.74<br>(90 <sup>th</sup> percentile) | 0.02-0.74             | Yes                                     | Corrosion of<br>household plumbing<br>system    |
| Lead (ppb)<br>Tested in 2015            | AL 15                    | 0      | 2<br>(90 <sup>th</sup> percentile)    | 1-2                   | Yes                                     | Corrosion of<br>household plumbing<br>system    |
|                                         |                          |        |                                       |                       |                                         |                                                 |
| Microbiological                         |                          |        |                                       |                       |                                         |                                                 |
| Total Coliform<br>Bacteria (2017)       |                          |        | Absent                                | Absent                | Yes                                     | Naturally present in the environment            |
| Organic (2017)                          |                          |        |                                       |                       |                                         |                                                 |
| TTHMs (ppb)<br>Total<br>Trihalomethanes | 80                       | 0      | 10<br>Highest Site<br>(LRAA)          | 10<br>1 sample        | Yes                                     | By-product of<br>drinking water<br>disinfection |
| HAAs (ppb)<br>Haloacetic Acids          | 60                       | N/A    | 3<br>Highest Site<br>(LRAA)           | 3<br>1 sample         | Yes                                     | By-product of<br>drinking water<br>disinfection |
| Chlorine                                | ne MRDL MRDLG 1.3<br>4 4 |        | 0.2 - 1.3                             | Yes                   | Water additive used to control microbes |                                                 |

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.

#### **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 = Not Detected

**SMCL** = Secondary Maximum Contaminant Level: is established to regulate aesthetics of drinking water like taste and odor.

Reference is made to the 2018 Annual Water Quality Report by The Watertown Fire District.

#### QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Vincent Caterino, Superintendent, at (860) 945-5299, or e-mail at: <u>caterino@watertownct.org</u>

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