



2010 Water Quality Report Green Springs Water System

Public Water System ID # CT0760021

We are 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. This report details where your water comes from, what it contains, and the risks our water testing and treatment are designed to prevent.

Water Source: Green Springs System serves Connecticut Water Company customers in the Green Springs subdivision Complex in Madison. Water from the Green Springs water system comes from three bedrock wells off of Green Springs Drive. All three draw from an underground aquifer at a rate of 10 gallons per minute and discharge into a 5000 gallon atmospheric tank. As water is required in the distribution system, booster pumps come on to transfer water from the atmospheric storage to a 1000 gallon pressurized tank that connects to pipes going to the residences.

Water Quality Testing: Connecticut Water has tested for contaminants and other water quality parameters in the Green Springs system that could adversely affect the quality of your drinking water. Samples for testing were taken at several places within the water system, including:

- At the source well.
- In the distribution system.

All of the samples were tested at laboratories certified by the State of Connecticut Department of Public Health (DPH). The test results were submitted to the DPH Drinking Water Division, as required.

Protecting Water Sources: 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.

Many people don't know that most contaminants enter rivers, lakes, and reservoirs from storm water runoff of streets, golf courses, athletic fields, construction sites, farms, and neighborhoods like yours. 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.

The State of Connecticut DPH has completed an assessment of Green Springs Wells, and has assigned the source with an overall susceptibility rating of "Low ." This rating indicates that the water source has a low risk of

contamination. The completed assessment report is available on the Drinking Water Division's Web site, http://www.dph.state.ct.us/BRS/Water/source_protection/assessments/community/community.htm

Additional source water assessment information can be found at the EPA website: www.epa.gov/safewater/protection/swap/html

Educational Information about Lead and Copper: Connecticut Water 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. 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 at 1-800-426-4791.

Conserving Water Indoors and Outdoors: Conserving water helps to ensure that we have an adequate supply of water for public health and safety, especially during peak demand seasons. Conserving can lower your water bill, and depending on the community where you live, it 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.

As you can see by the following table, our system had no violations. We're proud that our drinking water meets all Federal and State requirements. The EPA has determined that your water IS SAFE at these levels.

If you would like more information, please call Customer Service at 1-800-286-5700, write to Connecticut Water Company, 93 West Main Street, Clinton, CT 06413 or e-mail us at publicaffairs@ctwater.com.

Water Quality Data

The table below lists all the drinking water contaminants that were detected in water quality testing conducted in 2010. The “Highest level detected” column represents the highest concentration detected throughout the monitoring period.

Inorganic	MCL	MCLG	Highest Detected Level	Range of Detection	Met Drinking Water Standards	Typical Source of Contaminant
Copper (ppm) 2009	AL 1.3	AL 1.3	0.268	0	Yes	Corrosion of household plumbing systems
Lead (ppb) 2009	AL 15	0	10	0	Yes	Corrosion of household plumbing systems
Barium (ppm) 2010	2	2	0.049	0.049	Yes	Erosion of natural deposits
Chloride (ppm) 2010	250	NA	21.4	21.4	Yes	Erosion of natural deposits
Fluoride (ppm) 2010	4	4	0.2	0.2	Yes	Erosion of natural deposits
Nitrate (ppm) 2010	10	10	1.94	1.94	Yes	Runoff from fertilizer
Nitrite (ppm) 2010	1	1	ND	ND	Yes	Runoff from fertilizer
Sodium (ppm) 2010	NL=28	NA	10.5	10.5	Yes	Erosion of natural deposits
Sulfate (ppm) 2010	NA	250	18.8	18.8	Yes	Erosion of natural deposits
Microbiological						
Turbidity (2010)	TT 5 NTU	0	0.55	100%	Yes	Soil runoff
Radioactive						
Alpha emitters (pCi/L) 2010	15	0	3.51	ND-3.48	Yes	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	ND	ND	Yes	Erosion of natural deposits
Uranium (ug/L)	30	0	4.5	ND-4.5	Yes	Erosion of natural deposits
Organic						
TTHMs (ppb) [Total Trihalomethanes]	80	0	ND	ND	Yes	By-product of drinking water disinfection
HAA ₅ (ppb) [Haloacetic Acids]	60	NA	Not required	Not chlorinated	Yes	By-product of drinking water disinfection
Chlorine (mg/L)	MRDL 4	MRDLG 4	ND	Not chlorinated	Yes	Water additive used to control microbes

Note: The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Not all contaminants are tested for every year due to monitoring waivers and therefore we must use the most recent round of sampling. Some of our data is more than one year old, however, is limited to no older than 5 years.

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.

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.

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.

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

NA = not applicable

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 (µg/l)

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.