

# Consumer Confidence Report

## Canaan Water Department

2017

### What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

NOW IT COMES WITH A LIST OF INGREDIENTS.



**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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants 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, and wildlife.

**Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water 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 can also come from gas stations, urban storm water runoff, and septic systems.

**Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink**, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### What is the source of my drinking water?

The Canaan water system has two sources. The primary source is Canaan Street Lake. There is also a bedrock well that was placed in service during 2010. Water from this well is blended with water from the lake to improve the overall water quality. The lake has a reported safe yield of 1.0 million gallons per day. The treatment plant is based on the slow sand water filtration concept. Dual raw water pumps feed three filter beds. Each filter consists of a sand bed approximately four feet deep and support gravel over perforated under-drain. Combined flow from the lake and well is treated with sodium hypochlorite before entering the clearwell, which provides chlorine contact time. Sodium hydroxide is added to raise the pH of the water and make it less corrosive to piping and fixtures. A 294,000-gallon tank provides the water system storage.

**Why are contaminants in my water?** Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of

some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

**Do I need to take special precautions?** 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/CDC 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 1-800-426-4791.

### Source Water Assessment Summary

DES prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared during 2002, are noted below.

The lake source received 0 high susceptibility ratings, 3 medium susceptibility ratings, and 9 low susceptibility ratings.

The well has not been rated.

Note: This information is over 10 years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has

no plans to update this data but we are required to present it in this report.

The complete Assessment Report is available for review at Canaan Water Department. For more information, call John Coffey at 304-9380 or 523-9280 or visit the DES Drinking Water Source Assessment website at <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm>.

### How can I get involved?

For information on how to become more involved with your water system, including meeting and election details, contact the Town Administrator. He can be reached at the Canaan Town Hall, 523-4501 ext. 5.

Violations and Other information: The system had no violations during 2016.

### Definitions

**Ambient Groundwater Quality Standard or AGQS:** The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.

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

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or MCLG:** 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.

**Maximum Residual Disinfectant Level or MRDL:** 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.

**Maximum Residual Disinfectant Level Goal or MRDLG:** 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 contaminants.

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

**Turbidity:** A measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus helps measure the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.

### Abbreviations

BDL: Below Detection Limit

mg/L: milligrams per Liter

NA: Not Applicable

ND: Not Detectable at testing limits

NTU: Nephelometric Turbidity Unit

pCi/L: picoCurie per Liter

ppb: parts per billion

ppm: parts per million

RAA: Running Annual Average

TTHM: Total Trihalomethanes

UCMR: Unregulated Contaminant Monitoring Rule

ug/L: micrograms per Liter

*THE FOLLOWING APPLIES if these contaminants are present - see table for detected levels.*

### Drinking Water Contaminants:

**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. This water system is responsible for high quality drinking water, but can not control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and 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 or at <http://water.epa.gov/drink/info/lead/index.cfm>

**System Name: Canaan Water Department**

**EPA ID: 0351010**

**2017**

**ADDITIONAL TESTING**

Additional tests (no Primary MCL)	Results	Date	Treatment technique (if any)	AL (Action Level) or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria
Sodium (ppm)	12	Sampled 2008			

**DETECTED WATER QUALITY RESULTS**

Contaminant (Units)	Level Detected	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
---------------------	----------------	-----	------	------------------	--------------------------------	-------------------------------

**Microbiological Contaminants**

Turbidity (NTU)	Range ND <.250 Sampled 2017	TT	N/A	No	Soil runoff	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.
-----------------	--------------------------------	----	-----	----	-------------	---

**Radioactive Contaminants**

Compliance Gross Alpha (pCi/L)	Range 0.00 – 6.4 Average 4 Sampled 2017	15	0	No	Erosion of natural deposits	
Uranium (ug/L)	Range 0.00 – 9.9 Average 5 Sampled 2017	30	0	No	Erosion of natural deposits	
Combined Radium 226 + 228 (pCi/L)	Range 0.00-3 Average 1.75 Sampled 2017	5	0	No	Erosion of natural deposits	

**Inorganic Contaminants**

Barium (ppm)	Range 0.00 – 0.05 Average 0.036 Sampled 2016	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Chlorine (ppm)	Range 0.75 –3.5 Average 2.5 Sampled 2017	MRDL = 4	MRDLG = 4	No	Water additive used to control microbes	

Copper (ppm)	Range 0.00 – 1.0 90 <sup>th</sup> percentile .22 Sampled 2017	AL=1.3	.8	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Fluoride (ppm)	ND Sampled 2017	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
Lead (ppb)	Average .007 20 samples 90 <sup>th</sup> percentile .011 Sampled 2017	AL=15	.005	No	Corrosion of household plumbing systems, 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.
Manganese (ppm)	.005 Sampled 2017	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Nitrate (as Nitrogen) (ppm)	ND Sampled 2017	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	

### Volatile Organic Contaminants

Haloacetic Acids (HAA5) (ppb)	Range 2.7-22.5 Average 12.5 Sampled 2017	60	NA	No	By-product of drinking water disinfection	
Total Trihalomethanes (TTHM) (Bromodichloromethane Bromoform Dibromomethane Chloroform) (ppb)	Range 45-63 Average 59.6 Sampled 2017	80	N/A	No	By-product of drinking water chlorination	
VOC's	Range 1-20 Highest – 20 Sampled 2017	80	NA	No	Drinking water treatment by-products	