

City of Claremont
Department of Public Works
8 Grandview Street
Claremont, NH 03743

Rice Reservoir

**Your Water—
How Good Is It?
[Details inside]**

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Consumer Confidence Report - 2011 / Claremont Water System

The City of Claremont . . .

owns and maintains a water supply, treatment and distribution system that delivers quality water to its users. The Environmental Protection Agency (EPA) has enacted regulations requiring all water departments to inform their users of the quality of water that we provided last year. This report is a means of letting our customers know where their water comes from, what it contains, and how it compares to EPA standards. Claremont Water System is committed to providing you with this information because informed customers are our best allies – and this is your water system.

How can I get involved?

If you have any questions about this report or concerning your drinking water, please contact Wayne Leonard, the Water & Sewer Superintendent in the Claremont

Department of Public Works at (603)542-7020 Ext. 2002 or through email at wleonard@claremontnh.com. The Water Treatment Plant operation is contracted out to United Water/AOS and the contact person is Rob Lauricella at (603)543-0680 or through email at Rob.Lauricella@UnitedWater.com. The City of Claremont's Water Department is governed through the public works department, which, through the city manager's office, implements the policy of the city council. Council meetings are held on the second Wednesday of every month at 6:30PM.

Health Information

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 the 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 (800) 426-4791.

What is the quality of my drinking water?

The water supplied to the City of Claremont water users meets or exceeds all Local, State and Federal regulations for drinking water and is considered high-quality drinking water.



Bible Hill Pump Station

CONSUMER CONFIDENCE REPORT

Why are there contaminants in my water?

The sources of drinking water (both tap 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 may be naturally



occurring or a result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, and mining or farming.

- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts 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.



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 and Center for Disease Control 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 (800) 426-4791.

Health effects statement for 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 cannot 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 at 800-426-4791 or at <http://water.epa.gov/drink/info/lead/index.cfm>.



2011 CLAREMONT WATER SYSTEM

What is the source of my water?

The Claremont water system uses surface water supplied from three sources:

- White Water Reservoir, a 150 million gallon reservoir,
- Rice Reservoir, a 40 million gallon reservoir, and
- Sugar River.

These sources feed the Dole Reservoir, a 40 million gallon holding reservoir that feeds the water treatment plant.

Summary of Claremont's Source Water Assessment:

NH Department of Environmental Services has prepared a Source Assessment Report for the sources serving this public water system, assessing its vulnerability to contamination. The results of the assessment, prepared in 2001 are as follows:

Whitewater Reservoir: The majority (approximately 71%) of total water drawn for treatment is from this source. The Whitewater Reservoir received 0 high susceptibility ratings, 0 medium susceptibility ratings, and 11 low susceptibility ratings.

Sugar River: Approximately 29% of water drawn for treatment is from this source. Susceptibility for contamination at this source is elevated due to its proximity to an active highway and agricultural activity in its large watershed area. The Sugar River received 5 high susceptibility ratings, 3 medium susceptibility ratings, and 3 low susceptibility ratings.

Dole Reservoir: Dole is a 40 million gallon "holding" reservoir adjacent to the water treatment plant which accepts water from both the Sugar River and Whitewater Reservoir. It serves to provide an adequate steady and continual feed into the plant for treatment. The Dole Reservoir received 0 high susceptibility ratings,

0 medium susceptibility ratings, and 11 low susceptibility ratings.

Rice Reservoir: Due to its size, this reservoir is used very little and there were no known sources of contamination identified in its watershed. The Rice Reservoir received 0 high susceptibility ratings, 0 medium susceptibility ratings, and 11 low susceptibility ratings.

Claremont's complete Water Source Assessment Report is available for review at the Claremont Department of Public Works office located at 8 Grandview Street. For more information call (603) 542-7020 or the New Hampshire Department of Environmental Services (DES) at (603) 271-3303. You can also visit the NH DES Drinking Water Source Assessment Program website at: <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm>

How is Claremont's Water treated?

All of the water that enters the Claremont water system is treated in stages: coagulation, settling, filtration, chlorination to remove pathogens (disease-causing organisms), pH control, and corrosion control. Coagulation, settling, and filtration remove impurities in the water and the carbon filtration takes care of the taste and odor. There are approximately 4,000 connections served by the water treatment plant with a daily average of 1,000,000 gallons treated and delivered into the distribution system.

System improvements

This past year (2010) the City of Claremont commenced its Reservoir Rehabilitation Program. The three reservoirs, Dole, Rice and Whitewater, have undergone independent Engineer's Dam Safety Inspections

with hydraulic / hydro-geologic studies and maintenance and repair evaluations. These efforts are in compliance with the New Hampshire Department of Environmental Services' (NHDES) inspections and their remedial concerns and recommendations.

Beginning at Dole Reservoir, the City constructed an access road from the Water Treatment Plant to the base of the dam. A toe drain system was designed and its construction completed using the new access road. The drain system will relieve and control dam seepage along the entire toe of this nearly 100 year old dam. Additionally, a new concrete spillway was designed to meet the revised NHDES standards for flow capacities to accommodate a 100 year storm event. The construction of the spillway modifications is expected to occur this summer.

Distribution system improvements included the installation of 600 LF of new 6" PVC water main and house services along the lower portion of Maria Street. This work replaced an antiquated 2" steel line, increased flow volumes which will also allow better system flushing through a new fire hydrant, and lower repair and maintenance costs.



National Drinking Water Standards

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 U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Information on Cryptosporidium:

Cryptosporidium is a microbial parasite commonly found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Current test methods do not allow us to determine if the organ-

isms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immune-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. Our monitoring consisted of 24 monthly samples that began in April 2008

and was completed in March 2010. There was one detection in March 2009 with a result of 0.18 oocysts/Liter (approximately 0.18 oocysts per quart of water).

Sample Dates

The results for detected contaminants listed below are from the most recent monitoring done in compliance with regulations ending with the year 2010. Results prior to 2010 will include the date the sample was taken. The State of New Hampshire allows water systems to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Thus some of the data present, though representative, may be more than one year old.

SUBSTANCE	LEVEL MEASURED	MCL	MCLG	MEETS LIMITS?	LIKELY SOURCE	
Copper 2008	90 th Percentile # of sites above AL 0 sites	0.045 mg/L	AL= 1.3 mg/L	1.3mg/L	yes	Corrosion of household plumbing.
Lead 2008	90 th Percentile # of sites above AL 1 sites	13 ug/L	AL= 15 ug/L	0 ug/L	yes	Corrosion of household plumbing.
Total THMs	Highest annual average Range of measurements 62 ug/L 50 – 54 ug/L	80 ug/L Annual running average	N/A	yes	By-product of drinking water disinfection with chlorine.	
Total HAA5s	Highest annual average Range of measurements 24 ug/L 15–28 ug/L	60 ug/L Annual running average	N/A	yes	By-product of drinking water disinfection with chlorine.	
TOC	Annual average Range of measurements 1.2 mg/L 1.2 – 1.2 mg/L	TT = 35% removal	N/A	yes	Naturally present in the environment.	
Chlorine	Running average Range of Measurements 0.8 mg/L 0.6-0.9 mg/L	MRDLG = 4 mg/L	MRD= 4 mg/L	yes	Water additive used to control microbes.	
Barium	Highest measurement 0.004 mg/L	2 mg/L	2 mg/L	yes	Erosion of natural deposits.	
Turbidity	Highest measurement % of samples <0.3NTU 0.07 NTU 100%	TT = 1 NTU 95% < 0.3 NTU	N/A	yes	Soil runoff.	

DEFINITIONS:

TURBIDITY: is 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.

MCLG: Maximum Contaminant Level Goal, or 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. They are set as close to the MCLGs as feasible using the best available treatment technology.

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

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

MRDLG: Maximum Residual Disinfectant Level Goal or 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 contaminants (for water systems that use chlorine).

MRDL: Maximum Residual Disinfectant Level or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants (for water systems that use chlorine).

mg/L: milligrams per liter. A unit of concentration also described as Parts per Million.

ug/L: micrograms per liter. A smaller unit of concentration also described as Parts per Billion.

ABBREVIATIONS: N/A = not applicable
NTU = Nephelometric Turbidity Unit
HAA5 = Haloacetic Acids
TOC = Total Organic Carbon
THM = Total Trihalomethanes
< = less than