# Annual Drinking Water Quality Report CASCADE MOUNTAIN RESORTS PWSID #1035090

# INTRODUCTION

This Annual Drinking Water Quality Report for calendar year **2016** is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH).

If you have questions about this report, please contact:

Floyd Jones, 548 Country Club Road, Mount Airy, NC 27030 336-575-1699

If you want additional information about any aspect of your drinking water or want to know how to participate in decisions that may affect the quality of your drinking water, please contact:

Sharon Gwin, President, Cascade Mountain Water Company, P.O. Box 353, Fancy Gap, VA 24328 276-728-2887

The times and location of regularly scheduled board meetings are as follows:

Second Saturday of each month at 10:00 AM in the Summit Haus.

# **GENERAL INFORMATION**

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: (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. (2) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. (3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. (4) 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 stormwater runoff, and septic systems. (5) 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Drinking water, including bottled drinking 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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

# SOURCES OF OUR DRINKING WATER

The sources of your drinking water are groundwater as described below:

Water was obtained from five wells: Well Nos. 1, 3, 4, 7, and 8. All five wells are located in our community.

The Virginia Department of Health conducted a source water assessment of our system during April, 2002. The wells were determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. The report is available by contacting your water system representative at the phone number or address given elsewhere in this drinking water quality report.

# **DEFINITIONS**

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The table on the next page shows the results of our monitoring. In the table and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:

*Non-detect (ND)* - lab analysis indicates that the contaminant is not present.

Maximum Contaminant Level (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 (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.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

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

Level 1 assessment - a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 assessment - a very detailed study of the waterworks to identify potential problems and determine (if possible) why an E. coli PMCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

# WATER QUALITY RESULTS

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data presented in the below tables, though accurate, is more than one year old.

**Regulated Contaminants** 

Contaminant (units)	MCLG	MCL	Level Detected	Range	Violation (Y/N)	Date of Sample	Typical Source of Contamination
Nitrate (ppm)	10	10	1.32	0.06 – 1.32	N	9-16	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Alpha Emitters (pCi/L)	0	15	ND	ND	N	2014	Erosion of natural deposits
Combined radium (pCi/l)	0	5	ND	ND	N	2014	Erosion of natural deposits
Barium (ppm)	2	2	0.023	ND - 0.023	N	9-16	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

**Lead and Copper Contaminants** 

Contaminant (units)	MCLG	Action Level	90 <sup>th</sup> Percentile	Action Level Exceeded	Date of Sampling	# of Sampling Sites Exceeding Action Level	Typical Source of Contamination
Lead (ppb)	0	AL = 15	ND	No	9-14	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	AL = 1.3	ND	No	9-14	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

MCL's are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-tenthousand to one-in-a-million chance of having the described health effect for other contaminants.

### ADDITIONAL HEALTH INFORMATION

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 waterworks is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or 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 (800-426-4791) or at http://www.epa.gov/safewater/lead.

# **VIOLATION INFORMATION**

During the year we failed to collect the proper number of samples for inorganic examination. Five samples were required and none were submitted for analysis. We have resumed collecting and submitting for analysis the proper number of samples. The health effects as a result of not sampling are unknown. Please see the next page for additional information.

# NOTICE TO CONSUMERS

of the

Cascade Mountain Resort

Waterworks ID No. 1035090

We have been advised by State health officials of a failure to perform required monitoring in accordance with the Commonwealth of Virginia/State Board of Health *Waterworks Regulations*.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the monitoring period of January 1, 2014, to December 31, 2016, we did not monitor for inorganic contamination and therefore, cannot be sure of the quality of our drinking water during that time.

One sample was required to be analyzed for inorganic contamination at the entry point to Well No. 4 into the distribution system, and none were analyzed. Samples were collected for analysis from our other four entry points to the distribution system.

State health officials feel there is little need for concern about the safety of your water because past records show that our system has had no documented problems with inorganic contamination; however, routine sampling and analysis is required to determine the quality of water delivered to our customers.

# There is nothing you need to do at this time.

We plan to collect the samples for analysis within the next thirty days.

For more information, please contact:

Cascade Mountain Water Co. P.O. Box 353, Fancy Gap, VA 24328 (276) 728-0679

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Note to Cascade Mountain Homeowners from the Cascade Mtn. Water Co.:

Included in the enclosed Water Quality Report for 2016 is a "Notice to Consumers" concerning the testing for inorganic contamination during 2016. Initially, five samples using test kits supplied by the Commonwealth of Virginia were submitted to the state labs as required. The samples have to be tested within 24 hours of submission or they're considered not suitable for testing and rejected. For some reason, the five samples did not reach the lab in time and the state required us to send another set of samples for testing, but they supplied only four test kits for re-sampling. We sent the four samples back and they all tested within normal ranges. Because a fifth test kit wasn't supplied by the state for re-sampling, that sample did not arrive by the deadline last year, but it too tested within normal ranges.

The Virginia Dept. of Health required the Water Company to include the notice as part of the Water Quality Report. This additional note from the Water Company serves as an explanation as to what happened. Rest assured that the water in Cascade Mountain is a safe as ever.

The Cascade Mtn. Water Company