



**2019 WATER QUALITY REPORT FOR THE
CASCADE TOWN CENTER (FORT RICHIE) WATER SYSTEM
PWSID # 210007**

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Washington County Department of Water Quality vigilantly safeguards its water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard on this system.

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/Centers for Disease Control (CDC) guidelines on proper means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

The Cascade Town Center Water System uses six wells and a spring as its source of water. This water for this system is receives pH adjustment, corrosion control and chlorination prior to entering the distribution system.

Source water assessment and its availability

The sources of Cascade Town Center's water supply are six wells in unconfined fractured rock aquifers. The source water assessment area was delineated by the WSP using EPA approved methods specifically designed for this source type. Point sources of contamination were investigated within the assessment area from field inspections, contaminant inventory databases and earlier studies. The Maryland Office of Planning's 2000 digital land use map for Washington County was used to find non-point sources of contamination. Well information and water quality data were also reviewed. An aerial photograph and maps showing potential contaminants sources and land use within the Source Water Assessment area are included in this report.

The Cascade Town Center Water supply may be susceptible to contamination by volatile organic compounds, microbial contaminants such as viruses and bacteria, pesticides and herbicides which may come from a variety of sources such as agriculture and domestic uses and organic chemical contaminants including synthetic and volatile organic chemicals which are by-products of industrial processes, petroleum production and septic systems.

Why are there contaminants in my drinking 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity.

Possible contaminants consist of:

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 result from urban stormwater 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 may also come from gas stations, urban stormwater runoff and septic systems

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

To ensure that tap water is safe to drink, USEPA prescribes regulations that limit the number of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

How can I get involved?

For more information on getting involved, please contact Washington County Department of Water Quality at (240) 313-2600.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of contaminants in water provided by public water systems. The table below lists all the drinking water contaminants that we detected during the calendar year of this report.

Although many more contaminants were evaluated, only those substances listed below were found in your water. All sources of drinking water have some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not supply increased protection of public health.

A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have supplied the definitions below the table.

<u>Contaminants</u>	<u>MCLG</u> or <u>MRDLG</u>	<u>MCL,</u> <u>TT,</u> or <u>MRDL</u>	<u>Your</u> <u>Water</u>	<u>Range</u>		<u>Sample</u> <u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
Disinfectants & Disinfectant By-Products								
<i>(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.</i>								
Chlorine (ppm)	4	4	0.9	0.7	0.9	2019	No	Water additive used to control microbes
TTHMs [Total Trihalomethanes] (ppb)	No goal for the total	80	21.98	21.98	21.98	2017	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	No goal for the total	60	16.5	16.5	16.5	2017	No	By-product of drinking water chlorination
Inorganic Contaminants								
Nitrate (measured as Nitrogen, ppm)	10	10	2	0.0	1.8	2019	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Fluoride (ppm)	4.0	4.0	0.377	0.0	0.377	2019	No	Erosion of natural deposits. Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Radioactive Contaminants								
Beta/photon emitters (pCi/L)	0	50	5.6	5.6	5.6	2015	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Combined Radium 226/228 (pCi/L)	0	5	1.6	1.6	1.6	2015	No	Erosion of natural deposits
Gross alpha excluding radon and uranium (pCi/L)	0	15	4.2	4.2	4.2	2015	No	Erosion of natural deposits
			<u>Your</u>	<u>Sample</u>	<u># Samples</u>	<u>Exceeds</u>		
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Water</u>	<u>Date</u>	<u>Exceeding AL</u>	<u>AL</u>	<u>Typical Source</u>	
Inorganic Contaminants								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.21		2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead - action level at consumer taps (ppb)	0	15	3		2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Important Terms

Unit / Term Descriptions	
Unit / Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L) or one ounce in 7,350 gallons of water
ppb	ppb: parts per billion, or micrograms per liter (µg/L) or one ounce in 7,350,000 gallons of water.
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: Not applicable
ND	ND: Not detected
NR	NR: Monitoring not required but recommended
MCLG	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	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
AVG	Regulatory compliance with some MCL's are based on running average of monthly samples
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
Variations and Exemptions	Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions
MRDLG	MRDLG: Maximum residual disinfection 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 contaminants
MRDL	MRDL: Maximum residual disinfectant 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
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Additional Information 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. Washington County, MD 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 or at <http://www.epa.gov/safewater/lead>.

**For more information on the
Cascade Town Center Water
System (Fort Richie) call the
Washington County Department of
Water Quality at
(240) 313-2600**