

Mesa Cortina Water and Sanitation District 2011 Drinking Water Consumer Confidence Report (CCR) For Calendar Year 2010

Public Water System ID: CO0159080

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact **Benson Smith** at **303-670-3936** with any questions about the Drinking Water Consumer Confidence Report or for public participation opportunities that may affect the water quality.

General Information

All 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 (1-800-426-4791).

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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (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 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 that 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Terms and Abbreviations

<u>Term</u>	<u>Abbreviation</u>	<u>Definition</u>
Maximum Contaminant Level Goal	MCLG	The 'Goal' is 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 Contaminant Level	MCL	The 'Maximum Allowed' is 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.
Treatment Technique	TT	A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Action Level	AL	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Maximum Residual Disinfectant Level Goal	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.
Maximum Residual Disinfectant Level	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.
Average of Individual Samples	No Abbreviation	The typical value. Mathematically it is the sum of values divided by the number of samples.
Range of Individual Samples	No Abbreviation	The lowest value to the highest value.
Number of Samples	No Abbreviation	The number or count of values.
Gross Alpha, Including RA, Excluding RN & U	No Abbreviation	This is the gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222 and uranium.
Microscopic Particulate Analysis	MPA	An analysis of surface water organisms and indicators in water. This analysis can be used to determine performance of a surface water treatment plant or to determine the existence of surface water influence on a ground water well.
Variance and Exemptions	V/E	Department permission not to meet an MCL or a treatment technique under certain conditions.
Parts per million = Milligrams per liter	ppm = mg/L	One part per million corresponds to one minute in two years or a single penny in \$10,000.
Parts per billion = Micrograms per liter	ppb = ug/L	One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
Parts per trillion = Nanograms per liter	ppt = nanograms/L	One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
Parts per quadrillion = Picograms per liter	ppq = picograms/L	One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
Picocuries per liter	pCi/L	Picocuries per liter is a measure of the radioactivity in water.
Nephelometric Turbidity Unit	NTU	Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Not Applicable	N/A	Not Applicable
Violation	No Abbreviation	A failure to meet a Colorado Primary Drinking Water Regulation.
Formal Enforcement Action	No Abbreviation	An escalated action taken by the State (due to the number and/or severity of violations) to bring a non-compliant water system back into compliance by a certain time, with an enforceable consequence if the schedule is not met.

Our Water Source(s)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting <http://www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html>, clicking on **Summit** County and selecting **159080; Mesa Cortina WSD** or by contacting **Benson Smith** at **303-670-3936**. For general information about Source Water Assessment please visit <http://www.cdphe.state.co.us/wq/sw/swaphom.html>.

Potential sources of contamination in our source water area come from commercial/industrial transportation, high intensity residential, low intensity residential, urban recreational grasses, deciduous forest, evergreen forest, mixed forest, septic systems, road miles, EPA hazardous waste generators, aboveground, underground and leaking storage tank sites, existing/abandoned mine sites and other facilities.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that **could** occur. It **does not** mean that the contamination **has or will** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan.

Please contact **Benson Smith** at **303-670-3936** to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Water Sources			
Source	Source Type	Water Type	Location
BUFFALO MOUNTAIN MD **	Consecutive Connection	Groundwater	Buffalo Mtn Metro Dist
WELL NO 4*	Well	Groundwater	1959 Royal Buffalo Drive
WELL NO 5*	Well- offline	Groundwater	offline
WELL NO 6*	Well	Groundwater	72 Shooting Star Way

*Note: Mesa Cortina has a waiver from disinfection requirements and serves well water that has not been chlorinated.

**Note: Please see the Consumer Confidence Report for Buffalo Mountain Metropolitan District following this report

Detected Contaminant(s)

Mesa Cortina WSD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2010 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report. Any additional information may be found in the final section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, that means that Mesa Cortina WSD did not detect any contaminants in the last round of monitoring.

Lead and Copper Sampled in the Distribution System									
Analyte Name	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	Action Level	Sample Sites Above Action Level	AL or TT Violation?	Typical Sources	Potential Health Effects from Long-Term Exposure Above the Action Level (unless specified as short-term)
COPPER	01/01/2008 to 12/31/2010	1.2	5	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.	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.
LEAD	01/01/2008 to 12/31/2010	8.1	5	ppb	15	0	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.

Regulated Contaminants Sampled at the Entry Point to the Distribution System										
Analyte Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation?	Typical Sources	Potential Health Effects from Long-Term Exposure Above the MCL (unless specified as short-term)
ARSENIC	2008	2.8	2.8 - 2.8	1	ppb	10	0	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
BARIUM	2008	0.1	0.1 - 0.1	1	ppm	2	2	No	Discharge of drilling wastes; Discharge from	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

									metal refineries; Erosion of natural deposits.	
FLUORIDE	2008	0.44	0.44 - 0.44	1	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
NITRATE	2010	0.22	0.22 - 0.22	1	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Secondary Contaminants**

Analyte Name	Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	Secondary Standard
SODIUM	2008	18	18 - 18	1	ppm	N/A

**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply.

Violation(s) and Formal Enforcement Action(s)

Violations

No Violations to Report

Formal Enforcement Actions

No Formal Enforcement Actions to Report

BUFFALO MOUNTAIN METROPOLITAN DISTRICT

P.O. BOX 2430
SILVERTHORNE, COLORADO 80498-2430
(970) 468-6291
DENVER DIRECT 825-4434
FAX (970) 262-0913

Drinking Water Consumer Confidence Report For Calendar Year 2010 (PWSID CO 159025)

Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

We are pleased to present our Drinking Water Consumer Confidence Report for calendar year 2010. It contains information about the quality of the water we deliver and how it compares with Federal and State drinking water standards. Buffalo Mountain Metropolitan District had no drinking water violations during 2010. The few regulated contaminants that were detectable remained well below allowable standards.

A Word About Water Quality

As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals including, 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 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 byproducts of industrial processes and petroleum production, and also may 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, the Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE) prescribe 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 that must provide the same protection for public health.

All 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.*

General Health Information

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 of infections. These people should seek advice about drinking water from their health care providers.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791. *Cryptosporidium has not been detected in the District's raw or treated water.*

Our Water Source

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water treatment plant receives its supply from four wells that draw ground water from the Colorado Basin Aquifer.

The Colorado Department of Public Health and Environment has completed a Source Water Assessment Report for our source water area. You may obtain a copy of the report at: www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html or by contacting Gary Drescher – Buffalo Mountain Metropolitan District – at (970) 468-6291. Potential sources of contamination in our source water area come from: EPA hazardous waste generators; aboveground, underground and leaking storage tank sites; commercial/industrial/transportation; low intensity residential; forests; and road miles.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that *could* occur. It does not mean that the contamination *has or will* occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your home. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Please contact Gary Drescher – Buffalo Mountain Metropolitan District – at (970) 468-6291 to learn more about what you can do to help protect your drinking water sources.

Questions?

We welcome your questions about this report, as well as any general inquiries you may have. We want our customers to be informed about their water utility, the services we provide and the quality of the water we deliver every day. Please contact Gary Drescher – Buffalo Mountain Metropolitan District – at (970) 468-6291 or Eric Kircher – Metro Services II, the District's contract water operator – at (970) 468-7688. You are also invited to attend the District's Board of Directors meetings, which are typically held the 3rd Tuesday of each month. Please contact us for more information.

Terms and Abbreviations

In this report and in the table on the facing page, you may find terms and abbreviations that are unfamiliar. The following definitions may help you better understand these terms:

- **Action Level (AL):** The concentration of a contaminant in drinking water which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
- **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.
- **Maximum Residual Disinfectant Level (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 (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.
- **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 (µg/L):** 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):** A measure of the radioactivity in water.
- **Running Annual Average (RAA):** The average of monitoring results for the previous 12 calendar months.

Our Water Quality Data

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The tables on the facing page show all detections found during 2010, unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or our system is not considered vulnerable to this type of contamination; therefore, some of our data, though representative, may be more than one year old. The "Range" column in the tables will show a single value for those contaminants that were sampled only once. *All of our test results are below allowed levels.*

This table shows the results of our monitoring for the period from January 1 through December 31, 2010, unless otherwise noted. It does not include contaminants that were tested for, but not detected, such as coliform bacteria.

Inorganic Contaminants

Contaminant	MCL	MCLG	Units	Level Detected & Range	Violation	Sample Date	Typical Sources
Barium	2	2	ppm	0.084	No	11/04/11	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	100	100	ppb	3.4	No	9/25/07	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	4	4	ppm	0.54	No	11/04/10	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	10	10	ppm	0.32	No	11/04/10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Lead and Copper

Contaminant	AL	ALG	Units	90 th Percentile	Number of Sites over AL	Violation	Sample Date/Year	Typical Sources
Copper	1.3	1.3	ppm	0.43	0	No	8/13/08	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	15	0	ppb	2.6	0	No	8/13/08	Corrosion of household plumbing systems; erosion of natural deposits

Disinfectants

Contaminant	MRDL	MRDLG	Units	Level Detected & Range	Violation	Sample Date/Year	Source
Chlorine	4	4	ppm	0.90 0.60 - 1.10	No	2010 RAA	Water additive used to control microbes

Disinfection By-Products

Contaminant	MCL	MCLG	Units	Average	Range	Highest RAA	Violation	Sample Date/Year	Typical Sources
Total Trihalomethanes (TTHM)	60	N/A	ppb	2.08	2.08	n/a	No	11/04/10	By-product of drinking water disinfection

Special Health Information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Infants and young children are typically more vulnerable to **lead** in drinking water than the general population. It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline: (800)426-4791.

Violations

There were no violations received by our water system or ongoing in calendar year 2010.