CITY OF CAÑON CITY 2014 Drinking Water Quality Report
For Calendar Year 2013

Public Water System ID: CO0122100

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 ROBERT W HARTZMAN at 719-269-9019 with any questions about the Drinking Consumer Confidence Rule (CCR) 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) or by visiting http://water.epa.gov/drink/contaminants.

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:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** 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:** may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **Radioactive contaminants:** 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.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit http://wqcdcompliance.com/ccr. The report is located under "Source Water Assessment Reports", and then "Assessment Report by County". Select FREMONT County and find 122100; CITY OF CAÑON CITY or by contacting ROBERT W HARTZMAN at 719-269-9019. 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. Potential sources of contamination in our source water area are listed on the next page.

Please contact us 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.

Our Water Sources

Source	Source Type	Water Type	Potential Source(s) of Contamination
ARKANSAS RIVER	INTAKE	Surface Water	EPA Superfund Sites, EPA Abandoned Contaminated Sites, EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, and EPA Toxic Release Inventory Sites; Permitted Wastewater Discharge Sites; Aboveground, Underground and Leaking Storage Tank Sites; Solid Waste Sites; Existing/Abandoned Mine Sites; and Concentrated Animal Feeding Sites. In addition, several Land Use/Land Cover Types include: Commercial/Industrial Transportation; High & Low Intensity Residential; Urban Recreation Grasses; Quarries/Strip Mines/Gravel Pits; Row Crops; Small Grains; Pasture/Hay; Deciduous Forest; Evergreen Forest; Mixed Forest; Septic Systems; and Road Miles

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** − The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** − 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 and other regulatory requirements.
- **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 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 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.
- **Violation (No Abbreviation)** − Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** − Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** − Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** − Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** − Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** − Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** − Typical value.
- **Range (R)** − Lowest value to the highest value.
- **Sample Size (n)** − Number or count of values (i.e. number of water samples collected).
- **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 = ng/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 = pg/L)** − One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.

Detected Contaminants

The CITY OF CAÑON CITY 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, 2013 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.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	07/12/2011 to 07/15/2011	0.52	30	ppm	1.3		No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/12/2011 to 07/15/2011	4	30	ppb	15		No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System

Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	Highest Compliance Value	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2013	27.33	13.3 to 49.9	15	ppb	60	N/A		No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2013	28.29	14.8 to 45	15	ppb	80	N/A		No	Byproduct of drinking water disinfection
Chlorite	2013	0.21	0 to 0.37	12	ppb	1.0	.8	N/A	No	Byproduct of drinking water disinfection

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water								
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**TT Minimum Ratio**	**TT Violation**	**Typical Sources**
Total Organic Carbon Ratio	2013	1.15	1 to 1.38	12	Ratio	1.00	No	Naturally present in the environment

Summary of Turbidity Sampled at the Entry Point to the Distribution System					
Contaminant Name	**Sample Date**	**Level Found**	**TT Requirement**	**TT Violation**	**Typical Sources**
Turbidity	Date/Month: Apr	Highest single measurement: 0.13 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
Turbidity	Month: Dec	Lowest monthly percentage of samples meeting TT requirement for our technology: 100 %	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Gross Alpha	2011	2.3	2.3 to 2.3	1	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2011	0.1	0.1 to 0.1	1	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2011	2.1	2.1 to 2.1	1	ppb	30	0	No	Erosion of natural deposits

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
Barium	2011	0.04	0.04 to 0.04	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	**Year**	**Average**	**Range Low – High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
									deposits
Cyanide	2011	5	5 to 5	1	ppb	200	200	No	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	2011	1.2	1.2 to 1.2	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2013	0.02	0.02 to 0.02	1	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Violations, Significant Deficiencies, and Formal Enforcement Actions

Violations					
Name	**Category**	**Time Period**	**Health Effects**	**Compliance Value**	**TT Level or MCL**
DBP GROUP	MONITORING, ROUTINE (DBP), MAJOR - MON	10/01/2013 - 12/31/2013	N/A	N/A	N/A

Additional Violation Information

Our water system recently violated a drinking water standard. Although this situation does not require that you take immediate action, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation. 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 4th quarter of the 2013 calendar year our (4) sampling sites for sampling Total Trihalomethanes and Haloacetic Acids in the Distribution System changed. As a result we collected one of the four samples at an incorrect address location. Because of the specifics of the required sampling we were deemed to have not sampled and thus received the Violation Notice. There is nothing you need to do at this time. The system has corrected this violation by sampling at the correct address location.

For more information please contact Robert Hartzman at 719-269-9019. 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.

Additional Information

Source Water Protection Plan

During the 2013 calendar year the Cañon City Water Department completed a 24 month process of developing a Source Water Protection Plan (SWPP). The SWPP's purpose is to minimize degradation of the source water quality in the Upper Arkansas River Basin. Local public water providers, interested stakeholders, and local land planning agencies were engaged to identify ways to proactively reduce contamination risks to the Arkansas River, Cañon City's sole source for supply of drinking water to its residents.

To accomplish the development of the SWPP a Source Water Protection Plan Steering Committee was formed that included individuals from the City of Cañon City Water Department, the City of Florence Water Department, the Fremont County Planning & Zoning Department, the Fremont County Health Department, the Upper Arkansas Area Council of Governments, the Colorado Department of Public Health & Environment, the Colorado Rural Water Association, the Bureau of Land Management, and the Natural Resources Conservation Service.

The Steering Committee listened to presentations from several stakeholders with varied interests that included transportation, septic tanks, agriculture, forestry, mining, stormwater, informing the public and land use planning. With the information provided by these stakeholders the Steering Committee identified several issues of concern that could impact the water quality of the Arkansas River. Those issues of concern included:

Hazardous spill reporting especially along the US HWY 50 corridor between Salida and Cañon City
Management of On Site Wastewater Treatment Systems (septic tanks)
Forest Health/Wildfire mitigation
Abandoned and active mine sites
Highway and County road maintenance procedures
Stormwater Management
Agricultural practices
Public Outreach & Education
Land uses

In addition to identifying these issues of concerns the Steering Committee discussed with these stakeholders what would be considered some Best Management Practices to be used to try and help mitigate these potential sources of contamination. By enacting these Best Management Practices the overall goal is to maintain water quality, reduce future treatment costs, promote sustainable recreation areas, and preserve and restore wetland and aquatic ecosystems for fish and wildlife and the enjoyment of future generations.

This SWPP will be a work in progress as the concepts of the best management practices are further developed and employed. We encourage our water users to become involved in the process. One of the beliefs of the Steering Committee is that local support and acceptance of the plan is more likely where local citizens have been actively recruited and encouraged to participate in the development and implementation of the plan to protect the source of their drinking water.

If citizens have any questions, comments or concerns regarding the Source Water Protection Plan they are urged to contact Robert Hartzman at 719-269-9019.