BACA GRANDE WSD
2009 Drinking Water
Consumer Confident Report
For Calendar Year 2008

Chalet: Public Water System ID # CO0155200
Casita Park: Public Water System ID # CO0155300

Esta es informacion 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 share this information with all the other people who drink this water, especially those who may not have received this Public Notification directly (for example, people in apartments, nursing homes, schools, and businesses). This Public Notification is also posted in the Crestone Post Office.

General Information About Drinking Water

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. 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.
- ***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 stormwater runoff, and septic system.
- Radioactive contaminants, that 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 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 regulation establish limits for contaminants in bottled water that must provide the same protection for public health.

Our Water Source(s)

All of our water, both Baca-Chalets and Baca-Casita Park, is derived from snowmelt from the Crestones, whether from the groundwater aquifer that lies beneath the Baca, or from the surface flow from either South Crestone or Cottonwood Creeks, although it must be emphasized that these surface water supplies are considered as Emergency supplies only. Because our water is so fresh, it is very pure and contains low concentrations of constituents. This purity, however, means that our water is also very aggressive, and would attack plumbing materials it contacts. For that reason we apply a phosphate-based corrosion control compound to control the concentration of lead and copper in the distribution system. Our water sources are listed in the following table:

Source	Water Type
Well No. 18 (Baca-Chalets)	Groundwater
Motel Well (Baca-Casita Park)	Groundwater
Infiltration Gallery – S. Crestone Creek	Surface Water – Emergency Only
Infiltration Gallery – Cottonwood Creek	Surface Water – Emergency Only

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 www.cdphe.state.co.us/wq/sw/swaphom.html or by contacting Steven Harrell at 719-256-4310

Potential sources of contamination in our source water area come from:

- Chalet: direct sources from abandoned mines, indirect sources from forests, residential land use and agriculture (row crops, pasture, hay). Additional indirect sources include septic systems and runoff from roads.
- Casita Park: indirect sources from forests, agriculture (row crops, pasture, hay), septic systems, and runoff from roads

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 Seven Harrell at 719-256-4310 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 very day.

Terms and Abbreviations

The following definitions will help you understand the terms and abbreviations used in this report:

- *Parts per million (ppm) or Milligrams per lit (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 (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 (ppt) or Nanograms per liter (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 (ppq) or Picograms per liter (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.
- *Action Level (AL)* – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- *Treatment Technique (TT)* – a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- *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.
- *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.
- *Running Annual Average (RAA)* – an average of monitoring results for the previous 12 calendar months.
- *Gross Alpha, Including RA, Excluding RN & U* – this is the gross alpha particle activity compliance value. It includes radium-226, but exceeds 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 influences on a ground water well.

Detected Contaminants

Baca Grande 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, 2008 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. The "Range" column in the table(s) below will show a single value for those contaminants that were sampled only once. Violations, if any, are reported in the next section of this report.

Note: Only detected contaminants appear in this report. If no tables appear in this section, that means that Baca Grande WSD will not detect any contaminants in the last round of monitoring.

Organics and Inorganics	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM – Chalet	12/22/2008	0.041	0.035-0.041	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
BARIUM – Casita Park							
NITRATE – Chalet	06/24/2008	0.13	0.094-0.13	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
NITRATE – Casita Park	12/23/2008	0.36	--	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Lead and Copper	Collection Date	90th Percentile	Unit	AL	Typical Source
COPPER, FREE – Chalet	2004	0.11	ppm	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
COPPER FREE – Casita Park	2008	0.089			
LEAD – Chalet	2004	2	ppb	15	Corrosion of household plumbing systems; erosion of natural deposits

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & 228) – Chalet	02/13/2008	0.2	0.2	pCi/L	5	0	Erosion of natural deposits
GROSS ALPHA, EXCLUDING RADON & URANIUM – Chalet	06/24/2008	0.5	0.5	pCi/L	15	0	Erosion of natural deposits

Secondary Contaminants/ Other Monitoring	Collection Date	Highest Value	Range	Unit	Secondary Standard
SODIUM – Chalet	12/22/2008	4.1	2.4-4.1	mg/L	10000
TDS – Chalet	06/24/2008	86	76-86	mg/L	500

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.

Health Information About Water Quality

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.

There are no additional health effects notices.

Violations

Type	Category	Analyte	Compliance Period
MONITORING, ROUTINE (DMP), MAJOR	Failure to Monitor	CHLORINE	07/01/2008 – 09/30/2008
MONITORING (TCR), ROUTINE MAJOR	Failure to Monitor	COLIFORM (TCR)	09/01/2008 – 09/30/2008

Information About the Above Violation(s)

There are no additional required health effects violation notices.

Baca Grande WSD is required to include an explanation of the violation(s) in the above table and the steps taken to resolve the violation(s) with this report.

The two Failure to Monitor violations occurred during the tumultuous period of transition between the former District staff and the new District staff in September 2008. The former District staff provided no transition training to the new staff. The new staff were not aware that an outside consultant had previously been responsible for monitoring tasks that were now the responsibility of the new staff. Thus, the September samples for both Total Coliform and Chlorine Residual were not taken for either public water supply.

To assure that the monitoring tasks are completed appropriately, the District has constructed a monitoring schedule that itemizes all required monitoring tasks, and requires a sign-off once the monitoring has been completed.