



Consumer Confidence Report Case Study - Rifle, Colorado

August 24, 2010

With the consumer confidence report (CCR) season behind us, now is a good time to review a CCR case study that followed many of the practices featured in the Utility Branding Network's CCR checklist to increase public support and enhance your utility's brand.

Attached is the CCR from the City of Rifle Utility Department in Rifle, Colorado. Highlights include:

- Key water quality branding points (or what people can count on from the utility) were provided at the beginning of the CCR.
- A summary was included at the beginning that highlights findings and important issues covered in the CCR.
- The "Transforming Raw Water into Drinking Water" section clearly describes the treatment and testing used to make raw water fit for drinking. This section establishes the utility, its ethics, and its investment as the "source of quality" for the community's drinking water supply.
- Plans for investing in a new treatment facility and enhanced water quality are outlined in the CCR.
- Meaningful headlines are employed to highlight required information, which reduces confusion and water quality concerns.
- In addition to an EPA contact, a local utility contact is provided for supporting community members who have concerns about lead in their water.

The net result is that the CCR is clear, not overly technical, puts required information in a meaningful context, builds the brand of the Rifle Utility Department, and creates water quality confidence.

The Utility Branding Network CCR Checklist is attached with this news release. It is also available as a download on our website at www.utilitybranding.net.

If you have any questions about this specific news release, or would like more information on additional branding support, please email John Ruetten at john@utilitybranding.net.

General Comments - *Feel free to ask questions or to comment on this email. Questions and comments will be compiled and responded to with a follow-up call or email. Please reply to this message or email us at news@utilitybranding.net.*

About the Network - *The Utility Branding Network for water and wastewater agencies is committed to helping utilities better understand branding principles and to help them build a strong brand with their communities. A strong brand increases trust, support, and investment.*

If you are not yet a member of the Network, or just want more information, please contact John Ruetten at john@utilitybranding.net or Jeff Mosher at jeff@utilitybranding.net.

The Network is administered by the National Water Research Institute (NWRI).

Utility Branding Network

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Featuring Calendar Year 2009 Water Quality Results

Why You Should Read This Report !

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



Dear Valued City of Rifle Water Consumer,

This report presents important information on the City of Rifle's drinking water quality. It also discusses our local raw water supplies and our commitment and methods to turn these into drinking water you can trust, delivered to your tap everyday. Additionally, you will find information on how to participate in local water protection and water system improvement efforts and decision-making processes. On behalf of the entire Rifle Utility Department staff, I look forward to serving you each day! Please contact me at 665-6419 for more information or with any questions on this report.

Sincerely,

Charlie Stevens

City of Rifle Utility Director

Our Continuing Commitment to You

Rifle Utility Department's trained, licensed water professionals are committed to:

- High-quality drinking water meeting or exceeding all regulatory standards
- A modern, proactively maintained and reliable water system
- A forward-thinking approach anticipating future community needs and regulations

We know that our customers value their tap water. We appreciate the community support and investment critical to achieving our mission!



Drinking Water Quality Report Highlights



This year's *Drinking Water Quality Report* shows:

- Rifle's drinking water quality and its monitoring program met all state and federal regulatory standards in 2009
- Utility Department staff members conduct many routine tests beyond those reported herein to monitor and optimize water quality
- The Rifle Utility Department actively monitors the quality of its water supplies and collaborates with others to maintain and improve them
- The City's drinking water treatment systems employ multiple barriers to protect our water from disease-causing microorganisms and other contaminants
- The City is currently taking steps necessary to deliver even higher quality drinking water to your tap in the future
- Because no municipal or bottled drinking water is 100% "pure," vulnerable populations should pursue additional information on their drinking water

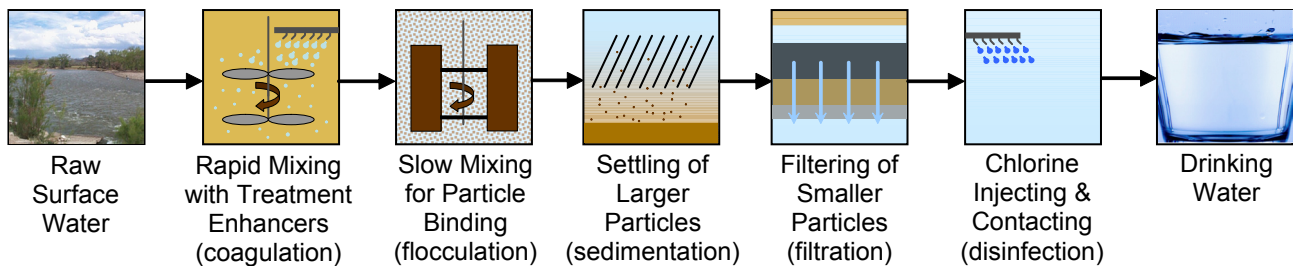


Transforming Raw Water into Drinking Water

Raw water supplies for drinking water production (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the land's surface 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 raw 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 storm water runoff, and septic systems
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities

Turning raw water into drinking water requires several treatment and purification steps. To ensure that the finished drinking water product is safe to drink, the Colorado Department of Public Health and Environment sets regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulates contaminant levels in bottled water that must provide the same protection for public health.



To produce quality, reliable drinking water the Rifle Utility Department invests water customer fees in:

- **Treatment.** We employ time-tested treatment methods with multiple barriers to contaminant passage. We produce drinking water meeting all health-based water quality standards.
- **Training.** All of our treatment plant operators maintain "A"-level licenses, the highest attainable in the State.
- **Testing.** In 2009 we went far beyond the minimum water quality monitoring required by law. Additional testing focused on building a better understanding of our water quality from source to tap. This has allowed us to identify future improvements to make the water even safer and more appealing to our customers.
- **Maintenance.** We are dedicated to proactively maintaining the City's valuable water infrastructure. The advanced water main flushing program we launched this year allows us to better maintain our system and deliver higher-quality water to your tap.
- **Capital Improvements.** We make system improvements annually. We completed multiple projects in 2009 to improve operations at, and water quality from, the Beaver Creek treatment facility. We have added an activated carbon process to the Graham Mesa plant this year to improve the taste of our drinking water.



Rifle Utility Department's Water Supplies

The following table presents information on the raw water supplies the City uses to produce drinking water for its customers.

* Note: The Colorado Department of Public Health and Environment has provided the City with a Source Water Assessment Report (SWAR) listing these potential contamination sources for our supplies. You may obtain a SWAR copy and/or learn about local opportunities to help protect our water supplies by contacting Charles Stevens at (970) 665-6419 or by visiting the following website:

www.cdphe.state.co.us/wq/swswaphom.html



The SWAR provides a screening-level evaluation of potential contamination that could occur. It does not mean such contamination has occurred or will occur. Like many Western Colorado raw water supplies, the City's are relatively high in quality. In recent history, no significant contamination events in either raw water supply have been observed. The City uses the SWAR and other information to make decisions and take actions to minimize risks to our drinking water.

City of Rifle Raw Water Supply		
Item	Colorado River	Beaver Creek
Supply Type	Surface water	Surface water
Fraction of Total Supply	90%	10%
Watershed Location	Central Colorado, west of Continental Divide	North slopes of mountains south of City
General Area of City served	North of Colorado River	South of Colorado River
Potential Contamination Sources*	Fuel storage facilities, sludge application sites, landfills, gas wells, septic tanks, logging operations, industries, factories	



Managing and Monitoring Our Water Supplies

The Rifle Utility Department is committed to effective management and monitoring of the City's raw water supplies. Three recent examples of this commitment are:



- The Colorado River supplies 90% of the City's raw water. Rifle Utility Department staff have collaborated with other watershed stakeholders to launch the Middle Colorado River Watershed Partnership. This group represents a strong collective voice to address water quality and quantity issues in the middle Colorado River.
- The City partnered with a local natural gas producer to install advanced water quality monitoring equipment for its Beaver Creek source. The equipment can detect potential contamination from local gas drilling activities and instantly alert City water plant operators to take action and protect the potable supply.
- The City has developed a municipal water use efficiency plan (www.rifleco.org/index.aspx?nid=308) and has taken initial implementation steps. The efficiency program will extend our valuable water resources and minimize the cost of future drinking water infrastructure improvements. The City promotes wise water use through its actions as a registered USEPA *WaterSense* Partner.





Investing in Our Water Quality Future

High-quality and reliably delivered drinking water is critical to Rifle's economy and community vitality. The Rifle Utility Department

is committed to long-term planning and investment to continuously improve tap water quality.

We live this commitment by:

- Anticipating future water quality regulations and trends in the drinking water industry. We believe these trends warrant investing in state-of-the-art treatment processes.
- Completing treatment testing and conceptual design for a new Water Purification Facility. The concept design contains modern, advanced treatment processes to elevate Rifle's tap water to a whole new quality level. Rifle water customers have expressed to us a strong willingness to support the investment required to make this project a reality.
- Leading a community water use efficiency program. Our water bill inserts provide you with water efficiency tips. We are pursuing grant funding to launch more efficiency program elements. Improving water-use efficiency makes our water supply more reliable and allows staff to focus more on continuing to improve water quality.



Water Quality Testing Results

The City of Rifle conducted all the water quality testing in 2009 required by Federal and State regulations. Indeed, the City conducted many more tests than regulations require. Testing revealed the City's drinking

water quality met all regulatory standards set to safeguard public health. The results tables on the next page present 2009 results and corresponding water quality standards for detected contaminants. These results show:

- The City met health-based water quality standards for all detected contaminants
- Measured levels of almost all detected contaminants were well below the standards
- By achieving a strict operational balance, Rifle Utility Department staff were able to simultaneously meet disinfection (not shown) and disinfection byproduct (DBP) standards. A new Water Purification Facility and planned improvements to the Beaver Creek WTP would allow the City to significantly reduce DBP levels while improving disinfection performance.

Helpful Drinking Water Quality Definitions

The following definitions will help you to better understand the water quality results presented in this year's report:

- **Action Level (AL)** - the level of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
- **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. The State of Colorado enforces these standards.
- **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. These are non-enforceable benchmarks.
- **Nephelometric Turbidity Unit (NTU)** – turbidity is a measure of the “cloudiness” of water due to the presence of light-reflecting particles. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Parts per Billion (ppb)** – a unit of measure for the level (concentration) of a substance in water. One part per billion corresponds to one minute in 2,000 years.
- **Parts per Million (ppm)** – a unit of measure of the level (concentration) of a substance in water. One part per million corresponds to one minute in two years.
- **Running Annual Average (RAA)** - an average of monitoring results for the previous 12 calendar months.
- **Treatment Technique (TT)** - a treatment technique is a required process intended to reduce the level of a contaminant in drinking water

Water Quality Testing Results

Results Measured at the Water Treatment Facilities - Parameters Regulated with MCLs

Detected Contaminant & Unit of Measure	Regulatory Standards		Measurements in Rifle Water		Standard Met? (high value ≤ MCL?)	Typical Source(s) of Contaminant
	MCL	MCLG	Highest Value	Value Range		
Barium, ppm	2	2	0.066	0.052 to 0.066	✓ Yes	Erosion of natural deposits; discharge of drilling wastes
Chromium, ppb	100	100	3.2	2.7 to 3.2	✓ Yes	Erosion of natural deposits
Di (2-ethylhexyl) phthalate, ppb	6	0	4.5	4.5	✓ Yes	Plastic water piping systems
Fluoride, ppm	4	4	0.28	0.28	✓ Yes	Erosion of natural deposits; water additive to promote dental health
Nitrate, ppm	10	10	0.039	0.039	✓ Yes	Fertilizer runoff; septic tank leaching; discharge from sewage plants; erosion of natural deposits
Nitrite*, ppm	1	1	0.0044	0.0044	✓ Yes	Fertilizer runoff; septic tank leaching; discharge from sewage plants; erosion of natural deposits
Selenium, ppb	50	50	2.9	2.9	✓ Yes	Erosion of natural deposits; discharge from mines

* Measurement taken 10/1/2007; City not required to monitor nitrite annually - its level generally does not change much over time

Results Measured at the Water Treatment Facilities - Parameters Regulated with TT Requirements

Detected Contaminant	Treatment Technique (TT) Definition	Standard Set by the TT	Measured in Rifle Water	Standard Met?	Typical Source(s) of Contaminant
Turbidity	<i>Filtration</i> : maximum filtered water turbidity measurement must be ≤ TT standard	1.0 NTU (max.)	0.78 NTU (on 8/17/09)	✓ Yes	Soil runoff
Turbidity	<i>Filtration</i> : percentage of filtered water turbidity measurements ≤ 0.3 NTU must be ≥ TT standard every month	95% (min.)	99% (12/2009 was lowest % month)	✓ Yes	Soil runoff
Total Organic Carbon (TOC)	<i>Coagulation</i> : TOC removal RAA compliance ratio (CR) must be ≥ TT standard	1.0 (min.)	1.5	✓ Yes	Natural organic material present in environment

Results Measured in the Water Distribution System

At Selected Monitoring Sites...

Detected Contaminant & Unit of Measure	Regulatory Standards		Measurements in Rifle Water			Standard Met? (Highest RAA ≤ MCL?)	Typical Source(s) of Contaminant
	MCL	MCLG	Highest RAA Value	Average of all Values	Range of Values		
Total trihalomethanes, ppb	80	N/A	78	60	18 to 91	✓ Yes	Byproduct of drinking water disinfection
Haloacetic acids (HAA5), ppb	60	N/A	37	27	1.0 to 52	✓ Yes	Byproduct of drinking water disinfection

At Customer Taps...

Detected Contaminant & Unit of Measure	Regulatory Standard: Action Level	Measurements in Rifle Water*: 90th Percentile Value	Standard Met? (90th pctl. no greater than AL?)	Typical Source(s) of Contaminant
Copper, ppm	1.3	0.17	✓ Yes	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead, ppb	15	2.5	✓ Yes	Corrosion of household plumbing systems; erosion of natural deposits

* Measurements taken during 2008, 2009 and 2010, as required by the State



City of Rifle
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A Message for Vulnerable Lead and Drinking Water Populations

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.

The City of Rifle recognizes that 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 (800) 426-4791 or visit www.epa.gov/safewater.

Municipal drinking water is a unique product – it is the only life-sustaining resource reliably delivered by others to your home around the clock for your convenient use on demand. This requires special infrastructure – a valuable, extensive, and expensive piping network. Elements of this network, especially residential plumbing systems, contain lead. While the plumbing industry has reduced the lead level in these elements, it has not yet entirely eliminated it. Homes built prior to 1986 are more likely to have plumbing materials with greater lead levels, but newer homes are also at risk.

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 for lead
- flush your tap for 30 seconds to 2 minutes before using your home's tap water
- contact Brian Ulve of the Rifle Utility Department's Water Division at (970) 665-6590 ext. 2 for additional guidance
- call EPA's Safe Drinking Water Hotline (800) 426-4791 for more information

How You Can Help Create Rifle's Water Quality Future



There are multiple ways you can help create Rifle's water quality future:

- Join the Rifle Utility Department's Water Services Advisory Board, a group of City staff and citizens developing ideas and providing advice to the Utility Director on a range of City water issues and decisions. The WSAB meets from 3-5 pm on the fourth Wednesday of each month at City Hall, 202 Railroad Avenue.
- Attend City Council meetings when water issues are up for discussion and decision. These occur the first and third Wednesdays of each month at 7 pm at City Hall.
- Participate in the Middle Colorado Watershed Partnership. Monthly meetings are typically held in Rifle.

Please contact **Charlie Stevens, Rifle Utility Director** at (970) 665-6419 or cstevens@rifleco.org for more information on the contents of this report, Rifle's drinking water quality, or the above-noted participation opportunities. We would love to hear from you!