

2011 CONSUMER CONFIDENCE REPORT



**UPPER EAGLE REGIONAL
WATER AUTHORITY**

**Clean Water.
Quality Life.™**

**846 FOREST RD. | VAIL, CO 81657
(970) 476-7480 | UERWA.ORG
PUBLIC WATER SYSTEM ID # CO0119786**

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

Clean Water. Quality Life.™

Upper Eagle Regional Water Authority (UERWA) is pleased to present this Consumer Confidence Report, which details the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. This report, and the Eagle River Water & Sanitation District's 2011 Consumer Confidence Report, is available online at uerwa.org.



Your public water system delivers clean, filtered water straight to your tap!

For most of the year, we treat surface water from the Eagle River in our Avon treatment plant, which can produce 10 million gallons per day. A 5 million-gallon-per-day micro-filtration treatment plant in Edwards also provides water to the area. During the spring and summer, the system is supplemented with three wells in the Eagle River Alluvial Aquifer in the Edwards area, which can produce 500, 230, and 90 gallons per minute (the equivalent of 0.720, 0.331, and 0.130 million gallons per day, respectively). The Ranch (west) side of Cordillera also runs seven small wells which can produce approximately 450 gallons per minute (0.65 million gallons per day) to supplement that area.

A connection to the Vail well

water system through Dowd Junction can supply up to 2.3 million gallons per day to the UERWA.

It is important that our valued customers be informed about their water utility. Please contact the Water Department Manager at (970) 949-5887 with questions about this report or to schedule a tour of our facilities.

Federal regulations require that this report be distributed to all of Upper Eagle Regional Water Authority's water customers. **There were no violations in the calendar year 2011.** Our goal is to provide you with safe and high quality drinking water. **UERWA's drinking water meets or exceeds all federal and state drinking water standards.**



What's in your water before we treat it?

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 by-products of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.

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 U.S. Environmental Protection Agency (EPA) prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Colorado has a statewide waiver for dioxin monitoring. UERWA has monitoring waivers for glyphosate, cyanide, and asbestos because our system is not considered vulnerable to this type of contamination.

Our facilities are designed to treat for known contaminants in our watershed, and to meet or exceed Federal and State requirements. Please contact the Water Department Manager at (970) 949-5887 to learn more about our water supply system or with questions about any of the information presented.

Source Water Assessment & Protection

A source water assessment has been completed by the State of Colorado. Consumers can obtain a copy of this assessment by going to the State's Source Water Assessment and Protection (SWAP) website at: www.cdphe.state.co.us/wq/sw/swaphom.html or by contacting the Water Department Manager at (970) 949-5887.

Total susceptibility to potential sources of contamination ranges between moderate and moderately high. This rating reflects conditions that exist throughout the entire watershed, and its overall potential for contamination. UERWA continuously monitors its water sources, and is committed to delivering finished drinking water of the highest quality. Potential Sources of contamination in our source water area come from above ground, underground, and leaking storage tanks, existing/abandoned mine sites, EPA hazardous waste generators, EPA abandoned contaminated sites, EPA superfund sites, EPA chemical inventory/storage sites, permitted wastewater discharge sites, high and low intensity residential, commercial/industrial/transportation, urban recreational grasses, quarries/strip mines/gravel pits, pasture/hay, septic systems, row crops, road miles, other facilities; deciduous, evergreen and mixed forests.

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.



Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population.

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.

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.

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.

Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea,

diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

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.



Your drinking water starts as snow and melts into our high alpine streams before it's treated and filtered.





2011

Water Quality Testing Results

UERWA routinely monitors for contaminants in your drinking water according to Federal and State laws. The table below shows all detections found in the period of **January 1 to December 31, 2011**, unless otherwise noted. All are below allowed levels, and there were **no violations for the year 2011. Contaminants that were tested for, but not detected**, include all synthetic organic, inorganic, and volatile organic contaminants, except those listed in the table.

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 these types of contamination. Therefore, some of our data, though representative, may be more than one year old.

Microbiological Contaminants	Violation	Sample Date	MCL OR TT			MCLG	CCR UNITS	LEVEL DE- TECTED	LIKELY SOURCE OF CONTAMINATION
Total Coliform Bacteria	No	Monthly	System collects < 40 samples: 1 positive monthly sample.			0	Absent or Present	0	Naturally present in the environment
Fecal Coliform & E. Coli	No	On Positive Total Coliform	A violation occurs when a routine sample and a repeat sample, in any given month, are total coliform positive and one is also fecal coliform or E. Coli positive.			0	Absent or Present	0	Human and animal fecal waste
Cryptosporidium	No	11/16/11	An MCL is not established. Testing is being done on source water to deter- mine if additional treatment will be required in the future.			N/A	Spores	0	Cryptosporidium is a microbial pathogen found in surface water throughout the United States.
Turbidity	No	7/3/11	TT Value is 0.3. A value less than 95% constitutes a TT violation unless ap- proved by the State. Any measurement in excess of 1.0 is a violation.			N/A	NTU	0.16	Soil Runoff
Lowest Monthly Percent of readings below TT limits: 100%									
RADIONUCLIDE CONTAMINANTS	VIOLATION	SAMPLE DATE	MCL	MCLG	CCR UNITS	LEVEL DETECTED	RANGE	LIKELY SOURCE OF CONTAMINATION	
Alpha Emitters	No	6/8, 11/29 2011	15	0	pCi/l	5	BDL-5	Erosion of natural deposits	
COPPER & LEAD CONTAMINANTS	EXCEEDS AL	SAMPLE DATE	ACTION LEVEL	MCLG	CCR UNITS	90TH PERCENTILE	# SAMPLES EX- CEEDING AL	LIKELY SOURCE OF CONTAMINATION	
Copper	No	Jul - Sept 2010	1.3	1.3	ppm	0.22	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead	No	Jul - Sept 2010	15	0	ppb	2	0	Corrosion of household plumbing systems, erosion of natural deposits	
ORGANIC & INORGANIC CONTAMI- NANTS	VIOLATION	SAMPLE DATE	MCL OR MRDL	MCLG OR MRDLG	CCR UNITS	LEVEL DETECTED	RANGE	LIKELY SOURCE OF CONTAMINATION	
Barium	No	6/8/11	2	2	ppm	0.04	0.036-0.040	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Chlorine	No	Monthly	MRDL = 4	MRDLG = 4	ppm	1.74	0.44-1.74	Water additive used to control microbes.	
Nitrate	No	6/8, 11/14, 11/29 2011	10	10	ppm	3.7	0.12-3.7	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	
DISINFECTION BYPRODUCT CONTAMI- NANTS	VIOLATION	SAMPLE DATE	MCL	MCLG	CCR UNITS	AVERAGE	HIGHEST RAA	RANGE	LIKELY SOURCE OF CONTAMINATION
Total Trihalomethanes	No	Quarterly	80	N/A	ppb	33.2	33.2	3.0-84.2	Byproduct of drinking water chlorination.
Haloacetic Acids	No	Quarterly	60	N/A	ppb	23.2	23.2	BDL - 50.1	Byproduct of drinking water disinfection.
DISINFECTION BYPRODUCT PRECURSOR CONTAMINANT	TT VIOLATION	YEAR	AVG. OF INDIV. RATIO SAMPLES	RANGE OF INDIV. SAMPLES (LOW - HIGH)	# OF SAMPLES	TT MIN. RATIO	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINATION	
Total Organic Carbon (TOC)	No	2011	1	1 - 1	4	Ratio of 1	Ratio	Naturally present in the environment.	
Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.									

OPERATIONS & MANAGEMENT

Your Public Water System is owned by Upper Eagle Regional Water Author- ity, a local government formed by intergovernmental contract. The Authority, a quasi-municipal corporation and political subdivision of the State of Colorado, is organized pursuant to the Water Authority Act.

The Authority provides water service to its six Member Entities (the Metro- politan Districts of Arrowhead, Beaver Creek, Berry Creek, EagleVail, and Edwards, along with the town of Avon) and to Bachelor Gulch and Cordillera. Operation and maintenance of the wa- ter system is provided by Eagle River Water & Sanitation District through an Operations Agreement.

Each Member Entity appoints one Director to the six-member Board of Directors to set policy and oversee operations, which are provided by ERWSD. Board meetings are open to the public and are generally scheduled for the fourth Thursday of each month. The board meeting schedule and other Authority information is available on- line at **uerwa.org** or by calling (970) 476-7480.



UERWA maintains over 1,300 fire hydrants, which are essential to public safety. Fire protection was an original reason to build community water systems.

TERMS & ABBREVIATIONS

The following definitions explain the many terms and abbreviations, that may be unfamiliar, which are used in this report.

Action Level (AL): The concentration of a contaminant, if exceeded, trig- gers treatment or other requirements a water system must follow.

Below Detection Level (BDL): See “Non-Detects”

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 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 Residual Disinfectant Level (MRDL): The highest level of a disinfec- tant 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.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of five NTU is just noticeable to the average person. **90th Percentile:** 90% of results are below this number.

Non-Detects (ND) or Below Detec- tion Level (BDL): Laboratory analysis indicates that the constituent is not

present. (“<” Symbol for less than, the same as ND or BDL)

Not Tested (NT): Not tested. **Parts per million (ppm) or Milligrams per liter (mg/l):** One part per million corresponds to one minute in two years or one 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 one penny in \$10,000,000. **PicoCuries per Liter (pCi/l):** A mea- sure of radioactivity in water.

Running Annual Average (RAA): An average of monitoring results for the previous 12 calendar months.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Variances and Exemptions: State permission not to meet an MCL or a treatment technique under certain conditions.

Waiver: State permission not to test for a specific contaminant.



When Can I Water?

- Adhere to the **odd/even** watering schedule based upon the last digit in your street address.
- The irrigation day runs from midnight to midnight.
- Properties with both odd and even numbered street addresses should contact the Water Conservation Officer to determine the best watering schedule.
- Hoses must have water saving shut off nozzles to prevent free running water.
- Permits are required for consecutive day irrigation.
- Swimming pools are limited to one filling per year, unless draining for repairs is necessary.
- Water shall be used for beneficial purposes only.

DAYS	ADDRESSES THAT MAY WATER	TIMES
Monday	None	None
Tuesday	Odd	Before 10am or after 4pm (MIDNIGHT TO 10AM OR 4PM TO MIDNIGHT)
Wednesday	Even	
Thursday	Odd	
Friday	Even	
Saturday	Odd	
Sunday	Even	

WATER CONSERVATION ITEMS ARE AVAILABLE TO CUSTOMERS FOR FREE AT THE VAIL OFFICE

- **Outdoors:** 6 position garden hose nozzle, soil moisture probe, rain gauge
- **Shower:** ultra-high efficiency shower-head, 5-minute timer
- **Sinks:** bathroom aerators, dual spray kitchen aerator
- **Toilets:** leak detection kit, tank ball, flapper valve, fill cycle diverter



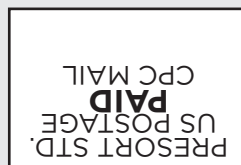
PREVENT WATER WASTE

Water for your landscaping makes up about half of your annual water use.

Landscaping benefits most from slow, thorough, infrequent watering.

Test sprinkler heads regularly for breaks and blockages; check lines for leaks.

Landscaping runoff wastes water and carries pollutants into waterways.



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