



**UPPER EAGLE REGIONAL
WATER AUTHORITY**



2019

Consumer Confidence Report

Clean Water. Quality Life.™

846 FOREST ROAD . 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. The UERWA system is interconnected with the Eagle River Water & Sanitation District (ERWSD) public water system. For more information about your drinking water, please see both entities' water quality data reports, available online at uerwa.org.



For most of the year, we treat surface water from the Eagle River at our Avon treatment plant, which can produce 10 million gallons per day. A 5 million-gallon-per-day microfiltration treatment plant in Edwards also provides water to the area. The system is supplemented with four wells in the Eagle River Alluvial Aquifer in the Edwards area, which can produce 650, 500, 230, and 90 gallons per minute (the equivalent of 0.940, 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 ERWSD's well water system through Dowd Junction can supply up to 2.3 million gallons per day of treated water.

It is important that our valued customers be informed about their water utility. Please contact the Customer Service department at **(970) 477-5451** with questions about this report or to schedule a tour of our facilities.

Federal regulations require that this report be distributed to all UERWA and ERWSD water customers. Our goal is to provide you with safe and high quality drinking water. **UERWA's and ERWSD's drinking water meets or surpasses 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 byproducts 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) and the Colorado Department of Public Health and Environment (CDPHE) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Our facilities are designed to treat for known contaminants in our watershed, and to meet or surpass federal and state requirements. Please contact the Customer Service department at (970) 477-5451 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 website at:

<https://www.colorado.gov/pacific/cdphe/swap-assessment-phase> or by contacting the Customer Service department at (970) 477-5451.

UERWA continuously monitors its water sources, and is committed to delivering finished drinking water of the highest quality.

Our source water area includes two surface water treatment facilities and 11 groundwater wells. Potential sources of contamination in our source water area include: above ground, underground, and leaking storage tank sites; 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; and 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.



At the 2018 GoPro Mountain Games. Photo by Rick Lohre courtesy of Vail Valley Foundation.

Important 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 from infections. These people should seek advice about drinking water from their health care providers. EPA and U.S. Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 EPA's Safe Drinking Water Hotline (1-800-426-4791) or by visiting epa.gov/ground-water-and-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 epa.gov/safewater/lead.



2019

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, 2019**, unless otherwise noted. All are below allowed levels. The table below only lists detected contaminants; those **that were tested for, but not detected**, include all synthetic organic, inorganic, and volatile organic contaminants regulated under the Safe Drinking Water Act.

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. Also, if only one sample was required then the range and level detected will be listed with only a single value.

The EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. The EPA uses the results of UCMR monitoring to learn the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. UERWA performed this monitoring and reported the analytical results of the monitoring to the EPA in accordance with its UCMR. Once the EPA reviews these submitted results, the results are made available in the EPA's Natural Contaminant Occurrence Database (NCOD). Consumers can view UCMR results by accessing the NCOD online. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided in the data table below.

MICROBIOLOGICAL CONTAMINANTS	VIOLATION	SAMPLE FREQUENCY	MCL OR TT			MCLG	CCR UNITS	LEVEL DETECTED	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
Turbidity	No	Monthly	Maximum 1 NTU for any single measurement.			N/A	NTU	Highest single measurement 0.26 (Nov.)	Soil runoff
	No	Monthly	In any month, at least 95% of samples must be below 0.1 NTU.			N/A	%	99% TT requirement met (June)	Soil runoff
RADIONUCLIDE CONTAMINANTS	VIOLATION	SAMPLE DATE	MCL	MCLG	CCR UNITS	LEVEL DETECTED (AVERAGE)	RANGE	LIKELY SOURCE OF CONTAMINATION	
Gross Alpha Emitters	No	Feb. & June 2014	15	0	pCi/L	1.7	BDL - 3.6	Erosion of natural deposits	
Combined Uranium	No	Feb. & June 2014	30	0	ppb	1.9	1.1 - 2.2	Erosion of natural deposits	
COPPER & LEAD CONTAMINANTS	EXCEEDS AL	SAMPLE DATE	90TH PERCENTILE ACTION LEVEL	MCLG	CCR UNITS	90TH PERCENTILE	SAMPLE SITES ABOVE AL	LIKELY SOURCE OF CONTAMINATION	
Copper	No	June - July 2019	1.3	1.3	ppm	0.34	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead	No	June - July 2019	15	0	ppb	2.7	0	Corrosion of household plumbing systems, erosion of natural deposits	
TREATMENT DISINFECTION	TT-VIOLATION	SAMPLE FREQUENCY	TT REQUIREMENT	MRDL	SAMPLES BELOW TT LEVEL	CCR UNITS	SAMPLE SIZE	RANGE	LIKELY SOURCE OF CONTAMINATION
Chlorine in the distribution system	No	Monthly	No more than 1 sample below 0.2 ppm	4.0	0	ppm	300/year	0.40 - 2.5	Water additive used to control microbes
ORGANIC & INORGANIC CONTAMINANTS	VIOLATION	SAMPLE DATE	MCL	MCLG	CCR UNITS	LEVEL DETECTED (AVERAGE)	RANGE	LIKELY SOURCE OF CONTAMINATION	
Barium	No	Dec. 2019	2	2	ppm	0.07	0.06 - 0.07	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Chromium	No	Dec. 2019	100	100	ppm	0.50	BDL - 1.5	Discharge from steel and pulp mills; erosion of natural deposits	
Fluoride	No	Dec. 2019	4	4	ppm	0.10	0.08 - 0.13	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
Dichlorophenoxyacetic acid (2,4-D)	No	June 2017	70	70	ppb	0.27	0.27	Runoff from herbicide used on row crops	
Nitrate	No	Nov. 2019	10	10	ppm	1.16	0.32 - 2	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Sodium	N/A	Dec. 2019	N/A - Sodium has secondary standards which are non-enforceable guidelines for contaminants that may cause cosmetic or aesthetic effects, but no health effects.		ppm	12.33	9 - 16	Erosion of natural deposits; road salt; water treatment chemicals; wastewater treatment effluents	
DISINFECTION BYPRODUCT CONTAMINANTS	VIOLATION	SAMPLE FREQUENCY	MCL	MCLG	CCR UNITS	LEVEL DETECTED (AVERAGE)	HIGHEST LRAA	RANGE	LIKELY SOURCE OF CONTAMINATION
Total Trihalomethanes	No	Quarterly	80	N/A	ppb	31.38	38.50	11 - 44	Byproduct of drinking water chlorination
Total Haloacetic Acids	No	Quarterly	60	N/A	ppb	17.52	23.25	4.5 - 34	Byproduct of drinking water disinfection
DISINFECTION BYPRODUCT PRECURSOR CONTAMINANT	TT VIOLATION	SAMPLE FREQUENCY	LEVEL DETECTED (AVERAGE)	RANGE	# OF SAMPLES	TT REQUIREMENT	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINATION	
Total Organic Carbon	No	Quarterly	1.1	1.00 - 1.27	4	Ratio > 1.0	Ratio	Naturally present in the environment	
Total organic carbon 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.									
UNREGULATED CONTAMINANT MONITORING RULE (UCMR4)	SAMPLE DATE	LEVEL DETECTED (AVERAGE)	RANGE	# OF SAMPLES	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINATION			
Total Manganese	Aug. - Nov. 2019	1.26	BDL - 4.9	7	ppb	Erosion of natural deposits			
Bromide	Aug. - Nov. 2019	27.9	7.3 - 57	4	ppb	Disinfection by-product precursor contaminant; naturally present in the environment			
Total Organic Carbon	Aug. - Nov. 2019	1.4	0.94 - 1.9	4	ppm	Disinfection by-product precursor contaminant; naturally present in the environment			
HAA5	Aug. - Nov. 2019	19.2	3.8 - 32	8	ppb	Byproduct of drinking water chlorination			
HAA6Br	Aug. - Nov. 2019	11.1	4.2 - 14	8	ppb	Byproduct of drinking water chlorination			
HAA9	Aug. - Nov. 2019	28.5	7.3 - 44	8	ppb	Byproduct of drinking water chlorination			

OPERATIONS & MANAGEMENT

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

UERWA provides water service to its six Member Entities (the metropolitan 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 water system is provided by ERWSD 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 UERWA information is available at uerwa.org or by calling (970) 477-5451.

TERMS & ABBREVIATIONS

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

Action Level (AL): The concentration of a contaminant, if exceeded, triggers treatment or other requirements a water system must comply with.

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 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.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of five NTU is just noticeable to the average person.

VIOLATIONS

UERWA received five violations in 2019, all attributed to an inadequate backflow protection and cross connection control (BPCCC) program. The violations were for failures to 1) develop or implement a written BPCCC program, 2) develop a written BPCCC program annual report, 3) comply with the requirements for surveying our system for cross connections, 4) repair cross-connection assemblies within 60 days or a CDPHE-approved alternative schedule, and 5) complete the testing requirements for backflow prevention devices. Uncontrolled cross connections can lead to inadvertent contamination of the drinking water.

Since receiving the violations, UERWA has been working to improve our BPCCC program. UERWA has achieved 2019 compliance with the first four violations and is working to achieve compliance with the fifth violation by Dec. 31, 2020, which is the end of the next compliance period. UERWA will continue to distribute quarterly notification letters to all customers with progress updates until full compliance is achieved.

90th Percentile: 90% of results are below this number.

Non-Detects (ND) or Below Detection 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 measure of radioactivity in water.

Running Annual Average (RAA): An average of monitoring results for the previous 12 calendar months. **LRAA** is a locational RAA specific to a monitoring site.

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

Variations 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.

**Providing efficient, effective, and reliable water utility services
in a manner that respects the natural environment**



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For more information, contact Customer Service at (970) 477-5451 or go to uerwa.org. @VailCOwater



When Can I Water?

- Adhere to the **odd/even** outdoor water use schedule based on the last digit in your street address.
- Watering day is from midnight to midnight.
- Properties with both odd and even numbered street addresses should contact Customer Service to determine the best watering schedule.
- Hoses must have water-saving shutoff nozzles to prevent free-running water.
- Swimming pools are limited to one filling per year, unless draining for repairs is necessary.
- Water shall be used for beneficial purposes only.

DAY	ADDRESSES THAT MAY WATER	TIMES
Monday – NO OUTDOOR WATER USE		
Tuesday	Odd	Before 10 a.m. or After 4 p.m. ~ <small>(MIDNIGHT TO 10 A.M. OR 4 P.M. TO MIDNIGHT)</small>
Wednesday	Even	
Thursday	Odd	
Friday	Even	
Saturday	Odd	
Sunday	Even	

PREVENT WATER WASTE

Your landscaping choices are directly connected to local stream water quality.

Reduce outdoor water waste to leave more flow in the streams and prevent runoff from carrying pollutants into waterways.

ARE YOU WATERSMART?

This free service is part of our commitment to provide our customers with the best tools to manage and understand water use and bills.

Get started today by logging on to the WaterSmart portal at erwsd.watersmart.com.