



**UPPER EAGLE REGIONAL
WATER AUTHORITY**



2018

**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. This report, and the Eagle River Water & Sanitation District's 2018 Consumer Confidence Report, is available online at uerwa.org.



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. 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 the Vail well water system through Dowd Junction can supply up to 2.3 million gallons per day to the UERWA. This water exchange typically occurs in the spring and the fall.

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 of Upper Eagle Regional Water Authority's water customers. Our goal is to provide you with safe and high quality drinking water. **UERWA'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) 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.

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

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.

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.

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 internal 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, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised 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.





2018

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, 2018**, 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.

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.

| MICROBIOLOGICAL CONTAMINANTS | VIOLATION | SAMPLE DATE | 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 (Avon Drinking Water Facility) | No | Nov. 2018 | Maximum 1 NTU for any single measurement. | N/A | NTU | Highest single measurement 0.27 | Soil runoff |
| Turbidity (Edwards Drinking Water Facility) | No | Dec. 2018 | In any month, at least 95% of samples must be below 0.1 NTU. | N/A | % | 100% TT requirement met | 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 - Sept. 2018 | 1.3 | 1.3 | ppm | 0.87 | 0 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead | No | June - Sept. 2018 | 15 | 0 | ppb | 1.9 | 0 | Corrosion of household plumbing systems, erosion of natural deposits |

| TREATMENT DISINFECTION | TT-VIOLATION | SAMPLE DATE | TT REQUIREMENT | SAMPLES BELOW TT LEVEL | CCR UNITS | SAMPLE SIZE | RANGE | LIKELY SOURCE OF CONTAMINATION |
|--|--------------|-------------|--|------------------------|-----------|-------------|---------------------------|---|
| Chlorine at entry point to distribution | No | Continuous | No more than 4 hours with a sample below 0.2 ppm | 0 | % | 3270 | 100% of samples > 0.2 ppm | Water additive used to control microbes |
| Chlorine in the distribution system | No | Monthly | No more than 1 sample below 0.2 ppm | 0 | ppm | 300 | 0.41 - 2.2 | Water additive used to control microbes |

| ORGANIC & INORGANIC CONTAMINANTS | VIOLATION | SAMPLE DATE | MCL OR MRDL | MCLG OR MRDLG | CCR UNITS | LEVEL DETECTED (AVERAGE) | RANGE | LIKELY SOURCE OF CONTAMINATION |
|---|-----------|-------------|-------------|---------------|-----------|--------------------------|---------------|---|
| Barium | No | Aug. 2018 | 2 | 2 | ppm | 0.060 | 0.045 - 0.068 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Fluoride | No | Daily | 4 | 4 | ppm | 0.36 | 0.03 - 1.08 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Hexachlorocyclopentadiene | No | June 2018 | 50 | 50 | ppb | 0.062 | 0.062 | Discharge from chemical 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 | Aug. 2018 | 10 | 10 | ppm | 1.08 | 0.23 - 1.70 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

| DISINFECTION BYPRODUCT CONTAMINANTS | VIOLATION | SAMPLE DATE | MCL | MCLG | CCR UNITS | AVERAGE | HIGHEST LRAA | RANGE | LIKELY SOURCE OF CONTAMINATION |
|-------------------------------------|-----------|-------------|-----|------|-----------|---------|--------------|----------|--|
| Total Trihalomethanes | No | Quarterly | 80 | N/A | ppb | 32 | 48 | 8.6 - 54 | Byproduct of drinking water chlorination |
| Total Haloacetic Acids | No | Quarterly | 60 | N/A | ppb | 16 | 25 | 1.5 - 28 | Byproduct of drinking water disinfection |

| DISINFECTION BYPRODUCT PRECURSOR CONTAMINANT | TT VIOLATION | SAMPLE DATE | AVG. OF INDIV. RATIO SAMPLES | RANGE OF INDIV. SAMPLES (LOW - HIGH) | # OF SAMPLES | TT REQUIREMENT | UNIT OF MEASURE | LIKELY SOURCE OF CONTAMINATION |
|--|--------------|-------------|------------------------------|--------------------------------------|--------------|----------------|-----------------|--------------------------------------|
| Total Organic Carbon (TOC) | No | Quarterly | 1.07 | 1.00 - 1.16 | 4 | Ratio > 1.0 | 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.

| LONG TERM 2 ENHANCED SURFACE WATER TREATMENT RULE: SOURCE WATER MONITORING | VIOLATION | SAMPLE DATE | MCL | BIN CLASSIFICATION | # OF POSITIVES | SAMPLE SIZE | LIKELY SOURCE OF CONTAMINATION |
|--|-----------|------------------|-----|--------------------|----------------|-------------|---|
| Cryptosporidium | No | Jan. - Oct. 2018 | N/A | 1 | 2 | 20 | Cryptosporidium is a microbial pathogen found in surface water throughout the United States |
| E. Coli | No | Jan. - Oct. 2018 | N/A | 1 | 19 | 20 | Human and animal fecal waste |

OPERATIONS & MANAGEMENT

Your Public Water System is owned by Upper Eagle Regional Water Authority, 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 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 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 at uerwa.org or by calling (970) 477-5451.

Partnership for Safe Water

The Avon Drinking Water Facility (ADWF) is committed to the Partnership for Safe Water – a voluntary effort between six drinking water organizations and more than 200 water utilities throughout the United States with a mission to improve the quality of water delivered to customers by optimizing water system operations. The facility is in the third phase of the four-phase program aimed at improving performance beyond even proposed regulatory levels. ADWF received the Directors Award of Recognition from the Partnership for Safe Water in 2017 and has continued to achieve the water quality goals set forth by this partnership in 2018.

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 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 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.

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.

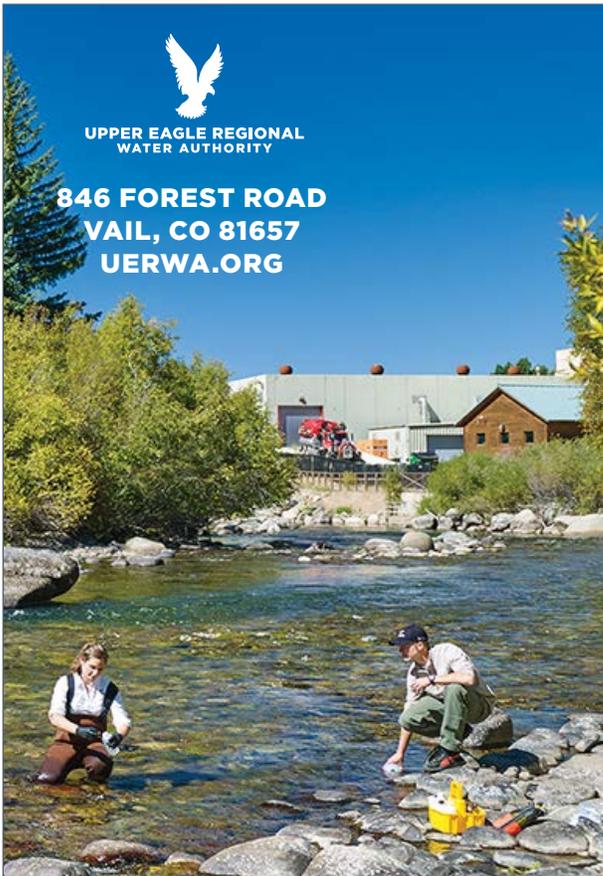
Running Annual Average (RAA): An average of monitoring results for the previous 12 calendar months. **LRAA** is a locational RAA specific to a monitoring site.

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](https://twitter.com/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. |
| Wednesday | Even | |
| Thursday | Odd | ~ |
| Friday | Even | |
| Saturday | Odd | (MIDNIGHT TO 10 A.M. OR 4 P.M. TO MIDNIGHT) |
| Sunday | Even | |

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

- **Outdoor:** 6-position garden hose nozzle, soil moisture probe, rain gauge
- **Toilet:** dye tablets to detect leaks, fill cycle diverter



PREVENT WATER WASTE

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 ditches or storm drains that flow directly to waterways.

Prevent runoff to improve stream water quality.