



2023 TOWN OF EAGLE

# WATER QUALITY REPORT



# TABLE OF CONTENTS

## P.I – P.3

Introduction

General Information

## P.4

Lead in Drinking Water

## P.5

Source Water Assessment &  
Protection

## P.6 – P.7

Our Water Sources  
Terms and Abbreviations

## P.8 – P.10

Detected Contaminants

## P.II

Unregulated Contaminants

## P.I2

Violations, Significant  
Deficiencies & Formal Actions

## P.I4

Next Steps

## P.I3

Water Demand &  
2024 Water Supply Outlook

## P.I5

Conclusion

# INTRODUCTION

Public Water System ID: CO0119233

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

The Town of Eagle is committed to ensuring its customers have access to safe and reliable drinking water. The 2023 Drinking Water Quality Report offers a summary of water quality testing outcomes for the 2023 calendar year, along with updated details about Eagle's water treatment facilities.

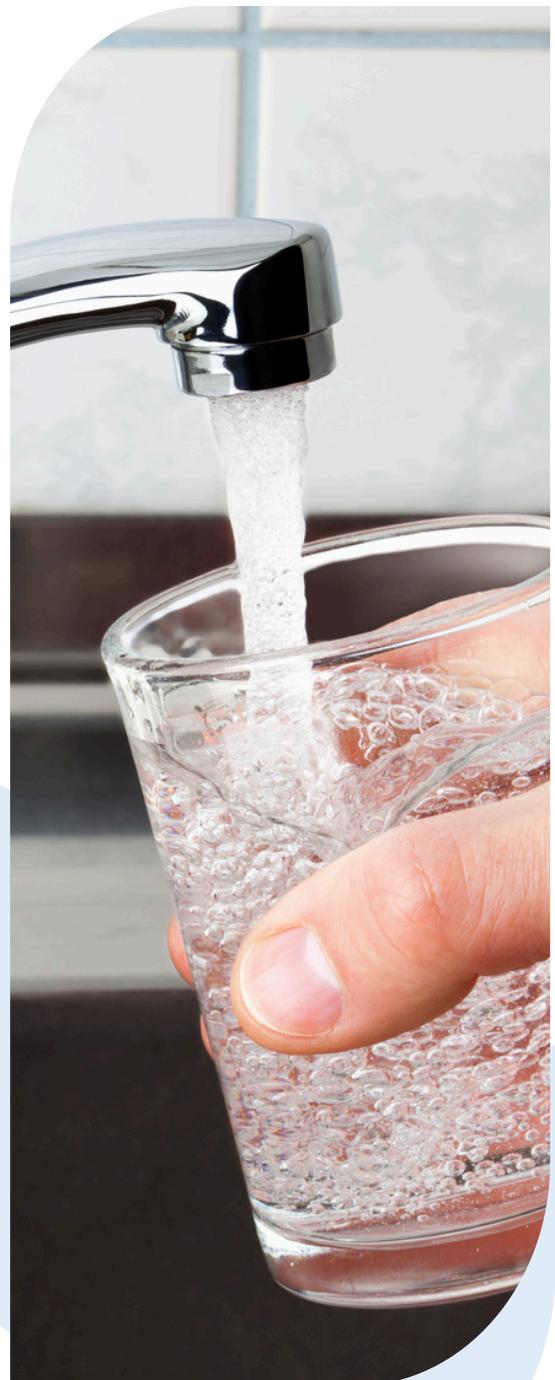
Our ongoing objective to provide you with a safe and dependable supply of drinking water. Should you have any inquiries or seek opportunities for public involvement that may impact water quality, contact the town's Water Plant Manager Kyle Anderson at 970-328-6678. For additional information regarding your drinking water and other utilities, visit [townofeagle.org](http://townofeagle.org).

## GENERAL INFORMATION

### **Brush Creek is Eagles Water Source**

Eagle's drinking water source is predominately snowmelt from mountains above Yeoman Park and Sylvan Lake State Park that flows into Brush Creek and its tributaries. Eagle treats surface water from Brush Creek at the Upper Basin Water Treatment Plant (UBWTP) and Lower Basin Water Treatment Plant (LBWTP) year-round. These treatment plants are currently capable of producing 4.3 and 2.5 million gallons per day of potable water respectively.

Water from the UBWTP is transported 7.5 miles down the Brush Creek drainage into Eagle via a potable water transmission main. The LBWTP is located in town at the confluence of Brush Creek with the Eagle River. Through this arrangement, the town can selectively leave more water in the lower section of Brush Creek by balancing production between the facilities. Doing this helps us to minimize our impacts on the aquatic health of Brush Creek.



## General Information

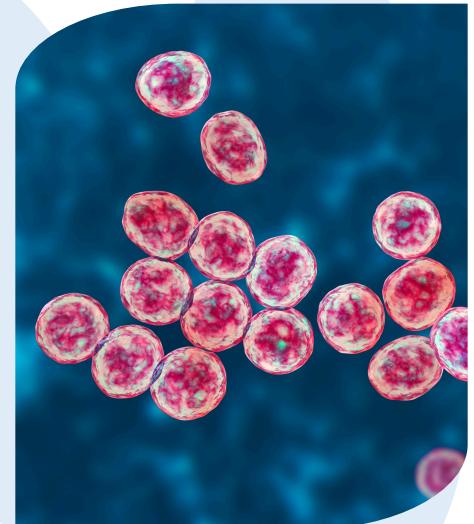
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. All water may reasonably be expected to contain small amounts of some contaminants.



More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).

Contaminants that may be present in source water include:

- **Microbial contaminants:** Viruses and bacteria may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants:** 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:** May come from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.
- **Radioactive contaminants:** These can be naturally occurring or be the result of oil and gas production and mining activities.
- **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.



## General Information

To ensure our tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the number of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Our valued customers must be informed about their water. Contact the town at 970-328-6678 with questions about any of the information presented in this report, to learn more about our water supply system or to schedule a tour of our facilities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. Individuals with these conditions 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.



# LEAD IN DRINKING WATER

Lead exposure poses significant health risks, particularly for pregnant women and young children. The presence of lead in drinking water primarily stems from materials and components in service lines and plumbing systems. While we are committed to delivering high-quality drinking water and eliminating lead pipes, we cannot regulate the diverse array of materials used in household plumbing. Thus, property owners share responsibility for safeguarding their residences from potential lead exposure within plumbing systems. Property owners can take responsibility by identifying and removing lead materials within their plumbing and take steps to reduce risks. Before drinking tap water, it's advised that pipes are flushed for several minutes by running the tap, taking a shower, doing laundry or dishes. Additionally, filters certified by an American National Standards Institute accredited certifier can be used to reduce lead levels in drinking water. For concerns about lead contamination in property's drinking water or to have it tested, contact Kyle Anderson at 970-328-6678. Detailed information regarding lead in drinking water, testing methodology and strategies to minimize exposure can be found at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).



# SOURCE WATER ASSESSMENT & PROTECTION (SWAP)

A source water assessment has been completed by the State of Colorado and consumers can access a copy of this assessment through the state's Source Water Assessment and Protection website at <https://cdphe.colorado.gov/swap-assessment-phase>. To find the assessment, search the table using the code **119233EAGLETOWNOF** or reach out to the town directly. Eagle consistently monitors its water sources at both treatment facilities and is committed to providing high-quality drinking water.

Potential sources of contamination within our source water area encompass various factors such as above-ground and underground leaking storage tank sites, existing/abandoned mine sites, agricultural lands, high and low-intensity residential, commercial, industrial and transportation zones, septic systems, road networks, other facilities and diverse forest types including deciduous, evergreen and mixed forests.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not imply that contamination has occurred or will occur. This information aids in evaluating the necessity to enhance current water treatment capabilities and prepare for future contamination threats, ensuring the consistent delivery of quality finished water to residences. Additionally, the results of the source water assessment serve as a foundation for developing a source water protection plan.



# OUR WATER SOURCES

## Sources (Water Type- Source Type)

LOWER BRUSH CREEK  
(Surface Water-Intake)  
BRUSH CREEK  
(Surface Water-Intake)

## Potential Source(s) of Contamination

Existing/Abandoned Mine Sites,  
Pasture/Hay, Deciduous Forest,  
Evergreen Forest, Mixed Forest, Septic  
Systems, Road Miles

## Terms and Abbreviations

- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **Average (x-bar)** – Typical value.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Health-Based** – A violation of either a MCL or TT.
- **Level 1 Assessment** – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment** – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **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.
- **Maximum Residual Disinfectant Level (MRDL)** – The highest level of disinfectant allowed in drinking water. There is convincing evidence that the 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.

## Terms and Abbreviations

- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Not Applicable (N/A)** – Does not apply or not available.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.



# DETECTED CONTAMINANTS

The town routinely monitors for contaminants in your drinking water according to federal and state laws. The following tables show all detections found from January 1 - December 31, 2023, 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. Violations and formal enforcement actions, if any, are reported in the next section of this report.

Note: Only detected contaminants sampled within the last five years appear in this report. If no tables appear in this section, then no contaminants were detected in the last round of monitoring.

## Disinfectants Sampled in the Distribution System

**TT Requirement:** At least 95% of samples per period (month or quarter) must be at least 0.2 ppm **OR**

If sample size is less than 40 no more than 1 sample is below 0.2 ppm

**Typical Sources:** Water additive used to control microbes

Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2023	Lowest period percentage of samples meeting TT requirement: 100%	0	10	No	4.0 ppm

## Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	4/15/2022 to 5/12/2022	0.12	40	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	10/7/2022 to 10/21/2022	1.1	40	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	10/7/2022 to 10/21/2022	0.06	40	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	4/15/2022 to 5/12/2022	1.5	40	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

## Detected Contaminants

Disinfection Byproducts Sampled in the Distribution System									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2023	28.11	12.3 to 53.4	8	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2023	33.81	15.6 to 53.1	8	ppb	80	N/A	No	Byproduct of drinking water disinfection

Summary of Turbidity Sampled at the Entry Point to the Distribution System							
Contaminant Name	Sample Date	Level Found		TT Requirement		TT Violation	Typical Sources
Turbidity	Date/Month: Jan	<u>Highest single</u> measurement: 0.142 NTU		Maximum 1 NTU for any single measurement		No	Soil Runoff
Turbidity	Month: Dec	<u>Lowest monthly</u> percentage of samples meeting TT requirement for our technology: 100 %		In any month, at least 95% of samples must be less than 0.1 NTU		No	Soil Runoff

Radionuclides Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2022	0.76	0 to 3.06	4	pCi/L	15	0	No	Erosion of natural deposits
Combined Uranium	2022	2.52	0.73 to 3.7	6	ppb	30	0	No	Erosion of natural deposits



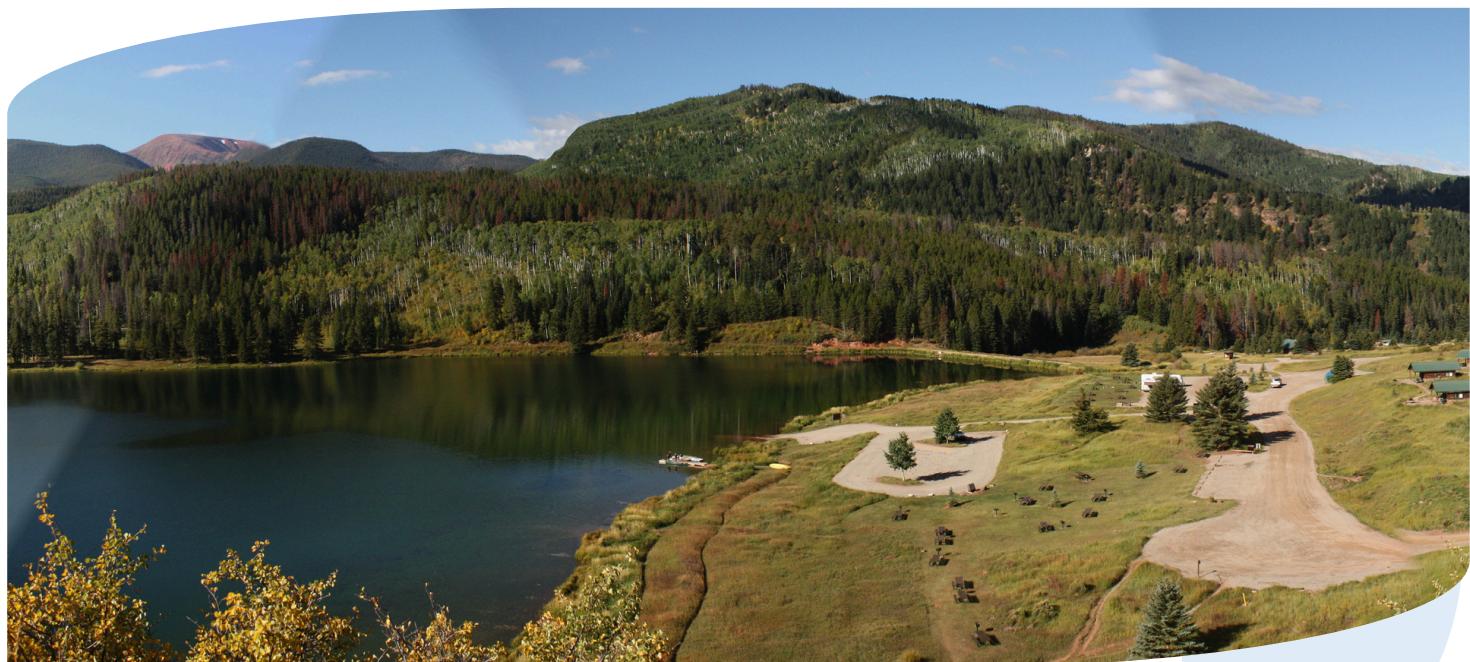
## Detected Contaminants

Inorganic Contaminants Sampled at the Entry Point to the Distribution System										
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources	
Barium	2023	0.04	0.04 to 0.04	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Fluoride	2023	0.14	0 to 0.27	2	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
Nitrate	2023	0.04	0.04 to 0.04	2	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	

### Cryptosporidium

Contaminant Name	Year	Number of Positives	Sample Size
Cryptosporidium	2023	1	1

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. 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. 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.



## Detected Contaminants

Secondary Contaminants**						
**Secondary standards are <u>non-enforceable</u> 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.						
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2023	12.3	2.5 to 22.1	2	ppm	N/A

# UNREGULATED CONTAMINANTS

All Unregulated Contaminant Monitoring Rule (UCMR) results were reported as below UCMR 5 minimum reporting level (MRL). The UCMR 5 MRLs are based on laboratory capability and are not associated with contaminant health effects information

### Unregulated Contaminants\*\*\*

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. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) ([epa.gov/dwucmr/national-contaminant-occurrence-database-ncod](http://epa.gov/dwucmr/national-contaminant-occurrence-database-ncod)) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure

All Unregulated Contaminant Monitoring Rule Results were reported as below the UCMR 5 minimum reporting level (MRL). The UCMR 5 MRLs are based on laboratory capability and are not associated with contaminant health effects information.

\*\*\*More information about the contaminants that were included in UCMR monitoring can be found at: [drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR](http://drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR). Learn more about the EPA UCMR at: [epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule](http://epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule) or contact the Safe Drinking Water Hotline at (800) 426-4791 or [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).



# VIOLATIONS, SIGNIFICANT DEFICIENCIES & FORMAL ENFORCEMENT ACTIONS

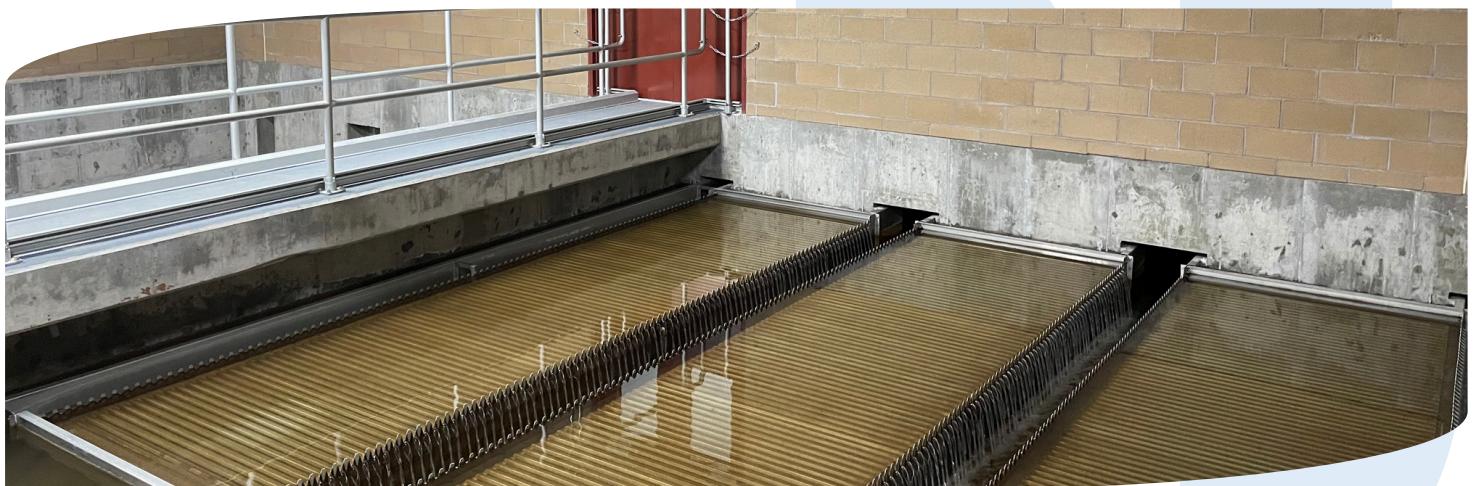
## August 14, 2023: Timely Reporting - Failure to Distribute Consumer Confidence Report

On August 14, 2023, the town's water system received reporting violations for Failure to Distribute Consumer Confidence Report (CCR). There is not a public health risk, impacted water treatment, or water quality issues. However, as our customer you have a right to know what happened and what we are doing to correct this situation.

### Background:

On June 13, 2023, the town was notified by the Division that additional information was required in the CCR distributed on June 1, 2023. The additions were made and CCR redistributed with the June billing on July 2, 2023. The July 2 redistribution date did not meet the Division's July 1 deadline. We realize the importance of communicating water quality information to you and the efforts we take to ensure the water is safe to drink.

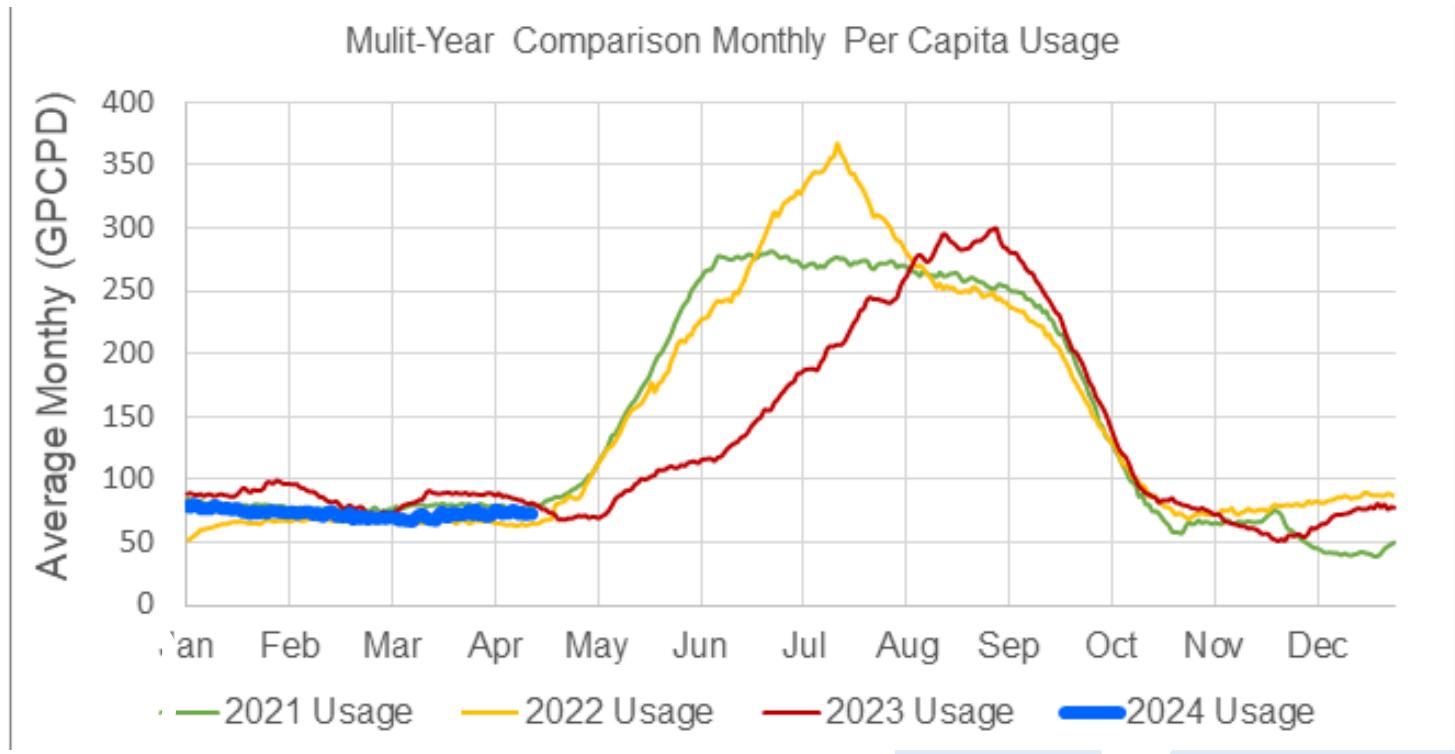
All 2023 - Violation			
Name	Description	Time Period & Health Effect	Status
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS - M614	12/08/2022 - 01/03/2023 We have an inadequate backflow prevention and cross-connection control program. Uncontrolled cross connections can lead to inadvertent contamination of the drinking water.	Resolved - Compliance Ratio Met. 12/31/2022
CONSUMER CONFIDENCE RULE	FAILURE TO DELIVER AN ANNUAL CONSUMER CONFIDENCE (WATER QUALITY) REPORT TO THE PUBLIC/CONSUMERS	07/01/2023 - 07/05/2023 NA	Resolved – The Revised CCR was redistributed on 07/02/2023 with billing.



# WATER DEMAND AND 2024 SUPPLY OUTLOOK

## Looking Back

Eagle currently diverts all of its water from one water source (Brush Creek), so it is important that the Eagle community does its part to manage its water use. Eagle's overall water consumption has steadily increased over the past 20 years trending with a population that has steadily increased. Our total diversions from Brush Creek have increased by approximately 30 percent, while the Eagle population has grown by over 30 percent. During 2023, seasonal water usage increases from 70 gallons per capita per day (GPCPD) in the winter to a peak of 300 GPCPD during the summer irrigation months. A large amount of water is used for landscape irrigation. In 2020, Eagle finalized its Water Efficiency & Conservation Plan with the goals to reduce total per capita outdoor water use by at least 10 percent and to improve systemwide water efficiency by 10 percent. For more information about the Water Efficiency & Conservation Plan, visit [townofeagle.org/414/Town-Utilities](http://townofeagle.org/414/Town-Utilities).



## Water Supply Outlook 2024

Eagle's water supply begins with snow deposits in the high country. On April 1, 2024, the snowpack in Eagle's watershed was reported at 105 percent of normal at the Vail Mountain SNOTEL site and 106 percent above normal at the Fremont Pass site. Since both sites are showing above 80 percent of normal snowpack, Eagle is able to enter the summer without water restrictions. However, that is subject to change as winter transitions into summer. All in all, Eagle's water supply looks very sustainable as long as we continue to use it wisely.

# NEXT STEPS

## How Can You Save Water? Be Waterwise

One effective method is to limit watering to no more than three days per week, ideally between 6 p.m. and 10 a.m. and promptly addressing any leaks. Concerned about excessive water use by your kids? Consider this: a leaky toilet can far surpass their water consumption. Even minor toilet leaks can waste over 100 gallons of water daily. To detect leaks, add a few drops of food coloring to the toilet tank, wait 15 minutes, then inspect the toilet bowl for any color change. If the water in the bowl changes color, you have a leak.



## Water Quality: Make a Difference From Your Own Backyard

The storm drainage system serves to gather stormwater, comprising rain and snowmelt, directing it untreated into Brush Creek. During this process, pollutants are carried along as rain and snowmelt traverse various surfaces like lawns, roads, and parking lots, accumulating substances such as fertilizers, pesticides, oil, and sediments before entering Brush Creek. The introduction of contaminants into the creek not only diminishes the quality of our drinking water source but also compromises the habitats of fish and wildlife. Here are some tips for Lawn and Garden Care:

- Leave grass clippings on the lawn to reduce the required nitrogen by 1/4 to 1/3.
- After mowing, sweep grass clippings from paved areas to prevent them from washing into gutters.
- Implement erosion control measures such as mulch, native grass, terraces or hardscaping in bare areas.
- Minimize herbicide use by cutting, pulling or spot-treating for noxious weeds.
- If your property borders a waterway, maintain a natural buffer zone and refrain from mowing or applying chemicals directly adjacent to the water's edge.
- Conduct a soil test to determine the nutrient requirements of your yard.



For More Information



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970-471-4486

**Town of Eagle Lead Water Plant Operator**

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