

GRAND COUNTY WATER NO 1 2022 Drinking Water Quality Report Covering Data For Calendar Year 2021

Public Water System ID: CO0125323

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

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact KRIS D BASSETT at 970-726-5583 with any questions or for public participation opportunities that may affect water quality.

General Information

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. 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.

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. 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 (1-800-426-4791).

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:** viruses and bacteria that 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 storm water 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 storm water runoff, and residential uses.
- **Radioactive contaminants:** 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 storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount 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.

Lead in 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.

Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit wqcdcompliance.com/ccr. The report is located under “Guidance: Source Water Assessment Reports”. Search the table using 125323, GRAND COUNTY WATER NO 1, or by contacting KRIS D BASSETT at 970-726-5583. 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. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
BIG VASQUEZ CREEK (Surface Water-Intake) LITTLE VASQUEZ CREEK (Surface Water-Intake)	Existing/Abandoned Mine Sites, Deciduous Forest, Evergreen Forest, Septic Systems, Road Miles

Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 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 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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **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.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **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.
- **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).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **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.
- **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.
- **Not Applicable (N/A)** – Does not apply or not available.
- **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.



Detected Contaminants

GRAND COUNTY WATER NO 1 routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2021 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 5 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, 2021	<u>Lowest period</u> percentage of samples meeting TT requirement: 100%	0	6	No	4.0 ppm

Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources
Copper	11/10/2021 to 12/21/2021	0.09	40	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	06/10/2021 to 06/24/2021	9	40	ppb	15	3	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	06/10/2021 to 06/24/2021	0.31	40	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	11/10/2021 to 12/21/2021	2	40	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

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)	2021	29.45	16.6 to 42.4	8	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2021	28.94	14.8 to 44.2	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: May	<u>Highest single</u> measurement: 0.43 NTU	Maximum 0.5 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	2019	1.3	1.2 to 1.4	2	pCi/L	15	0	No	Erosion of natural deposits

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	2021	0.01	0 to 0.01	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2021	0.5	0 to 1	2	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2021	0.2	0 to 0.39	2	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Secondary Contaminants**

**Secondary standards are non-enforceable 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	2021	3.35	3.2 to 3.5	2	ppm	N/A



Violations, Significant Deficiencies, and Formal Enforcement Actions

Health-Based Violations

Maximum contaminant level (MCL) violations: Test results for this contaminant show that the level was too high for the time period shown. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation that we told you about in a past notice. We are evaluating, or we already completed an evaluation, to find the best way to reduce or remove the contaminant. If the solution will take an extended period of time, we will keep you updated with quarterly notices.

Treatment technique (TT) violations: We failed to complete an action that could affect water quality. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation that we told you about in a past notice. We were required to meet a minimum operation/treatment standard, we were required to make upgrades to our system, or we were required to evaluate our system for potential sanitary defects, and we failed to do so in the time period shown below. If the solution will take an extended period of time, we will keep you updated with quarterly notices.

Name	Description	Time Period	Health Effects	Compliance Value	TT Level or MCL
STORAGE TANK RULE	FAILURE TO INSPECT STORAGE TANK(S) AND/OR FAILURE TO CORRECT STORAGE TANK DEFECTS - F318	10/28/2021 - 11/18/2021 RESOLVED	May pose a risk to public health.	N/A	N/A
STATE HEALTH DEPT INSPECTION	FAILURE TO CORRECT A SIGNIFICANT DEFICIENCY FOR VIOLATION - T901	12/02/2016 - 02/04/2021 RESOLVED	May pose a risk to public health.	N/A	N/A
STATE HEALTH DEPT INSPECTION	FAILURE TO CORRECT A SIGNIFICANT DEFICIENCY FOR VIOLATION - T901	12/02/2016 - 02/04/2021 RESOLVED	May pose a risk to public health.	N/A	N/A
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS - M614	10/28/2021 – Open	We have an inadequate backflow prevention and cross-connection control program. Uncontrolled cross connections can lead to inadvertent contamination of the drinking water. This is due to one or more of the following: We have permitted an uncontrolled cross connection, AND/OR we have installed or permitted an uncontrolled cross connection, AND/OR we failed to comply with the requirements for surveying our system for cross connections, AND/OR we failed to complete the testing requirements for backflow prevention devices or methods, AND/OR we failed to notify the State Health Dept of a backflow contamination event.	N/A	N/A

Health-Based Violations

Maximum contaminant level (MCL) violations: Test results for this contaminant show that the level was too high for the time period shown. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation that we told you about in a past notice. We are evaluating, or we already completed an evaluation, to find the best way to reduce or remove the contaminant. If the solution will take an extended period of time, we will keep you updated with quarterly notices.

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Name	Description	Time Period	Health Effects	Compliance Value	TT Level or MCL
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Additional Violation Information

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Describe the steps taken to resolve the violation(s), and the anticipated resolution date:

Cross Connection Rule (M614)- The District has surveyed all water connections within the District and is currently working to complete the following: 1. All commercial, industrial and multi-family properties connected to the District's water system are required to have a testable backflow device installed and the District is in the process of getting properties in compliance with this requirement. 2. The District is currently enforcing its Rules and Regulations Section 3.17. Enforcement of annual testing of all backflow prevention devices and collection of test reports is now being completed. All test reports need to be emailed to backflow@gcws1.com and we are in the process of notifying all connections in need of the annual backflow prevention device testing.

Non-Health-Based Violations

These violations do not usually mean that there was a problem with the water quality. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), we reported the sample result after the due date, or we did not complete a report/notice by the required date.

Name	Description	Time Period
TURBIDITY	EQUIPMENT VERIFICATION OR CALIBRATION – R532	10/28/2021 – Open
STORAGE TANK RULE	FAILURE TO MEET STORAGE TANK REQUIREMENTS – F330	10/28/2021 – 11/23/2021 RESOLVED

Non-Health-Based Violations

These violations do not usually mean that there was a problem with the water quality. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), we reported the sample result after the due date, or we did not complete a report/notice by the required date.

Name	Description	Time Period
LEAD & COPPER RULE	FAILURE TO MONITOR AND/OR REPORT	07/01/2020 – 01/05/2021 RESOLVED
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS – M613	10/28/2021 – 10/28/2021 RESOLVED
CONSUMER CONFIDENCE RULE	FAILURE TO DELIVER AN ANNUAL CONSUMER CONFIDENCE (WATER QUALITY) REPORT TO THE PUBLIC/CONSUMERS	07/01/2021 – 12/08/2021 RESOLVED
CHLORINE	EQUIPMENT VERIFICATION OR CALIBRATION – R531	10/28/2021 – 02/17/2022 RESOLVED

Additional Violation Information

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Describe the steps taken to resolve the violation(s), and the anticipated resolution date:

Turbidity Calibration (R532)- The District has purchased a new online turbidimeter and it will be installed and calibrated quarterly. This is expected to be resolved by July 1, 2022.

Significant Deficiencies

A situation, practice, or condition that may potentially result in drinking water quality that poses an unacceptable risk to public health and welfare and/or may potentially introduce contamination into the drinking water.

Date Identified	Deficiency Description	Deficiency Explanation and Steps Taken or Will Take to Correct	Estimated Completion Date

Significant Deficiencies

A situation, practice, or condition that may potentially result in drinking water quality that poses an unacceptable risk to public health and welfare and/or may potentially introduce contamination into the drinking water.

Date Identified	Deficiency Description	Deficiency Explanation and Steps Taken or Will Take to Correct	Estimated Completion Date
9/29/2021	T310 - PRIOR TO ENTRY POINT STORAGE CONDITION; The condition of the storage structure may allow potential sources of contamination to enter the tank.;	The hatch on the clearwell at Little Mac Treatment Plant will be upgraded to an acceptable hatch that meets Colorado State Design Criteria for Potable Water Systems. This project will begin when snow melts and work can be completed.	10/01/2022
9/29/2021	T131 - ALARM EQUIPMENT; No provisions to notify operators of treatment failures/malfunctions.;	SCADA control system has been updated to shut the water treatment plant down when final effluent turbidity exceeds 0.5 NTU	Completed-3/25/2022
9/29/2021	T119 - PROPER OPERATION; Surface water or ground water under the direct influence (GWUDI) of surface water treatment operational practices. Regulation 11, Section 11.8(1)(b) and CDPHE-WQCD Policy 4.;	A Standard Operating Procedure (SOP) has been written and approved on how to confirm the block and bleed valve assemblies are operating properly.	Completed-2/7/2022

Backflow and Cross-Connection

M614- We have an inadequate backflow prevention and cross-connection control program. Uncontrolled cross connections can lead to inadvertent contamination of the drinking water. See above for plan to resolve violation.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Grand County Water & Sanitation District #1

Had the following Violations Identified During a Drinking Water Inspection

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Our water system recently violated a drinking water requirement. Although this situation is not an emergency, as our customers you have a right to know what happened, what you should do, and what we are doing to correct this situation.

A routine drinking water inspection conducted on 9/27/2021 by the state drinking water program identified the following violations that may pose a risk to public health.

Identified Violation	Date Correction is Required	Steps We Are Taking
F330- Storage Tank Plan	Resolved	We have developed and implemented an annual storage tank plan.
M613- Annual Backflow Report	Resolved	Backflow report has been submitted and The Department has deemed this violation resolved.
R531-Disinfectant Monitoring Equipment Verification	Resolved	Weekly verification checks of our disinfectant monitoring equipment is now a part of our newly developed standard operating procedures.
F318- Periodic Storage Tank Inspections not Documented	Resolved	Tank inspections were performed in the years of 2019 and 2020 though not documented. Full documentation has been provided for 2021 and will continue for the following years.
R532- Turbidimeter Monitoring Equipment Calibration	7/1/2022	New turbidity monitoring equipment is being installed in the Big Mac Water Treatment Plant and will be calibrated quarterly by manufacturer's recommendations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the inspection it was identified that we did not completely document all of our required monitoring or testing. With routine sampling throughout the distribution system, we guarantee the drinking water quality meets State drinking water standards and is safe for consumption.

What does this mean? What should I do?

- There is nothing you need to do at this time. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

Most of the identified violations have been resolved with the State Health Department. We anticipate resolving the last identified violation (R532) by **July 1, 2022**. For more information, please contact **Kris Bassett** at **kbassett@gcws1.com** or **970-726-5583**, or **PO Box 3077, Winter Park, CO 80482**.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by: Grand County Water & Sanitation District #1 - CO0125323
Date distributed: **5-1-2022**