

2023 Annual Water Quality Report

City of Riverton

PWS WY5600047

Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúscalo o hable con alguien que lo entienda bien.

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

Our water source consists of both surface and ground water. Our surface water is diverted from the Wind River via the LeClair irrigation canal and is treated at the City of Riverton Water Treatment Plant. Our ground water is drawn from 14 wells tapping the Wind River aquifer.

Source water assessment and its availability

Our source water assessment is available at the City Hall (816 N Federal Blvd) and the City of Riverton website, www.riverton.wyoming.com.

Why are there contaminants in my drinking water?

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (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: 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, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

If you want to learn more, please attend any of our regularly scheduled City Council meetings. They are held on the first and third Tuesday of every month at 7:00 PM located at the City Hall, 816 N Federal Blvd.

Description of Water Treatment Process

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal or other filters that remove even smaller particles. A small amount of chlorine or other disinfection method is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and ensuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below, please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Additional Information for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Riverton - Water Treatment Plant is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. 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. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased

protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl ₂) (ppm)	4	4	0.87	0.02	0.87	2023	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	25	ND	25	2023	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	38	1.3	38	2023	No	By-product of drinking water disinfection
Total Organic Carbon (% Removal)	NA	TT	45.64	NA	NA	2023	No	Naturally present in the environment
Inorganic Contaminants								
Nitrate [measured as Nitrogen] (ppm)	10	10	0.06	ND	0.06	2023	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)	NA		9.5	NA	NA	2023	No	Erosion of natural deposits; Leaching
Microbiological Contaminants								
Turbidity (NTU)	NA	0.3	100	NA	NA	2023	No	Soil runoff
100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.19. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	3	ND	3	2022	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	3.8	0.5	3.8	2022	No	Erosion of natural deposits
Uranium (ug/L)	0	30	3	ND	3	2022	No	Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.485	2023	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	4	2023	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Additional Monitoring

As part of an on-going evaluation program, the EPA has required us to monitor for some contaminants in drinking water that are not currently regulated.

Under the Fifth Unregulated Contaminant Monitoring Rule (UCMR5), EPA is gathering information on the occurrence of 29 per- and polyfluoroalkyl substances (PFAS) and lithium in drinking water. UCMR5 is intended to improve understanding about the presence and quantity of these substances in public drinking water systems, and EPA often does not have full knowledge of the health effects for these unregulated contaminants. The UCMR5 data collected on PFAS and lithium from drinking water systems will help the EPA make determinations about future regulations and other actions to protect public health under the Safe Drinking Water Act. The process of developing regulatory standards is careful, deliberative, and data based. Monitoring for contaminants that are not regulated also helps federal, state, and other researchers prioritize studies for health effects information, identify data gaps, and determine the need for future studies to improve our understanding of the possible health risks associated with these contaminants in public drinking water. Information collected through the monitoring of these contaminants will help to ensure that future decisions on drinking water standards are based on sound science. For more information about UCMR5, visit <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule>.

Name	Average Level	Range	
		Low	High
Perfluoropentanesulfonic acid (PFPeS) (ppt)	6.5	Non-detect	13
Perfluoropentanoic acid (PFPeA) (ppt)	9.5	Non-detect	19
Perfluorobutanoic acid (PFBA) (ppt)	2.5	Non-detect	5
Perfluorohexanoic acid (PFHxA) (ppt)	14	Non-detect	28
perfluorooctanesulfonic acid (PFOS) (ppt)	3.5	Non-detect	7
perfluorohexanesulfonic acid (PFHxS) (ppt)	18.5	Non-detect	37

Name	Average Level	Range	
		Low	High
perfluoroheptanoic acid (PFHpA) (ppt)	1.8	Non-detect	3.6
perfluorobutanesulfonic acid (PFBS) (ppt)	6.5	Non-detect	13
Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.			

The City of Riverton collected treated drinking water samples for UCMR5 contaminants in May and November of 2023. One location served by Airport Well #2 had detections of PFAS in the drinking water in November but not during the sample collection in May. The average and range of the results are noted in the table above. To further assess the water quality, we have been working with the EPA to conduct additional sampling. On January 22, 2024, confirmation samples were collected for the Airport Well #2 water supply, as well as a blend of the Airport Well #2 and Airport Well #3 water supplies, and analyzed by the EPA Region 8 Laboratory. No contaminants were detected except for a low detection of 3.13 ppt PFHxS for Airport Well #2. No contaminants were detected in the blended supply. On April 9 and 10, 2024, we collected additional samples of the Airport Well #2 water supply under different operating conditions. These samples were analyzed by the EPA Region 8 Laboratory and no contaminants were found in any of the samples.

On April 10, the EPA announced the final National Primary Drinking Water Regulation (NPDWR), establishing legally enforceable maximum contaminant levels (MCLs) for the following six PFAS chemicals individually and in mixtures: PFOA, PFOS, PFHxS, PFNA, PFBS, and HFPO-DA. The new regulation will protect people against the adverse health effects associated with long-term exposure to PFAS, which include but are not limited to: effects on the liver (*e.g.*, liver cell death), growth and development (*e.g.*, low birth weight), hormone levels, kidney, the immune system (reduced response to vaccines), lipid levels (*e.g.*, high cholesterol), the nervous system, and reproduction, as well as increased risk of certain types of cancer. More information can be found here: <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>. PFOA, PFOS, PFHxS, PFNA, PFBS, and HFPO-DA were included in UCMR5 monitoring. The MCL standards are set at the highest level of each contaminant that will be allowed in drinking water. This new regulation will require public water systems like the City of Riverton to begin monitoring for these 6 PFAS by 2027. This sampling will be guided by EPA Region 8.

The new PFAS regulation’s requirements for public water systems will be implemented over five years, giving public water systems the time to make the changes needed to meet the new standards. The current PFAS results for Airport Well #2 do not violate the MCLs, which will go into effect in 2029. The water supply from Airport Well #2 is currently non-detect for PFAS. Additional sampling in the future will enable the City of Riverton to monitor the situation and determine if the results are the same and/or remain below the MCLs.

What do the PFAS detections mean for you?

PFAS are manmade chemicals that are widely used and last a long time when released into the environment. This PFAS detection is not an emergency. If it had affected you, you would have been notified within 24 hours. The human health risks of exposure to these identified PFAS compound(s) are based on lifetime exposure rather than short-term exposure.

What is being done?

We will continue to work with EPA. We have investigated potential sources of the PFAS that were detected. The Wyoming Department of Environmental Quality will also support our efforts, which will

include additional source investigation and sampling as part of an area wide study this spring.

We are committed to ongoing monitoring and keeping you informed of the results and recommendations for further action.

Additional information about PFAS can be found on EPA’s website at <https://www.epa.gov/pfas>.

Name	Average Level	Range	
		Low	High
Lithium (ppb)	10	9.1	11

During sample collection for UCMR5 contaminants in May and November 2023, the City of Riverton detected lithium in two wells within the Riverton well field. The average and range of the results are noted in the table above. Lithium is a naturally occurring metal and may be found at higher concentrations in certain parts of the country, particularly in groundwater sources in arid locations in the Western U.S.

Lithium has been used in pharmaceuticals for a long time to treat certain medical conditions under the care of a physician. Despite the abundance of information on patients receiving lithium at therapeutic levels, there has historically been limited information available to evaluate health risks in people at the levels associated with typical drinking water consumption, which are thought to be much lower than patients prescribed lithium as a therapy. Getting a better understanding of how much environmental lithium the public may be exposed to is one of the reasons the EPA is choosing to monitor for the presence and levels of lithium in drinking water systems around the country.

At present, EPA cannot confidently estimate the risk for people with lithium exposures from drinking water between the UCMR5 reporting limit of 9 µg/L (micrograms per liter) and a much higher concentration equivalent to a therapeutic dose. Therapeutic doses of lithium generally range from 600 to 1,200 mg/day (milligrams per day), which would be the equivalent of drinking water containing ≥ 240,000 µg/L lithium. The science on the potential for lithium’s effects on human health, and at what levels including those which may be present in the environment, is still evolving.

For more information on lithium, visit <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule#lithium>.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Availability of Monitoring Data for Unregulated Contaminants for the City of Riverton

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don’t yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Millie Hoffmann at 307-857-6891.

This notice is being sent to you by the City of Riverton. State Water System ID#: WY5600047

Date distributed: 6-11-2024.

Unit Descriptions	
Term	Definition
ug/L	ug/L : Number of micrograms of substance in one liter of water
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required but recommended.
Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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