EASY STEPS TO AVOID POSSIBLE EXPOSURE TO LEAD FROM PLUMBING

- Never use water from the hot water tap for making baby formula.
- Use only fresh water from the cold water tap for drinking or cooking.
- Avoid using water that has been standing in the pipes. When a faucet or drinking fountain is not used for more than six hours, run the cold water tap until the water feels noticeably colder (about 30 seconds to 2 minutes). This flushes standing water out of the pipes replacing it with fresh water. To conserve water, catch the flushed tap water for plants or other household use.
- Insist on lead-free solder and lead-free fixtures when repairing or replacing plumbing.
- Soft water can be more corrosive and dissolve higher levels of lead if it is present in plumbing. Home water treatment devices such as water softeners can make water more corrosive.
- Look for faucets that are NSF certified to limit contaminants to acceptable drinking water levels.

NEED MORE INFORMATION?

Your questions, concerns, and observations are important to us. Contact Casper Public Utilities at 235-8213 or on the web at **www.casperwy.gov**. For more information about potential health effects of water contaminants, contact the U.S. Environmental Protection Agency at 800-227-8917; the Safe Drinking Water Hotline, 800-426-4791; or on the web at **www.epa.gov/safewater**.

PLEASE RECYCLE THIS MAGAZINE PRODUCT.

IMMUNO-COMPROMISED SPECIAL HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some elderly and infants, can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. Guidelines from the Environmental Protection Agency and the Centers for Disease Control on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

HOW CAN I GET INVOLVED IN WATER QUALITY DECISIONS?

We want our customers to be informed about their water utility. If you want to learn more, please attend any of the regularly scheduled meetings of the following groups:

Casper Public Utilities Advisory Board on the fourth Wednesday of every month at 7 a.m. in the Downstairs Meeting Room at Casper City Hall, 200 N. David St. or **Central Wyoming Regional Water System** on the third Tuesday of every month at 11:30 a.m. in the Conference Room at the Regional Water Treatment Plant, 1500 S.W. Wyoming Blvd.

FROM THE EPA

All drinking water (both tap and bottled) comes from sources that include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and, in some cases, radioactive materials. It can also pick up substances resulting from the presence of animal or human activity.

Contaminants that may be present in source water before it is treated include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural operations and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming.
- Pesticides and herbicides that can come from agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants that can come from industrial processes, gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants that can be naturally occurring or the result of oil and gas production and mining activities.

LEAD & COPPER

In 2014 the City of Casper conducted tests for lead and copper in its water distribution system. These are required samples that are done every three years. We are proud to report that the results show we are below the Action Level for both lead and copper.

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.

The City of Casper 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 **www.epa.gov/safewater/lead**.

CLEARLY QUALITY

DRINKING WATER QUALITY REPORT

2015

We are proud to provide you with our 2015 Drinking Water Quality Report. This report lets you know that our drinking water is safe and that it meets or exceeds all the stringent drinking water quality standards set forth by the Environmental Protection Agency (EPA).

The 2015 Drinking Water Quality Report summarizes the results of the water testing we performed on the water we provided you in 2015. The information should look familiar. As part of the Safe Drinking Water Act, we are required to report to you annually, and most of the language in the report is required too.

Congress and the EPA want people to know what is in their drinking water. We agree. The more you know about your drinking water — its source, its treatment and its quality — the better equipped you are to participate in water-related discussions. Providing you with a safe and dependable supply of drinking water is our mission.

We at the City of Casper work around the clock to protect our water and provide top quality water to every tap. We ask that you help us protect our water too. See page 2 for things you can do.

One dollar purchases approximately 300 gallons of high quality Casper Water, and it's available right from your tap!

Casper Water has to pass stringent state and federal clean water standards.

When you drink Casper Water, you know from where it comes, how clean it is, and how it has been treated.

PLEASE RECYCLE THIS MAGAZINE PRODUCT.

ATTENTION PROPERTY OWNERS AND MANAGERS:
Please share this report with your tenants.

Find this report online at **www.casperwy.gov**.

Casper WYOCITY

SOURCES OF CASPER'S DRINKING WATER

The City of Casper purchases wholesale water from the Central Wyoming Regional Water System for your use. The water comes from two sources:

70% GROUNDWATER

Groundwater provides an average of 70 percent of Casper's water. Groundwater is pumped from the North Platte River alluvial aquifer via 29 wells and is treated with ozone and chloramines for disinfection and a corrosion inhibitor to reduce corrosion of water mains and residential plumbing systems.

30% SURFACE WATER

An average of 30 percent of Casper's water is surface water drawn from the North Platte River. This water originates as snowmelt from the upper North Platte River basin and is clarified, disinfected with ozone, filtered, disinfected with chloramines and treated with a corrosion inhibitor before it is released into the distribution system.

7 WAYS TO SAFEGUARD DRINKING WATER

1. Take unwanted prescription and over-the-counter medicines (leave in original package and place in a zip bag) to the lobby drop box at the Casper Police Department. It's free and available 24/7. Never flush medicines (human or animal).

2. Limit the use of fertilizers and weed killers. Use according to the manufacturer's label. Rain and sprinkler water wash these contaminants from your lawn into the storm drain, which flows to the North Platte River untreated.

3. Pick up pet waste. It's a serious water contaminant that washes from your lawn into the storm drain.

4. Pick up litter and debris from your lawn and street. Anything that is put in the street gutter, including grass cuttings and leaves, eventually flows untreated into our creeks and North Platte River.

5. Wash paint brushes and paint pans (water-based paint only) in the kitchen, bathroom, or utility sink. This water goes to the wastewater treatment plant.

6. Take cleaners, poisons, paint, oil and chemicals to the City's Special Waste Facility located across from the landfill. It's free. Never put harmful wastes into trash containers. These wastes can find their way from the landfill into groundwater and the North Platte River. Unsure whether something is hazardous or harmful? Call 235-8246.

7. Report chemical, gas, oil and other spills to nonemergency dispatch at 235-8278.

IN OUR WATER

The 17 substances listed in the table on the right were detected in Casper's water during 2015. All are below levels allowed by federal regulations. We tested for 66 other contaminants. They are not listed because they were not detected. These include volatile organic contaminants and synthetic organic contaminants like pesticides and herbicides.

Your water is monitored 365 days a year. Tests are done before and after treatment and while your water is in the distribution system. The results are compared to the stringent contaminant level limits and goals set by the Environmental Protection Agency to ensure that your drinking water is safe.

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 mean water may be 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 at 1-800-426-4791.

CRYPTOSPORIDIUM & GIARDIA

Cryptosporidium and giardia are microscopic organisms that, when ingested, can result in diarrhea, fever, and other gastrointestinal symptoms. In recent years, these have been found in surface water across the country. Cryptosporidium can also be transmitted through contaminated food or direct contact with human or animal waste.

Within the last five years, the Central Wyoming Regional Water System had water samples tested for cryptosporidium and giardia. The samples were analyzed using a method approved by the Environmental Protection Agency, and neither organism was detected. This does not mean that any organisms were not present in the samples, only that none were present in the portions examined.

TURBIDITY

Turbidity is a measure of water clarity. It measures how much suspended materials such as clay, sand, algae, plankton, microbes and other substances are in water. Turbidity can affect the color of water. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

A MESSAGE FROM THE CENTRAL WYOMING REGIONAL WATER SYSTEM

As part of the Interim Enhanced Surface Water Treatment Rule (IESWTR) regulation governing treatment for the pathogen cryptosporidium (40 CFR Part 141, Subpart P), the U.S. Environmental Protection Agency (EPA) requires a treatment technique for 99% removal of cryptosporidium. Water Systems using surface water or ground water under the direct influence of surface water (GWUDI) have been required to comply with this treatment technique since January 2002.

Currently, the Regional Water System utilizes GWUDI from collection devices along the North Platte River: vertical wells, horizontal wells, or caissons. This water is not treated in a filtration plant, but it is ozonated and disinfected with chloramines. Alternative filtration occurs through these devices, such as riverbank filtration occurring from the wells. On Dec. 10, 2001, EPA granted conditional removal credit to the Regional Water System GWUDI system while a detailed study was conducted to demonstrate the effectiveness of the alternative filtration technologies to remove cryptosporidium. During the study period, the Regional Water System implemented interim measures designed to ensure public health protection. The study was completed and a final report provided to EPA in January 2005.

EPA granted approval to the GWUDI system as an alternative filtration technology on March 18, 2005, based upon the preponderance of these study results, previous studies, and knowledge of the GWUDI system. This decision has been predicated on the primary goals of protecting public health and ensuring compliance with the Safe Drinking Water Act while utilizing sound science and recognizing cost considerations for the Regional Water System.

This approval is contingent upon the Regional Water System complying with several operational and performance requirements to improve pathogen removal including abandoning or filtering water from the infiltration gallery and ongoing monitoring of water quality. The Regional Water System will also continue to provide inactivation of this GWUDI water with ozonation and chloramines and will meet all other monitoring and treatment technique requirements of the surface water treatment rules.

DEFINITIONS

AL: Action Level — The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Action Levels are reported at the 90th percentile for homes at greatest risk.

CFU: Colony Forming Units — The number of visible growths of microorganism in a nutrient medium.

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 technology.

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.

MFL: Million Fibers per Liter — A measure of the presence of asbestos fibers that are longer than 10 micrometers.

n/a: Not applicable — The EPA has not requested monitoring for his contaminant.

ND: Nondetects —The contaminant was monitored but not detected.

NTU: Nephelometric Turbidity Unit —The measurement of the clarity of water.

pCi/L: pico Curies per liter — A measure of the radioactivity in water.

ppm: One part per million — The measurement corresponds to 1 minute in 2 years or 1 penny in $10,000.

ppb: One part per billion — The measurement corresponds to 1 minute in 2,000 years or 1 penny in $10,000,000.

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

SUBSTANCE	VIOLATION	HIGHEST LEVEL ALLOWED (MCL)	HIGHEST LEVEL DETECTED	IDEAL GOALS (MCLG)	POTENTIAL SOURCES OF CONTAMINANT
REGULATED AT THE GROUNDWATER SOURCES AND TREATMENT PLANT					
Bromate Running Annual Average Highest Level Detected	No	10 ppb (MCL based on Running Annual Average)	6.7 ppb 19 ppb	0	Drinking water ozonation by-product
Nitrate (As Nitrogen)	No	10 ppm	1 ppm	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride	No	4 ppm	0.3 ppm	4 ppm	Erosion of natural deposits
Selenium	No	50 ppb	10 ppb	50 ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	No	not regulated	77 ppm	none set	Erosion of natural deposits
Turbidity	No	0.3 NTU	0.283 NTU	n/a	Soil runoff
Cryptosporidium	No	2-log removal	<1 CFU/100 ml	n/a	Animal and human fecal waste
Alpha Emitters	No	15 pCi/L	10.8 pCi/L	0	Erosion of natural deposits
Combined Radium	No	5 pCi/L	3.5 pCi/L	0	Erosion of natural deposits
Uranium	No	30 ppb/L	11 ppb/L	0	Erosion of natural deposits
REGULATED AT THE CONSUMER'S TAP					
Lead	No	15 ppb AL	1 ppb one site exceeded AL	0	Corrosion of household plumbing
Copper	No	1.3 ppm AL	0.80 ppm no site exceeded AL	1.3 ppm	Corrosion of household plumbing
REGULATED AT THE DISTRIBUTION SYSTEM					
Asbestos	No	7 MFL	<0.18 MFL	7 MFL	Decay of asbestos cement water mains; erosion of natural deposits
Total Trihalomethanes	No	80 ppb	18.0 ppb	n/a	Drinking water chlorination by-product
Haloacetic Acids (5)	No	60 ppb	12.0 ppb	n/a	Drinking water chlorination by-product
Total Organic Carbon	No	TT	6.2 ppm	n/a	Naturally present in environment
% TOC Removal		greater than 35% removal	63%		
Chloramines (Running Annual Average)	No	4 ppm	1.30 ppm	n/a	Water additive used to control microbes