

# **2017 Annual Water Quality Report**

## **South Big Horn County JPB**

### **PWS# WY5601454**

#### **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 two ground water wells and water supplied by Big Horn Regional JPB.

#### **Source water assessment and its availability**

You can request a copy of our source water assessment from the Basin Town Office or the Town of Basin website.

#### **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 meetings. They are held on the third Thursday of every month at 7:00 PM located at the Town of Basin Council Chambers.

### **Description of Water Treatment Process**

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

### **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](http://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 insuring 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. South Big Horn County JPB 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>.

### **Additional Information for Arsenic**

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

## **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			
<b>Disinfectants &amp; Disinfection By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl <sub>2</sub> ) (ppm) <b>South Big Horn</b>	4	4	1	NA	NA	2017	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb) <b>Big Horn Regional JPB</b>	NA	60	0.3	NA	0.45	2017	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb) <b>Big Horn Regional JPB</b>	NA	80	0.92	NA	3.14	2017	No	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>								
Arsenic (ppb) <b>Big Horn Regional JPB</b>	0	10	2	NA	2	2016	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride (ppm) <b>Big Horn Regional JPB</b>	4	4	0.3	0.2	0.3	2016	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm) <b>Big Horn Regional JPB</b>	10	10	0.42	0.2	0.5	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb) <b>Big Horn Regional JPB</b>	50	50	5	NA	5	2016	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (optional) (ppm) <b>Big Horn Regional JPB</b>	NA		3.3	2.2	3.3	2016	No	Erosion of natural deposits; Leaching
<b>Radioactive Contaminants</b>								
Alpha emitters (pCi/L) <b>Big Horn Regional JPB</b>	0	15	5.97	1.79	5.97	2015	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L) <b>Big Horn Regional JPB</b>	0	5	2.93	0.8	2.93	2015	No	Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Copper - action level at consumer taps (ppm) <b>South Big Horn</b>	1.3	1.3	0.071	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb) <b>South Big Horn</b>	0	15	2	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

<b>Unit Descriptions</b>	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
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:**

Contact Name: Mike Dellos

Address: PO Box 599

Basin, WY 82410

Phone: (307) 568-3331

# Consumer Confidence Report (CCR) Certification for Wyoming Community Water Systems Serving Fewer than 10,000 Persons

Community Water System Name: \_\_\_\_\_

Public Water System Identification No: \_\_\_\_\_ Year CCR Due: \_\_\_\_\_

**Important:** In 1999, Governor Jim Geringer exercised his authority under the Safe Drinking Water Act to waive the direct mailing requirement for CCRs for small community water systems in Wyoming. Small community water systems can instead meet their annual reporting requirements under the CCR Rule by the methods of report distribution listed below.

**Directions:** Please mark the boxes in the section relevant to your drinking water system and fill in the associated blanks. Then sign the form in the last section.

**Community Water Systems Serving Fewer than 10,000 Persons must complete all three (3) of the following actions:**

1. Notified customers by direct mailing\* that the CCR shall be printed in a local newspaper or made available on an internet web site.  
Specify date and method of direct notice to customers:  
\_\_\_\_\_

and

2. Published the CCR as an insert in one or more local newspapers serving the area of service or published the CCR on an internet web site.  
Specify newspaper and the date of publication, or specify the internet web site address:  
\_\_\_\_\_

and

3. Made paper copies of the CCR available to the public upon request.  
Describe what information was provided to the customer so that he/she could request a paper copy of the CCR, if desired:  
\_\_\_\_\_

\*Direct mailing can include mailing a paper notice or emailing a notice to your customers.

**Community Water Systems Serving 500 Persons or Fewer must complete both of the following actions:**

1. Provided direct notice\* to each customer that the annual CCR is available.  
Specify the date and method of direct notice to customers, and where the report was made available:  
\_\_\_\_\_



and

- 2. Made paper copies of the CCR available to the public upon request or through an internet web site.

Describe what information was provided to the customer so that he/she could request a paper copy of the CCR, or specify the internet web site address:

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\*Direct notice can include mailing a paper notice to or emailing a notice to your customers.

The community water system named above hereby confirms that its Consumer Confidence Report (CCR) has been distributed to customers or that appropriate notices of availability have been given as specified on this form. Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to EPA Region 8.

**CERTIFIED BY:**

Name (please print): \_\_\_\_\_

Title: \_\_\_\_\_ Phone #: \_\_\_\_\_

Signature: \_\_\_\_\_

Today's Date: \_\_\_\_\_

Please sign and send your completed certification by mail, fax, or email for receipt no later than October 1st of each year for the CCR due that same year:

**MAILING ADDRESS:**

US Environmental Protection Agency, Region 8  
 Drinking Water Program (8P-W-DW)  
 Attn: CCR Rule Manager  
 1595 Wynkoop St.  
 Mailcode: 8P-W-DW  
 Denver, CO 80202-1129

**EMAIL:**

To: R8DWU@epa.gov  
 Subject: CCR Certification

**FAX:**

1-(877) 876-9101  
 Attn: CCR Certification