

WATER QUALITY REPORT



DNISD Consumer Confidence Report 2015

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. We report that the City of Sheridan and DNISD drinking water is of high quality and meets or exceeds safe drinking water standards.

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 healthcare 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?

Sheridan's municipal water supply sources include surface water from creeks, streams, lakes, and reservoirs in the Bighorn National Forest's Big Goose drainage. Sheridan's water intake is located in Big Goose Canyon, upstream of many of the listed impacts, which help reduce possible contamination.

Source Water Assessment and its availability

Wyoming Department of Environmental Quality has conducted a source water assessment for the City of Sheridan. This report shows where our water comes from and potential sources of contamination, which may affect our water supply. The report and map can be reviewed at City Hall or on-line at www.sheridanwy.net/departments/utilities

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 Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs and springs.

As water travels over the surface of the land or through the ground, it can dissolve naturally-occurring minerals and may pick up substances from other sources such as humans.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from industrial or domestic wastewater discharge, oil and gas production, mining or farming.

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- • Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- • 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 which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for human health.

How can I get involved?

This report is to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. For questions about the quality of our drinking water or this report, phone Water Superintendent Tom Manolis at the Water Supply and Treatment office 674-8532, or DNISD Chairman Mike Johnston at 674-9639. DNISD holds regular board meetings the 4th Thursday of each month at 7pm at the Sheridan Senior Citizens Center, 211 Smith St. Sheridan.

Description of our 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 and anthracite that remove even smaller particles. A small amount of Sodium Hypochlorite is used to kill bacteria and other micro organisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.

We are pleased to announce our new Water Treatment Plant upgrade project has been completed. These upgrades are improving plant performance, increasing efficiency and ensuring compliance with EPA's LT2 Rule (Cryptosporidium). We expect a reduction in chemical dose, which equates to a cost saving with greater process control.

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. The City of Sheridan 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 the 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>.

In response to recent nationally publicized reports on lead, the City of Sheridan has negotiated a price reduction from Inter-Mountain Labs (IML) for lead testing for our customers who have elevated concerns about lead in your home tap water.

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 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	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfectant 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	1.43	0.68	2.04	2015	No	Water additive used to control microbes
Haloacetic Acids, (HAA5) (ppb)	N/A	60	46	39	51	2015	No	By-product of drinking water chlorination
TTHM's Total Trihalomethanes (ppb)	N/A	80	52	38	62	2015	No	By-product of drinking water Disinfection
Total Organic Carbon (% removal)	N/A	TT	40.39	21.43	63.89	2015	No	Naturally present in the environment
Inorganic Contaminants								
Sodium (ppm) (no established limit for Sodium)	N/A	N/A	11.8	10.2	13.4	2015	No	Erosion of natural deposits, Leaching

Microbial Contaminants								
Turbidity (NTU)	N/A	1	0.03	0.02	0.16	2015	No	Soil Runoff
Turbidity has no health effects. However, turbidity can interfere with proper disinfection. 100% of the samples were below the TT value of 0.3NTU. A TT violation occurs when <95% of samples are below .15NTU. Any measurement in excess of 1 is a violation unless otherwise approved by the EPA								
Total Coliform positive samples/month	0	1 Positive Sample / Month	0 Positive Samples	N/A	N/A	2015	No	Naturally present in the environment
Fecal Coliform or E. Coli bacteria	0		0 Fecal or E. Coli			2015	No	Human or animal fecal waste
Inorganic Chemicals								
Contaminants	MCLG (Goal)	AL	Your Water	Sample Date	# Samples exceeding AL	Exceeds	Typical Source	
Fluoride (ppm)	4	4	0.7	2015	N/A	No	Erosion of natural deposits; naturally occurring or treatment chemical additive that promotes dental health	
Lead (ppb) 90th percentile, Based on 30 samples taken	0	15	ND	2015	0	No	Corrosion of household plumbing systems	
Copper (ppm)	1.3	1.3	0.25	2015	0	No	Erosion of natural deposits; corrosion of household plumbing	

Unit Descriptions

Term	Definition
ppm	parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
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.
Positive samples/month	Number of samples taken monthly that were found to be positive
NA	Not applicable
ND	Not detected
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: Maximum Permissible Level (None established at this time for sodium)

Cryptosporidium and Giardia are microscopic organisms that are common in surface water. *Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Our 2015 monitoring results have not detected these organisms in our water. 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, infants and small children, and the elderly 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. We have upgraded our plants to enhance our *cryptosporidium* removal/inactivation processes to lessen the risk of cryptosporidiosis as per EPA's new LT2ESWTR requirements.

Violations

No violations to report. Perfect compliance in 2015



Be observant. Notice and report any suspicious activity around our water sources.

For more information please contact:

Contact: Tom Manolis, Water Supply and Treatment Superintendent

Phone: 307.674.8532 - Fax: 307.674.1587 - E-Mail: tmanolis@sheridanwy.net

Website: <http://www.sheridanwy.net/departments/utilities/water>

Address: 6 Soldier Creek Rd, Sheridan, WY 82801