

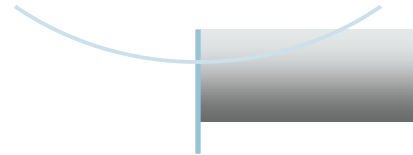
June 2019



Downer  
Neighborhood  
Improvement &  
Service District



# 2018



# Annual Drinking Water Quality Report



## EXCELLENCE IN DRINKING WATER

We are very pleased to provide you with our Annual Drinking Water Quality Report, also known as the Consumer Confidence Report. This report is a snapshot of last year's water quality and is designed to provide comprehensive information about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies, such as the Environmental Protection Agency. We are committed to providing you with accurate information regarding exceptional water and services we have delivered to you over the course of this past year. We believe informed customers are our best allies. Our constant goal is

to provide you with a safe and dependable supply of drinking water. Your water meets or exceeds the requirements of the Federal Safe Drinking Water Act (SDWA).

All of the water we provide to you comes from creeks, streams, lakes, and reservoirs in the Big Horn National Forest's Big Goose drainage. Sheri-



The diversion dam at our Intake Facility in Big Goose Canyon.

dan's Water Intake facility is located at the mouth of Big Goose Canyon, upstream of many of the listed impacts, which helps reduce possible contamination.

### Source Water Assessment

Wyoming Department of Environmental Quality (DEQ) 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 our website at:

[www.sheridanwy.net/departments/utilities/water](http://www.sheridanwy.net/departments/utilities/water)

## SPECIAL PRECAUTIONS

Some individuals may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those undergoing chemotherapy, organ transplant recipients, individuals with HIV/AIDS or other immune system disorders, and also the elderly and infants, can be particularly at risk. These individuals should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (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 Drinking Water Hotline (800) 426-4791. In addition, you may visit the following websites for more information:

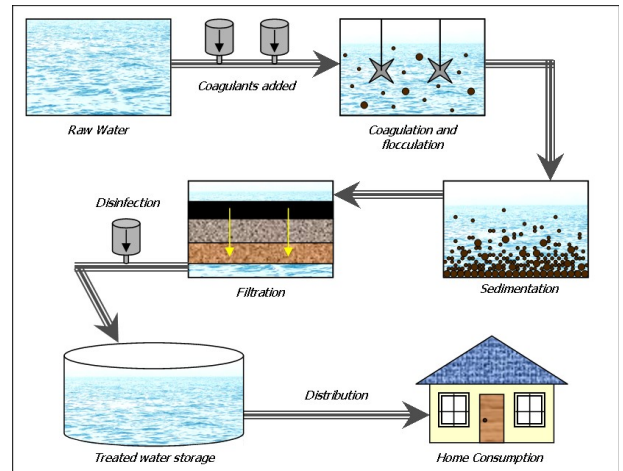
<https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline>

<https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations#Microorganisms>

## OUR TREATMENT PROCESS

Your water is treated in a "treatment train" (a series of sequential processes) 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 filters that remove even smaller particles.
- After filtration, *disinfection* adds a small amount of chlorine to kill bacteria and other microorganisms that may be in the water before



The surface water treatment process.

the water is stored and distributed to homes and businesses in the community.

Recent Water Treatment Plant upgrades have improved plant performance, increased efficiencies, and have ensured compliance with EPA's LT2 (Cryptosporidium) Rule.

## LEAD IN DRINKING WATER



The City of Sheridan and Sheridan Area Water Supply (SAWS) care about the health of families in our community, and want to help limit exposure to lead in drinking water. We take steps to control water chemistry at our water treatment plants to help prevent lead from leaching into drinking water, and we test for levels of lead and copper in the City's water distribution system as required by federal and state regulatory laws. There are no known sources of lead in our water distribution system.

Lead in drinking water occurs primarily from materials and components associated with property owner's service lines and household plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. The City of Sheridan is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. We encourage families to take precautions to ensure they are not exposed to lead at the tap. Families can take steps to reduce their risk by:

- After a period of stagnation, flush your tap for 30 seconds to 2 minutes before using water for drinking or cooking in order to retrieve fresh water that is coming from the main distribution line (Consider using the water to flush toilets or water plants in order to minimize waste).
- Purchase a point-of-use treatment device certified to remove lead & properly maintain the device.
- Avoid consuming water from the hot water tap, where lead, if present, is more likely to appear.

If you are concerned about lead in your drinking 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 are available from the EPA Safe Drinking Water Hotline (800) 426-4791, or website at: <http://www.epa.gov/safewater/lead>

## WATER QUALITY DATA TABLES

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 on the following page 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 the 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.

### Important Drinking Water Definitions & Abbreviations

**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- 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- Treatment Technique.** A required process intended to reduce the level of a contaminant in drinking water.

**AL- Action Level.** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Variations and Exemptions-** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**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- 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 con-

trol of microbial contaminants.

**MNR- Monitored Not Regulated.**

**MRL- Minimum Reporting Level.** The smallest measured concentration of a substance that can be reliably measured by using a given analytical method.

**MPL- Maximum Permissible Level.** The highest level of a contaminant that is allowed in drinking water.

**ppm- parts per million or milligrams per Liter (mg/L)**

**ppb- parts per billion or micrograms per Liter (µg/L)**

**NTU- Nephelometric Turbidity Units.** A measure of the cloudiness of the water, e.g. crystal clear water vs. water that looks like chocolate milk.

**Rfc- Reference Concentration.** An estimate of a continuous inhalation exposure to the human population that is likely to be without an appreciable risk of deleterious effects during a lifetime.

**Positive samples/month- Number of samples taken per month that were found to be positive.**

**N/A- Not applicable.**

**ND- Not detected.**

**NR- Not required.**

**Total Trihalomethanes (TTHMs)** Some people who drink trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

# WATER QUALITY DATA TABLES

| Contaminants  | MCLG or MRDLG | MCL, TT, or MRDL        | Your Water | Range       |                           | Sample Date | Violation?  | Typical Source                            |
|---|---------------|-------------------------|------------|-------------|---------------------------|-------------|---|---|
|   |               |                         |            | Low         | High                      |             |   |   |
| <b>Disinfectants and Disinfectant By-Products</b>   |               |                         |            |             |                           |             |   |   |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)   |               |                         |            |             |                           |             |   |   |
| Chlorine (Cl <sub>2</sub> ) (ppm)   | 4             | 4                       | 1.12       | .73         | 1.33                      | 2018        | No  | Water Additive used to control microbes   |
| Haloacetic Acids (HAA5) (ppb)   | n/a           | 60                      | 35         | 35          | 35                        | 2018        | No  | By-product of drinking water chlorination |
| Total Trihalomethanes (TTHM) (ppb)  | n/a           | 80                      | 41         | 41          | 41                        | 2018        | No  | By-product of drinking water disinfection |
| Total Organic Carbon (% removal)  | n/a           | TT                      | 43         | 23          | 55                        | 2018        | No  | Naturally present in the environment      |
| <b>Inorganic Contaminants</b>   |               |                         |            |             |                           |             |   |   |
| Sodium (ppm)  | Not est.      | Not est.                | 11.8       | 11.8        | 11.8                      | 2018        | No  | Erosion of natural deposits, leaching     |
| <b>Microbial Contaminants</b>   |               |                         |            |             |                           |             |   |   |
| Turbidity (NTU)   | n/a           | 1                       | .03        | .02         | .15                       | 2018        | No  | Soil runoff                               |
| Turbidity has no health effects, however, it can interfere with proper disinfection. 100% of the samples were below the TT value of .3 NTU. A TT violation occurs when <95% of the samples are below .15 NTU. 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          | n/a         | n/a                       | 2018        | No  | Naturally present in the environment      |
| E.Coli bacteria or Fecal Coliform   | 0             |                         | 0          | n/a         | n/a                       | 2018        | No  | Human or animal fecal waste               |
| Contaminants  | MCLG          | AL                      | Your Water | Sample Date | # of Samples exceeding AL | Exceeds?    | Typical Source  |   |
| <b>Inorganic Chemicals</b>  |               |                         |            |             |                           |             |   |   |
| Fluoride (ppm)  | 4             | 4                       | .7         | 2018        | n/a                       | No          | Erosion of natural deposits; naturally occurring or treatment chemical additive that promotes dental health |   |
| Lead (ppb)  | 0             | 15                      | ND         | 2018        | 0                         | No          | Corrosion of household plumbing systems   |   |
| Copper (ppm)  | 1.3           | 1.3                     | .2         | 2018        | 0                         | No          | Erosion of natural deposits; corrosion of household plumbing systems  |   |

# WATER QUALITY DATA TABLES



## Fourth Unregulated Contaminant Monitoring Rule (UCMR 4)

The EPA uses the Unregulated Contaminant Monitoring Rule (UCMR) program to collect nationally representative data for contaminants suspected to be present in drinking water, but that do not have regulatory standards. UCMR 4 requires monitoring for 30 chemicals between 2018 and 2020. This monitoring is used by EPA to understand the

frequency and level of occurrence of unregulated contaminants in the nation’s public water systems (PWSs). State and local officials may also use UCMR data to assess the need for actions to protect public health. Every five years, the EPA develops a new list of UCMR contaminants, largely based on the Contaminant Candidate List (CCL). Under our monitoring schedule, nine cyanotoxins and one cyanotoxin group were tested for within our finished water in 2018. Metals, Pesticides, Alcohols, Semi-Volatile Organic Compounds (SVOCs) and Haloacetics Acids (HAAs) will be tested for quarterly from 2019-2020.

| Contaminants                | MRL (µg/L) | RfC (µg/L)            |                            | Your Water | Sample Date | Typical Source  |
|-----------------------------|------------|-----------------------|----------------------------|------------|-------------|---|
|                             |            | Infant to Young Child | School-aged child to Adult |            |             |   |
| <b>Cyanotoxins</b>          |            |                       |                            |            |             |   |
| Total Microcystins          | .3         | .3                    | 1.6                        | ND         | 2018        | Fresh water contaminated with cyanobacteria in warmer climate conditions, such as rising water temperatures during the summer months or stagnant water. Also due to an oversupply of nutrients from fertilizer runoff into lakes and streams. Contaminated water will exhibit algae blooms. |
| Microcystin-LA <sup>1</sup> | .008       | .3                    | 1.6                        | NR         | 2018        |   |
| Microcystin-LF <sup>1</sup> | .006       | .3                    | 1.6                        | NR         | 2018        |   |
| Microcystin-LR <sup>1</sup> | .02        | .3                    | 1.6                        | NR         | 2018        |   |
| Microcystin-LY <sup>1</sup> | .009       | .3                    | 1.6                        | NR         | 2018        |   |
| Microcystin-RR <sup>1</sup> | .006       | .3                    | 1.6                        | NR         | 2018        |   |
| Microcystin-YR <sup>1</sup> | .02        | .3                    | 1.6                        | NR         | 2018        |   |
| Nodularin-R <sup>1</sup>    | .005       | n/a                   | n/a                        | NR         | 2018        |   |
| Anatoxin-a                  | .03        | n/a                   | n/a                        | ND         | 2018        |   |
| Cylindrospermopsin          | .09        | .7                    | 3                          | ND         | 2018        |   |

EPA has established UCMR 4 Minimum Reporting Levels (MRLs) based on the capability of laboratories to perform the analytical method, not based on a level established as “significant” or “harmful.”

1. Under the EPA Screening Method 546, if the Total Microcystins comes back as “not detected” (ND), subsequent, more specific tests for the remaining microcystins are not required (NR).

The detection of a UCMR 4 contaminant does not represent cause for concern in and of itself.

Reference concentrations are health-based from peer-reviewed sources and provide context for the detection of a UCMR contaminant. They do not represent regulatory limits or action levels and should not be interpreted as an indication that the Agency intends to establish a future drinking water regulation. They are not legally enforceable federal standards. For more information, please visit <https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>.

## ARE THERE CONTAMINANTS IN MY DRINKING WATER?

All drinking water, including bottled water, may 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 contacting the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800)426-4791) or on-line at: <http://www.epa.gov/dwregdev>



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 other sources, such as human activity.

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.

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.



**Contaminants are naturally occurring in both the air and water. Through our treatment process, harmful contaminants are eliminated or controlled.**

- 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.

We're on the web!

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

## CITY OF SHERIDAN

55 Grinnell Plaza  
Sheridan, WY 82801  
(307) 674-6483

For more information, please contact:

### Water Supply & Treatment Division

Tom Manolis  
*Water Supply & Treatment Superintendent*  
6 Soldier Creek Rd.  
Sheridan, WY 82801  
(307) 674-8532  
tmanolis@sheridanwy.net

Report a problem  
Request service  
Send a suggestion  
Send a comment

Check out  
our App!

### Connect Sheridan

This convenient  
tool puts City  
Hall at your  
fingertips!



## How can I get involved?

This report is meant 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 your drinking water or this report, contact our Water Superintendent, Tom Manolis, at the Water Supply and Treatment Division 674-8532 between 7 a.m. and 3:30 p.m., or the DNISD Chairman, Rich Garrison at 672-3360. DNISD holds regular board meetings on the 4th Thursday of each month at 7pm at the Hub on Smith (Sheridan Senior Center), located at 211 Smith St.

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

## WATER CONSERVATION TIPS

### Indoors

- Fix a leak
- Turn off running water when not in use (ex. when brushing your teeth).
- Opt for a quick shower instead of a bath.
- Install water efficient fixtures and appliances.
- Run the dishwasher only when completely full or wash dishes in a sink filled with water.
- Run the clothes washer only when completely full.
- Keep a pitcher of water in the fridge instead of letting the water run until cold.
- Thaw food in the fridge overnight instead of under running water.
- Skip the garbage disposal.

### Outdoors

- Create a water-smart landscape and water accordingly.
- Wash the car with a bucket or at a commercial place that recycles used water.
- Water smarter— it's best to water in the early morning or evenings. Make sure your sprinkler system is calibrated correctly.
- Let your grass grow. Over-watering grass leads to shallow roots, more weeds, and less drought resistance.
- Sweep driveways, sidewalks, and steps instead of hosing them off.
- Water plants at the roots, not the leaves.
- Use the right tool, the right way! A standard garden hose and nozzle leads to water loss due to mist, runoff, or

evaporation. Try a soaker hose instead.

- Take the kids to cool off at the pool, park, or in the mountains. Mother nature offers plenty of natural cooling resources— all you have to do is find the time to indulge in them.

### During a Drought

- Follow the rules.
- Cut back on watering— water conservation is more important than a bright green lawn during a drought.
- Check for leaks.
- Go the extra mile. Collect and use rainwater or repurpose used water.



For more information, please visit:

**EPA WaterSense**  
<https://www.epa.gov/watersense>



To view this report online, please visit:

<https://sheridanwy.net/departments/utilities/water>