The City of Hagerman takes monthly and yearly samples to determine the presence of any contaminants. We test monthly for **Total Coliform** and **Escherichia Coli**, which is commonly referred to as **E. coli**. **E coli** and **Coliform** bacteria are present in the environment and feces of all warm-blooded animals and humans. **Coliform** bacteria are unlikely to cause illness. However, their presence in drinking water indicates that disease-causing organisms (pathogens) could be in the water system. Our yearly samples are on a set monitoring schedule by Idaho Department of Environmental Quality (IDEQ). On that schedule there are yearly samples and rotating samples that we take certain years. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently.

Regulated	Substances	sampled	in 2022
regulated	Oubstances	Sampicu	

Substance	MCL	MCLG	Amount Detected	Typical Source	Violation
(Unit of Measure)	(MRDL)	(MRDLG)	Range Low-High		
Chlorine (ppm)	4.0	4.0	0.10-0.59	Water additive used to control microbes.	No
Nitrate (ppm)	10	10	1.59	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.	No
Total Coliform	1>	0	ND	Naturally present in the environment.	Yes
Total Haloacetic acids (ppm)	0.060	NA	ND	By-product of drinking water disinfection.	No
TTHMs (Total Trihalomethanes) (ppm)	0.080	NA	0.002	By-product of drinking water disinfection.	No
Di(2-ethylhexyl) phthalate	6	0	ND	Discharge from rubber and chemical factories.	No

Lead and copper samples results from 10 sample sites

Substance (unit of measure)	Action Level	MCLG	Amount Detected (90 th Percentile)	Typical Sources For both Substances	
Copper (ppm)	1.3	1.3	0.165	Typically, due to leaching from internal plumbing materials; erosion of natural deposits	
Lead (ppm)	0.015	0	0.001		

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.

Important drinking water definitions

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

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

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

MNR: Monitored Not Regulated

MPL: State Assigned Maximum Permissible Level

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.

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

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

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Unit Descriptions

NA: not applicable

ND: Not detected

NR: Monitoring not required, but recommended.

ppm:(parts per million) One part substance per one million parts water.



Lead and Drinking Water

The limited source of lead exposure from your home's water is mostly likely pipe or solder in your home's own plumbing. The most common cause is corrosion, a reaction between water and lead pipes or solder. Lead levels are likely to be highest if your home has faucets or fittings of brass that contain some lead, or your home or water system has lead pipes or copper pipes with solder that contains lead.

Flush pipes before drinking.

The longer the water stands idle in the pipes, the more lead it can absorb. Do not drink or cook with water that has been in your plumbing for more than 6 hours—overnight, for example, or while you're at work. Flush your pipes by letting the cold-water faucet run until you feel the water get colder, at least 30 to 60 seconds. (To prevent wasting this water, use it for watering plants or washing dishes.) Boiling water does not remove lead. For more information, go to http://www.deq.idaho.gov/water-quality/drinking-water/pwsmonitoring-reporting/contaminants/lead/

Fun Facts

- There is the same amount of water on Earth as there was when the Earth was formed.
- Water is composed of two elements, Hydrogen and Oxygen. 2 Hydrogen + 1 Oxygen = H2O.
- Nearly 97% of the world's water is salty or otherwise undrinkable. Another 2% is locked in ice caps and glaciers. That leaves just 1% for all of humanity's needs
 — all its agricultural, residential, manufacturing, community, and personal needs.
- Water regulates the Earth's temperature. It also regulates the temperature of the human body, carries nutrients and oxygen to cells, cushions joints, protects organs and tissues, and removes wastes.
- 75% of the human brain is water and 75% of a living tree is water.
- A person can live about a month without food, but only about a week without water.
- Water is part of a deeply interconnected system. What we pour on the ground ends up in our water, and what we spew into the sky ends up in our water.

Water expands by 9% when it freezes. Frozen water (ice) is lighter than water, which is why ice floats in water.

Where does my water come from?

We have two water sources that we use for our community. Our main source is a ground water spring called Big Springs. It is piped to our storage facility. The second source is a deep well. Both are pumped to an 800,000-gallon storage tank for disinfection and storage until it is needed in the distribution system.



Why a storage tank?

Ever wonder why we still have water when the power goes out? Our storage facility is located east of town at a higher elevation. We use the storage tank and elevation to acquire our pressure in the system. For every foot of height, it provides 0.43 PSI (pounds per square inch) in the system. We also have a standby generator at our facility that we use to fill the tank in the event of a power outage.

City of Hagerman 191 State St. North P.O. Box 158 Hagerman, ID 83332



Water testing performed in 2022 by



CITY OF HAGERMAN

PWS ID#5240012



During the summer months, the demand on our system is very high. We see times where the amount of water going to town is the same as what we are pumping in to our storage tank. Typically, this happens in July and August during the hottest days. The city would like you to keep conservation in mind to help lower the demand and cost to the system. Below are a few ways to help conserve water. On August 4, 2022, EPA released Guidance for Developing and Maintaining a Service Line Inventory. This inventory will cover all the piping/fittings in the water system to identify any lead pipes. The city could be reaching out to the residents for help. Part of the inventory process is identifying what type of water line is leaving the meter and going to your homes, businesses, and schools.

Do you have a Cross-Connection?

Cross-connections, which are defined as actual or potential connections between a potable water supply and a non-potable source, where it is possible for a contaminant to enter the drinking water supply. External contaminant introduction diminishes the water quality of drinking water distribution systems. Some examples are fire sprinkler systems, air conditioners, and underground sprinkler systems. Ironically, the ordinary garden hose is the most common offender as it can be easily connected to the potable water supply and used for a variety of potentially dangerous applications. A cross-connection contamination can occur when the pressure of an outside source becomes greater than the pressure in the drinking water supply system. This is known as backpressure. Contamination can also occur when the pressure in the drinking water line drops due to other occurrences such high water usage, main breaks, and fire hydrant use for flushing or firefighting use. These are known as backsiphonage. Back flow prevention devices are used to help prevent contamination from occurring. Hagerman city code 8-1-17 requires backflow prevention devices. Hagerman city code 8-1-18 goes over the conditions requiring backflow devices and requires that they be tested annually by a certified tester. If you would like more information on this, come in to city hall or EPA has a Crossconnection control manual on their website www.epa.gov/safewater/ .

Thank you,

City of Hagerman

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 <u>www.epa.gov/watersense</u> for more information.