

Annual Drinking Water Quality Report
For the Monitoring Year 2022
Hebgen Lake Estates County Water & Sewer District
PWSID #MT0001983
West Yellowstone, MT 59758
(406) 640-1664

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality 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. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is groundwater with two wells and 36 pressure tanks with 86 gallon capacities in the system.

A Source Water Assessment and Delineation Report was completed by the Montana Department of Environmental Quality in September 2005. This assessment report identified potential sources of contaminants to the public water supply. This report is available for review by contacting Hebgen Lake Estates at (406)-646-1664 or on-line at: <https://deq.mt.gov/water/Programs/dw-sourcewater>

This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact **Greg Glen Johnson at (406) 640-1664**. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. Notices of yearly meetings will be distributed to all homeowners and a notice posted on the common area bulletin board along with a copy of this consumer confidence report.

Hebgen Lake Estates routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the **period of January 1st to December 31st, 2022.**

“Some of our data in the tables are more than one year old, since certain chemical contaminants are monitored less than once a year. Our sampling frequency complies with EPA and State drinking water regulations.”

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

N/A (Not Applicable) – This term is used in reference to only one source being analyzed where there is no range of parameters. It is also used if there is no Maximum Contaminant level Goal or MCL set for the contaminant.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Action Level - the concentration of a contaminant that if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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.

Maximum Contaminant Level Goal - The “Goal” (MCLG) is 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.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Coliform Bacteria						
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No of Positive	Fecal Coliform or E Coli Maximum Contaminant Level	Total No of Positive E Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	3		0	N	Naturally present in the environment.
RTCR Assessments						
During the past year we were required to conduct Assessment(s)	Number of assessments required in the reporting year	Number of assessments completed in the reporting year	Number of corrective actions required	Number of corrective actions completed	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.	
Level 1	1	1	0	0		

Contaminant	Violation Y/N	Sample Date	Highest Level Detected	Range Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants								
Total Coliform bacteria were sampled monthly in 2022, We experienced 1 positive monthly sample for Total coliform								
Radioactive Contaminants								
Gross alpha excluding radon and uranium	N	2022	0.268	-0.745 – 0.268	pCi/l	0	15	Erosion of natural deposits
Beta/photon emitters	N	2022	2.71	2.68 – 2.71	mrem/yr	0	4	Decay of natural and man-made deposits
Combined Radium 226/228	N	2022	0.363	0 – 0.363	pCi/L	0	5	Erosion of natural deposits
Uranium	N	2022	0.4	0.4 – 0.4	ug/L	0	30	Erosion of natural deposits

Contaminant	Violation Y/N	Sample Date	Highest Level Detected	Range Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	N	2022	2	2.0 – 2.0	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Copper	N	2022	90 th % = 0.161 *	.00659 – 0.803	ppm	1.3	AL=1.3 No sites were over action level	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	2022	0.3	0.3 – 0.3	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead	N	2022	90 th % = 0.426 *	0 – 2.73	ppb	0	AL=15 No sites were over action level	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate + Nitrite (as Nitrogen)	N	2022	1	0.562 – 0.637	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
*Lead and Copper Rule Testing <i>The 1994 Federal Lead & Copper Rule mandates a household testing program for these substances. According to the rule, 90% of the samples from high-risk homes must have levels less than 0.015 milligrams per liter for lead and 1.3 milligrams per liter for copper.</i>								

Microbiological Contaminants:

Total Coliform - Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present.

Radioactive Contaminants:

Alpha emitters - Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Combined Radium 226/228. Some people who drink water that contains radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Inorganic Contaminants:

Arsenic - Some people who drink water that contains arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Copper - Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink that water contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Fluoride - Some people who drink water that contains fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Lead - Infants and children who drink water that contains lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities.

Nitrate - Infants below the age of six months who drink water that contains nitrate in excess of the MCL could become seriously ill and if untreated could die. Symptoms include shortness of breath and blue-baby syndrome.

Additional Health Information:

Total Coliform: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television, or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

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.”

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. Hebgen Lake Estates 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>.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Violations Table:

COMBINED RADIUM 226/228			
Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Monitoring Routine Major	07/01/2022	09/30/2022	Samples were taken on time but not reported by the laboratory to MT. DEQ by the deadline. This is considered a failure to test our drinking water for the contaminant and period indicated. Because of this failure we cannot be sure of the quality of our drinking water during the period indicated. This violation was returned to compliance once the result was received by Montana DEQ.
GROSS ALPHA EXCLUDING RADON AND URANIUM			
Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Monitoring Routine Major	07/01/2022	09/30/2022	Samples were taken on time but not reported by the laboratory to MT. DEQ by the deadline. This is considered a failure to test our drinking water for the contaminant and period indicated. Because of this failure we cannot be sure of the quality of our drinking water during the period indicated. This violation was returned to compliance once the result was received by Montana DEQ.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or is man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.” 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 indicate that the 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 at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

Please call our office if you have questions. We work around the clock to provide top quality water to every tap at Hebgen Lake Estates. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children’s future.