

Drinking Water Quality Report for 2024

Lake Village

Yellowstone National Park

Public Water System 5680079

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?

Fishing Bridge Well #1 and Well #2
Lake Village Springs

Source water assessment and its availability

June 2004 available upon request.

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 ask questions?

If you would know more or get involved contact us at jason_murphy@nps.gov or call (406) 640-0035

Monitoring

The Mammoth Water Quality Laboratory and Energy Laboratories in Billings, Montana provide water testing services and support our quality assurance program. These certified laboratories follow precise drinking water analyses established by the U.S. Environmental Protection Agency and serve to ensure that our treated water meets federal regulations.

To ensure your tap water is safe, the Environmental Protection Agency has set very stringent levels **or Maximum Contaminant Levels (MCLs)** - the highest allowable level a contaminant is allowed in drinking water. A person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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/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).

Reporting of compliance data violations

Haloacetic Acids (HAA5)			
Some people who drink water containing haloacetic acids 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 (DBP) MAJOR	01/01/2024	12/31/2024	We failed to test our drinking water for the containment and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
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Lead and Copper Rule			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
INITIAL TAP SAMPLING (LCR)	01/01/2024	2024	We failed 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.
LEAD CONSUMER NOTICE (LCR)	09/09/2023	2024	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

Total Trihalomethanes (TTHM)			
Some people who drink water containing 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.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	01/01/2024	12/31/2024	We failed 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.

Additional Information for Lead

Yellowstone National Park (YNP) is committed to providing high-quality drinking water to our employees and residents. As part of our ongoing water quality and public health efforts, we would like to share the following important information about lead in drinking water

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	Range of Levels Detected	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	January-June 2024	1.3	1.3	.044-.600	0.357	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2 January-June 2024	0	15	0-6	5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	Range of Levels Detected	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	July - December 2024	1.3	1.3	0.111-.345	0.254	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	July - December 2024	0	15	0-9	7	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Health Risks of Lead Exposure

Lead can cause serious health effects in people of all ages, especially:

- Pregnant individuals
- Infants (both formula-fed and breastfed)
- Young children

Understanding the Source of Lead in Water

Lead in drinking water primarily comes from materials and parts used in:

- Service lines
- Household plumbing

Yellowstone is responsible for maintaining public water systems and is in the process of conducting a lead service line inventory and replacement program.

Currently there are still service lines with unknown status, and connectors of unknown material throughout the park. If you would like to know the status of a service line, please email Jason_Murphy@nps.gov or call 406-640-0035.

Why Lead Exposure May Fluctuate

Even if your tap water tested no detection at one point in time, lead levels can vary. As such, lead exposure remains possible due to fluctuations in water chemistry and plumbing conditions.

In 2024 Yellowstone National Park sent 90 lead and copper building and housing samples for analysis. No results exceeded the EPA limits for lead and copper. The park will continue to annually monitor lead and copper levels in park housing and buildings.

The Yellowstone Facilities team is working together with NPS public health to evaluate the installation of point of use water filtration systems in park housing and buildings.

How You Can Protect Yourself and Your Family

There are several steps you can take to reduce the risk of lead exposure:

- **EPA recommends use of a Certified Water Filter:** Choose one certified by an American National Standards Institute (ANSI) accredited certifier to reduce lead. Be sure to follow the manufacturer's instructions for proper use.
- **Use Cold Water Only:** Always use cold water for:
 - Drinking
 - Cooking
 - Preparing baby formula (boiling water does not remove lead)
- **Flush Your Pipes*:** Run your taps for several minutes before using water for drinking or cooking. You can flush your system by:
 - Running the tap
 - Taking a shower
 - Doing laundry
 - Running a dishwasher

*Homes with lead service lines or galvanized pipes requiring replacement may need longer flushing times.

Testing and More Information

If you are concerned about lead in your water and would like to request water testing, or learn more about your service line: Contact: Jason Murphy, Jason_Murphy@nps.gov 406-640-0035

More information about lead in drinking water, testing methods, and ways to reduce exposure is available here: <https://www.epa.gov/safewater/lead>.

WY5680079 Lake Village, 2024 Lead Service Line Inventory.

Lead Service Line Inventory available at the following link.

<https://www.nps.gov/yell/learn/nature/water.htm>.

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.

Regulated Contaminants

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2024	1.2	1 - 1.2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	08/30/2023	4.9	0 - 4.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	2.8	0 - 2.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	06/27/2023	2	2 - 2	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Fluoride	2024	3.7	3.7 - 3.7	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Nitrate [measured as Nitrogen]	2024	0.04	0.04 - 0.04	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2024	2.6	0 - 2.6	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2024	1	0 - 2	0	15	pCi/L	N	Erosion of natural deposits.

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	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.

Important Drinking Water Definitions	
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Open Significant Deficiencies for WY5680079 as of 12/31/2024

Date Identified	Nature of Significant Deficiency	Resolution
2024	The system must demonstrate that surface water is not directly entering the groundwater collection structures at the Spring Collection area.	A plan is in place to address this deficiency in 2025.
2024	The Clearwell must be inspected and the structure/condition compared to the Tech Tips for Finished Water Storage Facilities.	A plan is in place to address this deficiency in 2025.
2024	Well WL01 - Fishing Bridge Well #1 must be fitted with a functioned sanitary seal that is tightly bolted and does not allow contamination to enter the well.	A plan is in place to address this deficiency in 2025.
2024	The air vent of Tank ST02 - Bridge Bay Tank must be fitted with a #24-mesh non-corrodible screen.	A plan is in place to address this deficiency in 2025.
2024	The access hatch for Tank ST02 - Bridge Bay Tank must have a neoprene gasket to seal the hatch lid to the frame tightly.	A plan is in place to address this deficiency in 2025.
2024	The overflow on Tank ST03 - Lake Village Steel Tank, ST04 - Lake Village Concrete Tank must be fitted with a #24-mesh non-corrodible screen, or a properly sealed flapper or duckbill valve.	A plan is in place to address this deficiency in 2025.
2024	The air vent on Tank ST03 - Lake Village Steel Tank must be fitted with a #24-mesh non-corrodible screen.	A plan is in place to address this deficiency in 2025.
2024	The overflow on Tank ST05 - Fishing Bridge II Storage Tank must be fitted with a #24-mesh non-corrodible screen, or a properly sealed flapper or duckbill valve.	A plan is in place to address this deficiency in 2025.
2024	The overflow on Tank ST05 - Fishing Bridge II Storage Tank must be piped to an elevation between 12 and 24 inches above the ground surface.	A plan is in place to address this deficiency in 2025.
2024	The valve access vault for the Lake Village Steel Tank (ST03) is filled with water, reportedly from a leaking valve.	A plan is in place to address this deficiency in 2025.

For more information please contact:

Contact Name: Jason Murphy
Address: PO Box 168
YELLOWSTONE NATIONAL PARK, WY 82190
Phone: 307-344-2530, email: Jason_Murphy@nps.gov

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