

Water Quality

2 0 2 4 A N N U A L R E P O R T



**Quality water is an essential part of our youth and future.
Bear Mountain Water District takes pride in ensuring that our
customers have the highest quality water possible.**

Este informe contiene información muy importante acerca del sistema de agua de la montaña del oso Distrito de Agua. Si usted necesita información en español, llame al (509) 670-4088.

2024 Water Quality Report

BEAR MOUNTAIN WATER DISTRICT

WATER QUALITY DATA RESULTS

This report describes the quality of the Bear Mountain Water District's drinking water, the source and the programs that protect our water quality. This publication complies with the federal law which requires water systems to provide water quality information to customers every year. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems and the table on the following pages lists the contaminants which were found in the Bear Mountain water system.

While most of the content is required by regulation, we have also included information that responds to typical questions our customers ask about the system. We support the public's right to know the results of our water quality monitoring. We also recognize that a report dominated by technical information is not inviting reading to most people. We've made an effort to provide the information in a clear and useful format.

Safe drinking water is essential to our community. Providing safe drinking water is a complex business. For those of you who are not interested in all the detail we provide; here is a summary:

The Bear Mountain Water District tests the water regularly through a certified laboratory. State and Federal regulators routinely monitor our compliance and testing protocols to ensure the delivery of safe drinking water to our customers. In the last 3 years the water system has conducted more than 200 tests for over 500 drinking water contaminants. Only 17 contaminants were detected, (see inside) and none exceeded a level higher than the state allows. The Bear Mountain Water District meets all state and federal standards.

CUSTOMER VIEWS WELCOME

Bear Mountain Water District board members meet every 4th Wednesday at 1:00PM at the Fire Station in Chelan. If you have further questions or comments about the information in this report or meeting location, please call (509) 670-4088. We welcome your interest in the Bear Mountain water system.

We invite you to visit our website at www.bmwd-chelan.org.

WHERE DOES YOUR WATER COME FROM?

The Bear Mountain water system is totally dependent on surface water. Lake Chelan has a large quantity and good quality of water. However to meet that criteria for domestic drinking water the State requires additional treatment and daily monitoring. The system uses a diatomaceous earth filtration process with chlorine added for disinfection. The filtration plant is located in Clos Chelalle. There is two lake pumps and 2 booster pumps that can pump a total of 90 gallons per minute to a storage reservoir that have a capacity of 156,000 gallons.



BACKFLOW PREVENTION & HAZARDS AT HOME

Bear Mountain Water District is working hard to protect your drinking water from contamination. This effort begins where your water is collected and continues through the entire distribution process.

The danger comes when the hose comes in contact with a harmful substance. If the pressure in the water main drops while the hose is submerged in contaminated water, then the water (and whatever is in it) could be siphoned back into your pipes and the drinking water supply. Water pressure drops are not uncommon. They can occur when hydrants are opened to fight fires or during repairs to a broken water main.

Fortunately, you can install different types of backflow assemblies for protection. This will help prevent this occurrence from happening and keep your water safe from these contaminants. Visit <https://www.bmwd-chelan.org/cross-connection-backflow-prevention> for more info

DO YOU HAVE ANY WATER LEAKS?

Check all faucets for drips. Replace worn and leaking washers, gaskets, pipes or defective fixtures.

Check for leaks on outside faucets, and make sure the valve closes properly.

Check toilets for leaks—they are the most common! Check the overflow of the tank to make sure no water is running over (float level may be set too high) The flapper valve in the bottom of the tank is also a location of a possible leaking toilet. To check for a flapper valve leak, put a small amount of food coloring in the toilet tank after it has filled. Do not flush the toilet for at least an hour, or overnight if possible. If the food coloring shows up in the bowl without flushing, you probably have a leaking flapper or plunger ball valve.

HOW HARD IS MY WATER?

Hard water has a high concentration of calcium and magnesium ions. These minerals are commonly present in all natural water sources. The water industry in general considers water with a hardness greater than 7 grains per gallon to be hard. Some people soften their water as a personal preference but water does not have to be softened to make it safe or usable. Bear Mountain water system hardness is 20.6 mg/l.

SPECIAL INFORMATION AVAILABLE

Drinking water, including bottled water, may reasonably be expected to contain 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 (EPA). Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency (EPA)/Centers for Disease Control & Prevention (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 (1-800-426-4791) or EPA's Web site at <http://www.epa.gov/safewater>.

CONTAMINANTS THAT MAY BE PRESENT IN THE WATER BEFORE WE TREAT IT INCLUDE:

- Microbial contaminants, such as viruses and bacteria, which 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 storm water 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 storm water 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 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.

- Per- and polyfluoroalkyl substances (PFAS) large family of human-made chemicals. A wide variety of stain-resistant, water-resistant, and non-stick consumer products. Some examples include food packaging, outdoor clothing, and non-stick pans. PFAS also have many industrial uses because of their special properties. In Washington State, PFAS have been used in certain types of firefighting foams utilized by the U.S. military, local fire departments, and airports.

LEAD

In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children. To help reduce potential exposure to lead: for any drinking water tap that has not been used for 6 hours or more, Flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula.

Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline at 1-800-426-4791 or online at <http://www.epa.gov/safewater/lead>.

2 0 2 4 W A T E R Q U A L I T Y D A T A R E S U L T S

SUBSTANCE	HIGHEST LEVEL ALLOWED (MCL*)	HIGHEST LEVEL DETECTED	VIOLATION (YES / NO)	POTENTIAL SOURCES
REGULATED AT THE PUMPHOUSE				
Arsenic (ppb)	5	.003	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	0.047	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	0.06	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrite (ppm)	1	<.10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate (ppm)	10	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Iron (ppb)	3	.014	No	Erosion of natural deposits
Chloride (ppm)	250	.5	No	Variable & dependent on chemical composition of water
Sulfate (ppm)	250	3.1	No	Erosion of natural deposits; mine drainage wastes
Conductivity (umhos/cm 25 deg.)	700 umhos/cm 25 deg.	53 umhos/cm 25 deg.	No	Presence of ions; on their total concentration, mobility and on the temperature of measurement
Turbidity (NTU)	1	.23	No	Soil run-off
Total Dissolved Solid (ppm)	500	26	No	Matter suspended or dissolved in water
Hardness (mg/L)	Not Regulated	20.6 (mg/l)	Not Regulated	High concentration of calcium and magnesium ions.
Radium 228	5	.53	No	Erosion of natural deposits
Haloacetic Acids (HAA5) (ppb)	60	18.9	No	By-product of drinking water chlorination
(TTHM) Total Trihalomethanes	80	30.1	No	By-product of drinking water disinfection
Total Coliform	0 Positive Sample	0	No	Naturally present in the environment
PFAS	Varies by Contaminant	ND	No	Human-Made Chemicals
REGULATED AT THE CUSTOMER'S TAP				
Copper (ppm)	(AL) 1.3	.047	No	Erosion of natural deposits; Leaching from wood and corrosion of household plumbing
Lead (ppb)	(AL) 15	<.001	No	Corrosion of household plumbing systems; Erosion of natural deposits

DEFINITIONS:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible.

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

ppm or mg/l: parts of contaminant per million parts of water or milligrams per liter.

ppb: parts of contaminant per billion parts of water or milligrams per liter.

Non-detect (ND): Indicates that the compound was not detected in the sample.

WATER CONSERVATION

In 2010, Bear Mountain Water District developed water use efficiency goals to comply with Washington's Water Use Efficiency Rule for the water system. To achieve these goals, the Bear Mountain Water District has implemented several water use efficiency measures. These include programs such as installation of service water meters, Xeriscape (drought-tolerant) landscaping and future customer leak detection and notification. Goals established for the Bear Mountain Water District are summarized as follows:

Source metering is in place and operational. All potable services metered. Reduce water usage per ERU by 5% per year, through conservation pricing applied to charge aggressive rates for usage above planned average daily demand. We plan to conduct future public meetings to further provide customer water savings.