2022
Consumer Confidence Water Quality Report
Spanish Peaks Mountain Club, Public Water Supply
PWS MT0004588

The Spanish Peaks Owners Association [SPOA] through an employment agreement with **Lone Mountain Land Company**, currently operates the water system for the Spanish Peaks Mountain Club. Daily operations of the system are provided by Pete Adams, (operator #7071), who is a certified water and wastewater operator by the State of Montana. The Spanish peaks water system is pleased to provide you with the 2022 Consumer Confidence Annual Water Quality Report. We want to keep you informed about the quality of water Spanish Peaks Resort has delivered to you over the past year.

The Operator routinely monitors for constituents in your drinking water according to Federal and State laws. We are pleased to report that your drinking water is **very safe** to drink and meets or exceeds all federal and state requirements. The following tables show any detects (more than, 0.0 ppm) in our monitoring for the period of **January 1st to December 31st, 2022,** that have been found.

Spanish Peaks remote and pristine setting eliminates many of the potential man-made water quality problems that plague more densely populated areas, however all sources of drinking water are subject to potential contamination by constituents that are naturally occurring and/or man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. Lead in drinking water is one in particular the EPA requires all water systems to bring to your attention in this report. 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 your own service lines and home plumbing. The Spanish Peaks water system 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 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 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 is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Arsenic is another constituent, and it occurs naturally in soil and rock and can dissolve into groundwater. For most people, food and water are the biggest sources of exposure to arsenic. Drinking water with low levels of arsenic over a long time is associated with diabetes and increased risk of cancers of the bladder, lungs, liver, and other organs. Arsenic can also contribute to cardiovascular and respiratory disease, reduced intelligence in children, and skin problems, such as lesions, discoloration, and the development of corns. Health impacts of arsenic may take many years to develop, especially if you are in contact with arsenic at a low level over a long time.

Infants less than six months old are the most vulnerable population to consuming high nitrate levels. In the human body, nitrates are converted to nitrites, which interfere with the oxygen carrying capacity of the blood. High levels of nitrates in drinking water have caused serious illness and sometimes death of infants less than six months old. Symptoms of this condition, called Methemoglobinemia, are shortness of breath and blueness of the skin. For children and adults, long term exposure of nitrate above Maximum Contaminant Level (MCL) can lead to development of diuresis, increased starchy deposits, and hemorrhaging of the spleen. Elevated nitrate levels in groundwater are an indication that surface water has a direct connection to groundwater.

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. The EPA also has a web site where you can search through a database of drinking water information across the country. The web site address is: http://www.epa.gov/enviro/html/sdwis/sdwis_query.html

In the tables below you may find terms and abbreviations you are not familiar with. To help you better understand these terms, we have provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years.

Parts per billion (ppb) or micrograms per liter (ug/l) – one part per billion corresponds to one minute in two thousand years.

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

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

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.

Maximum residual disinfectant level or MRDL- The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

Maximum residual disinfectant level goal or MRDLG- 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.

Pico Curies per Liter (pCi/L - Radioactive materials are measured in pCi/L. This stands for pico Curies per liter. A "pico Curie" is one-trillionths of a Curie. A Curie is equivalent to 37 billion radioactive disintegrations per second.

WATER SOURCES & CONTAMINANTS AND ANY VIOLATIONS:

Spanish Peaks Mountain Club's drinking water source is from 4 deep groundwater wells located in the area of Ousel Falls, and Ousel Falls View Road. All wellheads are protected by recorded easements. The following information and results are from the most recent tests performed in accordance with State regulations.

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TEST RESULTS - PWSID #004588– SPANISH PEAKS RESORT							
Contaminant	**Violation Yes/No**	**Last Sample Date**	**Highest Level Detected**	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Nitrate (as Nitrogen)	**No**	5/5/2022	0.14 Range (0.137-0.14)	ppm	10.0	10.0	runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Lead	**No**	12/9/20	90^{th} percentile = 1.32	ppb	0	Al-15	corrosion in household plumbing systems, erosion of natural deposits
Copper	**No**	6/29/20	90^{th} percentile = .075	ppm	1.3	Al-1.3	corrosion in household plumbing systems, erosion of natural deposits, leaching from wood preservatives

Contaminant	Violation Yes/No	Last Sample Date	Highest Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Disinfection By-Products (DBPs) TTHMs &HAA5s	**No**	8/3/2020	2.9 1	ppb	NA	80-TTHM 60 -HAA5	Chlorine added to the drinking water to disinfect it
Chlorine	**No**	Samples Taken Monthly	0.5 Range (0.2-0.85)	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes.
Fluoride	**No**	9/8/22	.768	ppm	4	4 ppm	Several rocks have fluoride bearing minerals like apatite, fluorite, and biotite. The weathering of these rocks and infiltration of rainfall through it increases fluoride concentration in groundwater.
Barium	**No**	9/8/2022	.0352	ppm	2	2 ppm	Barium is an alkaline earth metal that can be found in naturally occurring mineral deposits.
Selenium	**No**	9/8/2022	0.18	ppb	50	50 PPB	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Combined Radium	**No**	9/8/2022	2.82	pCI/L	0	5 pCI/L	Radioactive decay of uranium and thorium in rocks and soil
Gross Alpha	**No**	9/8/2022	3.46	pCI/L	0	15 pCI/L	Naturally occurring radioactive elements emit alpha particles as they decay.

We received 4 violations in 2022:

We took the following samples on time, but the results were not reported by the certified lab to Montana DEQ by the deadline. All these violations were returned to compliance once the data was received.

- Inorganic compounds: Cadmium, Chromium, Fluoride, Mercury, Nitrate, Nitrite, Selenium, Barium, Antimony, Beryllium, Cyanide, Nickel, Thallium

- Volatile organic compounds: Benzene, Carbon tetrachloride, p-dichlorobenzene, Trichloroethylene, Vinyl chloride, 1,1,1-trichloroethane, 1,1-dichloroethylene, 1,2-dichloroethane, cis-1,2-dichloroethylene, Ethylbenzene, Monochlorobenzene (chlorobenzene), o-dichlorobenzene, Styrene, Tetrachloroethylene, Toluene, Trans-1,2-Dichloroethylene, Xylenes, 1,2-dichloropropane, Dichloromethane, 1,1,2-trichloroethane, 1,2,4-trichlorobenzene

- Gross alpha

- Combined Radiums

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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. 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/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 addition to the possible contaminants, Spanish Peaks also tests for water quality parameters as well. These are constituents found in water that are not regulated by the DEQ, but they do influence the water taste, feel and clarity. Most of these parameters do not have a maximum contaminant level (MCL). The following table shows the water quality parameters that were tested in 2022.

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Analyte	*Result*	*Units*	*Min. Reporting limit*	*MCL*
Alkalinity	206	mg/L	10	
Calcium	56.6	mg/L	.50	
Chloride	3.39	mg/L	.15	250
Conductivity	526	uS/cm	.10	
Fluoride	.924	mg/L	.02	4
Hardness	222	mg/L	10	
Iron, Total	.02	mg/L	.02	
Lithium	ND	mg/L	.07	
Magnesium	23.3	mg/L	.20	
pH	7.96	S.U.	.10	
Phosphate as P	ND	mg/L	.07	
Potassium	5.31	mg/L	.50	
Sodium	29.4	mg/L	.20	
Sulfate	56	mg/L	.10	250

If you have any questions about this report, or concerning your water, please contact Pete Adams, the Spanish Peaks Mountain Club's Certified Operator at (406)-580-1527. You can also visit the Home Owners web site at www.spanishpeaksowners.org, for more information. We want our customers to be informed about their water utility.

We ask that all our customers help us protect and conserve our water sources.

Thank You, the Spanish Peaks Water Department