

# *Annual Drinking Water Quality Report*

## *Pine Meadow Mutual Water*

### *2017*

We are pleased to present the Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you 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 sources have been determined to be from groundwater sources, wells and a single spring.

We have learned through our monitoring and testing that some constituents have been detected. At Pine Meadow, we work around the clock to provide top quality water to every tap. The heart of our community is our water sources for our way of life and our children's future.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or manmade. 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.

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health.

So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first.

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. Pine Meadow 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

MCLs 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 from their health care providers about drinking water. 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).

Pine Meadow routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2017. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. We constantly monitor for various constituents in the water supply to meet all regulatory requirements.

In July 2017, we failed to test for coliform bacteria. Water quality may change without any visible indication due to unanticipated environmental factors. For this reason, we are required to sample for coliform bacteria on a monthly basis. This violation does not necessarily pose a health risk. We reviewed why we failed to take our routine coliform bacteria tests and we have taken steps to ensure that it will not happen again. This was a minor paperwork error. The sample did pass as being Coliform free.

As you can see from the table, our system had no violations. We are pleased to report that your drinking water meets Federal and State requirements. The EPA has determined that your water IS SAFE at these levels.

The Drinking Water Source Protection Plan for Pine Meadow Mutual is available for your review. It contains information about source protection zones, potential contamination sources and management strategies we have developed to further protect our sources from contamination. Our sources have been determined by the EPA to have a low level of susceptibility from potential contamination from sources.

If you have any questions about this report concerning your water quality, utility or source protection plan, please contact Brody Blonquist at (801) 641-0111. We want our valued customers to be informed about their water utility. If you want to learn more about the Pine Meadow Mutual Water Company, please attend any of our regularly scheduled board meetings. They are held on the second Thursday of the month. Meeting times and place can be found at <http://www.pinemeadowwater.com>.

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

## TEST RESULTS

Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Turbidity for Ground Water	N	1.7	NTU	N/A	5	2013	Soil runoff
Total Coliform Bacteria	Y	1	N/A	0	Presence of coliform bacteria in 5% of monthly samples	2017	Naturally present in the environment
Fecal coliform and <i>E.coli</i>	N	ND	N/A	0	If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	2017	Human and animal fecal waste
<b>Inorganic Contaminants</b>							
Arsenic	N	2-3	ppb	10	10	2016	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Copper a. 90% results b. # of sites that exceed the AL	N	a. 479 b.0	ppb	1300	AL=1300	2016	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	N	ND-1	ppm	4	4	2016	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead a. 90% results b. # of sites that exceed the AL	N	a. 7 b.0	ppb	15	AL=15	2016	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N	ND-1	ppm	10	10	2017	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	1-9	ppb	50	50	2016	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	12-66	ppb	None set by EPA	None set by EPA	2016	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills
Sulfate	N	8-324	ppm	1000	1000	2016	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
TDS (Total Dissolved solids)	N	252	ppm	2000	2000	2016	Erosion of natural deposits
<b>Disinfection By-products</b>							
Chlorine	N	200	ppb	4000	4000	2014	Water additive used to control microbes
<b>Radioactive Contaminants</b>							
Alpha emitters	N	ND-3	pCi/l	0	15	2017	Erosion of natural deposits
Radium 226	N	0.21	pCi/l	0	5	2012	Erosion of natural deposits
Radium 228	N	ND-2	pCi/l	0	5	2017	Erosion of natural deposits

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

- ❖ **Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ❖ **Date** - Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates may seem out-dated
- ❖ **Maximum Contaminant Level (MCL)** - 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 (MCLG)** - 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 (MRDL)** - 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.
- ❖ **Maximum Residual Disinfectant Level Goal (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.
- ❖ **Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- ❖ **Millirems per year (mrem/yr)** - measure of radiation absorbed by the body
- ❖ **ND/Low - High** - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.
- ❖ **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- ❖ **Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- ❖ **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 (ug/l)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- ❖ **Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- ❖ **Parts per quadrillion (ppq) or Picograms per liter (picograms/l)** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- ❖ **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- ❖ **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*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.*

