## Annual Drinking Water Quality Report Otter Rock Water District For year 2017

We're pleased to present to you this year's Annual Water Quality 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 we drink and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are three springs; all three are classified as Ground Water Sources. Our water is of such high quality that disinfection, filtration or any treatment is not required.

The Otter Rock Water District has been awarded the "Outstanding Performer" classification by the State Drinking Water Program.

We have developed a source water protection plan. Our recharge area has been certified by the Oregon Health Department (cert. # 0005). This delineation report is available for review. Lincoln County has designated this area to be a Goal V resource. This gives us some added protection.

I'm pleased to report that our drinking water is safe and meets federal and state requirements. 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 our office at 541-765-2660. 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. They are held every month on the second Tuesday at 6:00 PM. The meetings are held at the Otter Rock Community Hall at 6515 Gladys Ave. There now is a water payment drop box at the District Building's front doors.

We test for Total Coliforms as well as E Coli monthly. We had no tests come back positive for E Coli. This year we did have a few tests come back positive for Total Coliforms in the distribution system. We had NO positive Total Coliforms tests taken from the springs. The positive tests were taken in the distribution system. In February, April, September, and October we had positive Total Coliform results. 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 an investigation to identify problems and to correct any problems that were found during this investigation. During the past year, we were required to conduct [1] level 1 coliform investigations. [1] level 1 coliform investigation was completed. In addition, we were required to take [3] corrective actions and we completed [3] of these actions. After further testing all samples for E Coli came back negative. This year we had several improvement projects going throughout the water system. We installed a new roof on the large tank. We also had a thorough cleaning of the system. This included pipes, all springs, vaults, and Tanks. We also repaired several cracks inside and outside of storage tanks, vaults, and concrete structures. These may or may not have contributed to the results.

The Otter Rock Water District routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of detected substances for the monitoring period of January 1<sup>st</sup>, 2017 to December 31<sup>st</sup>, 2017 or the latest results of a chemical detection. We have tested for many more substances than shown here; the table below shows only the ones that were detected. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. 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.

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:

*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 - 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.

*Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements 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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detec ted	Unit Mea sure ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants						
* 1. *Copper 8/2015	N	598	ppb	1300	AL= 1300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2. Nitrate (as Nitrogen) 5/2017	N	1.78	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Radioactive Contaminants						
4. Combined radium 9/2012	N	1.7	pCi	0	5.0000 pCi	Erosion of natural deposits

<sup>\*</sup> Lead and Copper testing was done at required number of residences. Amount shown is the  $90^{th}$  % Source water had ND.

(Inorganic Contaminants:)

- (1) 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 water containing 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.
- (2) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and bluebaby syndrome.

Radioactive Contaminants:

(3) 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.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

## What does this mean?

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. 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.

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.

**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.

**Lead**: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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.

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).

We at the Otter Rock Water District work around the clock to provide top quality water to every tap. 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. Please call our office if you have questions.