

2012
Water Quality Report
For
The City of Sutherlin

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of 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 water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our primary water source is surface water from Calapooya Creek at Nonpareil, and our secondary water source is surface water from Cooper Creek reservoir.

The City of Sutherlin has a source water assessment on the Calapooya and the Cooper Creek water sheds. For Calapooya Creek, there have been 8 **potential** contaminant sources. These include rural homesteads, Red Rock road, grazing animals, non-irrigated crops, clear cuts, road density, stream crossing, and areas of slope instability. For the Cooper Creek water shed there have been 9 **potential** contaminant sources. These include managed forest lands, recreation areas (parks), large capacity septic systems, a storm water outfall and retention basin, an area of grazing animals, and a rural residential area. This provides a quick look at existing potential sources of contamination that could, if improperly managed or released, impact water quality in the watershed. We have a source water assessment plan available at our office that provides more information upon request.

We're pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Water Treatment Supervisor Randy Harris at 541-459-5768. 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 City Council meetings. These meetings are held on the second Monday each month.

The City of Sutherlin routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2012. 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.

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.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

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

Maximum Contaminant Level - (mandatory language) 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 - (mandatory language) 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.

The following lab results are for the Calapooya surface water

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Sample Date	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	N	ND		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
2. Fecal coliform and <i>E.coli</i>	N	ND		0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
3. Turbidity, all surface water systems beginning calendar year 2005	No	0.30 NTU	4-23-12	0	TT=1 NTU	Soil runoff

Inorganic Contaminants						
1. Copper	N	0.253	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2. Lead	N	5.0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection Byproducts, Byproduct Precursors, Disinfectant Residuals						
1. Total Trihalomethanes TTHM	N	13.5	ppb	N/A	80.0	Byproduct of drinking water disinfection
2. Haloacetic Acids (HAA)	N	23.5	ppb	N/A	60.0	Byproduct of drinking water disinfection
3. Total Organic Carbon (TOC)	N	0.76	ppm	N/A	NONE	Naturally present in the environment
4. Chlorine	N	2.1	ppm	4.0	4.0	Water additive used to control microbes

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. The City of Sutherlin 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 two 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 or at www.epa.gov/safewater/lead.

The City has tested source water from Calapooya Creek that supplies the Non Pareil WTP for Cryptosporidium. These organisms are present in the raw water sources in very low concentrations. The results of the tests was a 12 month mean of 0.058 oocysts/L. This is below the 0.075 oocysts/L that would require additional treatment. The water treatment plant is designed to remove these contaminants. **This organism was detected in Calapooya Creek not in our treated water. Monthly bacteria tests conducted on our treated water indicate that it is safe to drink.**

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 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.

MCL's are set at very stringent levels. To understand 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.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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).

If you have any questions please call Randy Harris at 541-459-5768.

We at the City of Sutherlin 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.