Annual Drinking Water Quality Report 2001

Umpqua Basin Water Association, Inc.

You will be pleased to know that in 2001, Umpqua Basin Water Association, Inc. met all federal and state drinking water standards. 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 treatment process and to protect our water resources. We are committed to ensuring that you receive ***"Drinking Water You Can Trust"***.

Umpqua Basin Water Association is a large privately owned, non-profit rural drinking water system serving approximately 9000 people through 230 miles of pipe covering some 100 square miles north and west of Roseburg. Our 2800 service connections are composed primarily of rural residential users together with 46 commercial and public users.

All water treated and delivered by Umpqua Basin Water Association is surface water taken from the North Umpqua River. Surface water refers to water that comes from an above ground source such as a lake, river, stream or reservoir. We are quite fortunate in that the North Umpqua River is one of the highest quality surface water sources in the State of Oregon. It is a high volume, fast flowing, low temperature river that originates ±100 miles to the east in the snowfields of the Cascade Mountains. There is relatively little industrial, agricultural or residential activity along its banks and the vast majority of the river's watershed is within the Umpqua National Forest.

Umpqua Basin Water Association has a modern full-treatment water plant located on the banks of the North Umpqua River in Garden Valley. The plant is operated by a well trained and state certified staff. The technology and expertise at this facility allows us to consistently exceed all current water quality standards efficiently.

If you have any questions about this report or concerning your water utility, please contact our customer service representative at 672-5559, 8:00 a.m. to 4:30 p.m., Monday through Friday**.** 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 Board of Directors meetings. They are held on the second Tuesday of the month at 12:00 noon at the Association offices, 4972 Garden Valley Rd., Roseburg.

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of contaminants in drinking water does not necessarily indicate that the drinking water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency (EPA) *"Safe Drinking Water Hotline"* at 1-800-426-4791.

Water samples. Water samples are routinely collected from different sampling stations around the system and tested in state certified labs to make sure the water is safe for your consumption. These samples must meet standards set by the Oregon Health Division (OHD) and the U S Environmental Protection Agency (EPA). The microbiological tests we perform analyze the water for the presence of indicator organisms called "coliform bacteria". If the indicator organism is detected, there is the potential that other pathogenic (disease causing) organisms may be present. Umpqua Basin Water Association's system is well protected against microbiological contamination. The water we provide contains a small amount of chlorine in it to maintain a disinfectant capability. The OHD and EPA provide guidelines on MCLs for this type of testing. The MCL for coliform bacteria is no more than one (1) coliform-positive test per month out of the nine- (9) samples we take each month. Umpqua Basin Water Association does very well with this requirement, as we've had ZERO (0) positive samples for the past seven years.

Lead and Copper. There is no lead or copper in the Association's water supply. However, these metals can enter the drinking water supply through corrosion within the water distribution system or household plumbing. Therefore, additional regulations were adopted in 1991 calling for supplemental testing to occur at the taps of those customers considered being at highest risk for leaching of these substances into their water. Our findings based on several rounds of testing in June 1998 were that our water did not tend to promote significant leaching of these minerals. The 90^{th} percentile results for lead were 5.0 ppb and copper was 950 ppb. The action levels for lead is 15 ppb and copper is 1,300 ppb. We will be testing once again in June 2002.

Cryptosporidium. Cryptosporidium is a microscopic organism that is naturally present in bodies of water throughout the world. We have been voluntarily testing both source water and finished water for the presence of Cryptosporidium since 1994.We detected this constituent in seven (7) out of 26 source water samples tested and zero (0) out of 26 finished water samples tested.

Do I need to take special precautions? 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 with other immune system disorders some elderly people and some 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Umpqua Basin Water Association also tests finished water for both Arsenic and Nitrate, neither has been detected at reportable levels. EPA is reviewing the drinking water standard for arsenic because of concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral thought to cause cancer in humans at high concentrations. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age and can cause "blue baby syndrome". Nitrate typically occurs in surface waters as a result of agricultural runoffs. Again, neither of these contaminants has been detected.

Water Quality Table

The water quality data on the following table lists the contaminants that we detected during monitoring in the calendar year 2001. The presence of these contaminants in the water does not indicate that the water poses a health hazard and there were no violations of the water quality standards. Definitions of the terms and abbreviations used in the table are listed below the table.

Contaminant	MCL	MCLG	Result Highest Level	Range	Major Sources
Turbidity	0.5 NTU	N/A	0.433 NTU 100% of all samples are below 0.5 NTU	0.013-0.433	Soil Runoff
TTHM	100 ppb	0 ppb	370 ppb	140-370	By-product of chlorination
HAA	N/A	N/A			
MCA	N/A	N/A	n/d	n/d	By-product of chlorination
MBA	N/A	N/A	2 ppb	2 ppb	By-product of chlorination
DCA	N/A	N/A	26 ppb	5-26 ppb	By-product of chlorination
TCA	N/A	N/A	25 ppb	4-25 ppb	By-product of chlorination
BCA	N/A	N/A	n/d	n/d	By-product of chlorination
DBA	N/A	N/A	n/d	n/d	By-product of chlorination
Adipates*	400 ppb	-	-	-	Plastic vinyl hoses
Phthalates*	6 ppb	-	-	-	Plastic vinyl hoses

These contaminants were tested for as a quarterly follow-up to detection in 2000. Source was determined to be sampling line plumbing and not the source of the water. Corrective action to replace the sample tap plumbing flexible hose with solid copper line eliminated the contaminant.

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 an enforceable level set as close to the MCLGs as feasible in light of 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 human health. MCLGs allow for a margin of safety.

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. One of the most important ways to measure how well a water treatment process is performing is by turbidity analysis. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for bacterial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

The standard for turbidity is 0.50 NTU. Turbidity in excess of 5 NTU is just noticeable to the average person. Umpqua Basin Water Association's water has an average turbidity of 0.017 NTU and never exceeds 0.50 NTU.

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.

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

Lawn Watering is Fast Approaching

Morning is the best time to water most lawn areas ... and the earlier the better.

❖As the sun rises so does the mercury. After about 10 a.m. heat steals moisture from your lawn through evaporation. When you water EARLY, you can water LESS because more of the water is absorbed into your lawn. You save time and money when you water at daybreak.

Don't Drizzle.

❖A light sprinkling is the LEAST EFFECTIVE method of watering. In fact, it can damage your lawn. A good soaking gets to the "root" of the problem by encouraging deep, solid root growth. Lawns without deep root growth are less drought resistant and more prone to winter kill.

Watering during the heat of the day can actually harm your lawn.

❖"Scald" or "burn" damage occurs when hot sunlight hits water droplets that cling to leaves. The tiny droplets imitate powerful, miniature magnifying glasses.

At night, cool, moist conditions create an ideal environment for lawn diseases to develop. Grass blades watered in the morning dry off quickly, making it harder for a disease habitat to flourish.

Water only when your lawn needs it.

❖You don't have to water on a set schedule. Water only when the grass or plants show signs of needing it. To test whether or not your lawn needs a soaking, step on the grass. If it springs back up, you don't need to water. If it stays flat, it's time to water

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