

ON TAP



"Drinking Water You Can Trust"

Vol. 17 Issue 1

March 1, 2002

"2001 - The Year in Review"

2001 was a busy and successful year for Umpqua Basin Water Association. Our membership continued to grow with the addition of 53 new members, bringing our total membership to 2803, a 1.9% increase.

Our distribution system continued to grow with the addition of 7200 ft. (1.4 miles) of new mainlines. Several new developments were completed, including; The Meadows-Phase II, Melrose Terrace Estates and Darley Drive. In addition, the Association built a 12" mainline to a new tank site off of Old Garden Valley Road. The cost of the developments was paid for by the developers (\$75,175.00) and donated to the Association. The Association paid for the cost of the tank line, as well as tank site development (\$163,505.00).

The Association also completed several additional distribution system projects last year. 2910 ft. of 12" mainline was moved on Garden Valley Road to accommodate a Douglas County road improvement project. 710 ft. of 1 1/2" line on Hi Lo Lane was upgraded to a combination of 4" and 2" mainline and 1280 ft. of 1 1/2" line on Orchard Lane was upgraded to 4" mainline. Total cost to the Association on these improvement projects was \$143,126.00.

We also finished the Treatment Plant Upgrade project that was begun in 2000. This project included a major renovation of our clear well, improved metering of finished water leaving the treatment plant and the addition of plant monitoring equipment that allows us to improve plant performance and comply with new drinking water regulations. Final cost for this project was \$348,618.00.

Finally, the Association purchased capital equipment that included computer hardware and software, truck radios, two small pick-up trucks, a wet/dry vac trailer and some small tools in the total amount of \$81,541.00.

Grand total, the value of all projects and capital purchases for 2001 came to \$811,965.00. The funding for the Association's portion of all of these projects came from our funded depreciation and capital improvement accounts and totaled \$704,986.00. No borrowing or financing was required.

“Year 2002 Projects”

Two major projects for 2002 have begun. Construction of a 1 million gallon storage reservoir off of Old Garden Valley Road will begin in March with completion anticipated by the end of June. This reservoir will give us much needed storage and supply to the Del Rio Road and Lower Garden Valley areas. Total cost of this project is estimated at \$350,000.00.

The second project is the replacement of 2200 ft. of mainline on Lookingglass Road between Military Road and Taber Lane. Design work has been completed and bids will be received by mid-March. Work will be completed by July 1st. Douglas County Road Department will be making a number of slide corrections this coming year on Lookingglass Road. Our water line must be moved to accommodate these road improvements. As we do this work, we intend to upgrade to a 6" mainline in order to provide improved service to that area of the system.

Additionally, during the spring and summer months, Umpqua Basin Water Association personnel will be replacing and upgrading several short, sub-standard lines around the distribution system. These projects will each be a few hundred feet in length and will improve flow and dependability to small groups of homes.

Finally, we will begin design on the replacement of 2 miles of 2" line on Upper Cleveland Rapids Road with a new 6" mainline. Actual construction on the project will occur in spring/summer of 2003.

“Membership Benefits”

As a member of Umpqua Basin Water Association, you already know the great advantages that come from belonging to a cooperative-style organization. But the benefits you can get from a cooperative membership do not stop there. **We want to remind you that you and your relatives can join WOOD PRODUCTS CREDIT UNION and take advantage of additional benefits such as:**

1. **Free checking account for life when you open a 3% Special Money Market Account with a minimum \$10,000 deposit. See enclosed insert.**
2. First mortgages for home purchases – rates are down!
3. Free ATM transactions at more than 200 CU ATM's in the Northwest.
ATM's are located at the Roseburg Branch and the Dillard Store.
4. Home Banking offered at no cost to members – Bill Payer coming soon.
5. Great rates on all Certificate of Deposit and Savings/Investment accounts.
6. Competitive lending rates on everything from new and used cars/trucks to RV's and boats, etc. with decisions made at time of application.
7. Access to your Checking account with WPCU Checking Debit Card.

The friendly folks at Wood Products Credit Union would like to share with the other benefits of credit union membership. With a credit union, you're not just an account number; you're an owner. For more information please feel free to stop by their location at 2335 NW Kline St. (near Cinema 7 Theaters on Garden Valley) or give them a call at 673-4461.

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water 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 treatment process and 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 220 miles of pipe covering some 100 square miles north and west of Roseburg. Our 2690 service connections are composed primarily of rural residential users together with 40 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.

Umpqua Basin Water Association routinely monitors for constituents in your drinking water according to Federal and State laws. The following Water Treatment Analysis Tables show the results of our monitoring for the period of January 1st to December 31st, 1999. In some cases, we have been allowed to test for a particular constituent less often than once a year. In those cases, the data presented in the table are from the most recent testing done in accordance with the reduced monitoring regulations. The table is a listing of all constituents tested for, the MCL's for the constituents, the test results from your water supply and the reasons for regulation.

Water quality results are often times difficult to understand, let alone interpret. Following are some definitions and examples to help clarify the results reported in the table:

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

Langelier Index (LI) – A means of expressing the degree to which water will either tend to dissolve or deposit calcium carbonate. A "0" score is neutral, negative numbers indicate the degree to which the water is dissolving, and positive test results reflect the tendency to leave deposits.

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.

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. 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.

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 and cost/benefit considerations. 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.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is the level of a contaminant, not necessarily achievable, below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Inorganic Contaminants – Inorganics are created both by man-made processes as well as naturally occurring. They get into the water supply by the run-off or leaching into the surface water sources. Umpqua Basin Water Association tests for 7 different inorganics and has found none detected in our water.

Synthetic Organic Chemical - Testing for synthetic organic chemicals is a prudent way to test for any industrial or agricultural source contamination. SOCs are herbicides, insecticides and pesticides. Umpqua Basin Water Association tests for 42 different SOCs and has found none detected in our water.

Volatile Organic Chemicals - Volatile organic chemicals are used in many industrial solvents. VOCs pose a possible health risk because a number of them are known to be or are probable carcinogens (cancer causing agents). Umpqua Basin Water Association tests for 37 VOCs (in addition to THMs) and have found none detected in our water.

pH – The degree of acidity or alkalinity of a solution. Values between 0 and 7 indicate acidity and readings

between 7 and 14 indicate alkalinity. With a value of almost 7, our finished water is essentially neutral.

Trihalomethanes/Haloacetic Acids - Trihalomethanes (THMs) and Haloacetic Acids (HAAs) are produced in the course of water treatment as by-products of the chlorination/disinfection process. Some THMs and HAAs are thought to be carcinogens at certain levels. The MCL for total THMs is 80 ppb. Umpqua Basin Water Association (UBWA) is well under the MCL with a measurement of 15 ppb. There is currently no requirement for UBWA to test for the HAAs and therefore no MCL. However, UBWA does quarterly testing to build a data base in case of future regulations.

Hardness - There are no distinctly defined levels of what constitutes hard or soft water. The amount of hardness affects how easily soap will lather up. The harder the water, the less lather for a given amount of soap. Hardness is typically measured as dissolved calcium carbonate (CaCO_3) with amounts above 130 ppm considered hard. Umpqua Basin Water Association's water ranges from 20 to 30 ppm and is considered moderately soft. Expressed in grains per gallon (g/gal), our water ranges from 1.2 to 1.8 g/gal of hardness.

“Water Quality Analyses”

Contaminant (units)	MCLG	MCL	Results	Major Sources in Drinking Water
Oregon Secondaries (mg/L)				
Aluminum (ppb)	n/a	50 to 200	8	Erosion of natural deposits; Water treatment chemicals
Arsenic (ppb) †	n/a	50	ND	Natural deposits; Runoff from orchards, glass and electronic production wastes
Barium (ppm) †	2	2	ND	Discharge of drilling wastes; Discharge from metal refineries; Natural deposits
Bromate ††	n/a	n/a	ND	By-product of drinking water disinfection
Cadmium (ppb) †	5	5	ND	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Calcium (ppb) ††	n/a	n/a	5,800	Erosion of natural deposits
Chloride (ppb)	n/a	250,000	6,000	Erosion of natural deposits
Chromium (ppb) †	100	100	ND	Discharge from steel and pulp mills; Erosion of natural deposits
Color	n/a	15	ND	
Copper (ppb)	1,300	AL=1,300	ND	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	n/a	4	ND	Erosion of natural deposits; Discharge for fertilizer and aluminum factories
Iron (ppb)	n/a	300	ND	Erosion of natural deposits
Langeliers Index (LI)	n/a	n/a	-3.52	
Lead (ppb) ††	0	AL=15	ND	Corrosion of household plumbing systems; Erosion of natural deposits
Magnesium (ppb) ††	n/a	n/a	2	Erosion of natural deposits
Manganese (ppb)	n/a	50	ND	Erosion of natural deposits
Mercury [inorganic] (ppb) †	2	2	ND	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Nitrate [as Nitrogen] (ppm)	10	10	ND	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
PH	n/a	6.5 to 8.5	6.81	
Selenium (ppb) †	50	50	ND	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Silver (ppb)	n/a	100	ND	Erosion of natural deposits
Sodium (ppb) †	n/a	n/a	2,900	Erosion of natural deposits
Sulfate (ppb)	n/a	250,000	ND	Erosion of natural deposits
Surfactants (MBAS) (ppb)	n/a	500	ND	Detergents and foaming agents
Total Alkalinity (ppm) ††	n/a	n/a	15	Erosion of natural deposits
Total Dissolved Solids (ppm)	n/a	500	27	Erosion of natural deposits
Total Hardness (ppm)	n/a	250	24	Erosion of natural deposits
Total Solids (ppm) ††	n/a	n/a	47	Erosion of natural deposits
Zinc (ppm)	n/a	5	ND	Erosion of natural deposits

Trihalomethanes (THM)				
Bromodichloromethane	n/a	n/a	2	By-product of drinking water chlorination
Bromoform	n/a	n/a	ND	By-product of drinking water chlorination
Chlorodibromomethane	n/a	n/a	ND	By-product of drinking water chlorination
Chloroform (ppb)	n/a	n/a	13	By-product of drinking water chlorination
Total trihalomethanes (ppb)	0	80	15	By-product of drinking water chlorination

Haloacetic Acids (HAA)				
Bromoacetic Acid (ppt)	n/a	n/a	ND	By-product of drinking water chlorination
Bromochloroacetic Acid (ppt)	n/a	n/a	ND	By-product of drinking water chlorination
Chloroacetic Acid (ppt)	n/a	n/a	ND	By-product of drinking water chlorination
Dibromoacetic Acid (ppt)	n/a	n/a	ND	By-product of drinking water chlorination
Dichloroacetic Acid (ppt)	n/a	n/a	8,000	By-product of drinking water chlorination
Trichloroacetic Acid (ppt)	n/a	n/a	9,000	By-product of drinking water chlorination

Microbiological Contaminants				
Total Coliform Bacteria	0	*	0	Naturally present in the environment
Fecal coliform and <i>E. coli</i>	0	**	0	Human and animal fecal waste

*** - Presence of coliform bacteria in 5% of monthly samples,**

** - A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive

Radioactive Contaminants				
Alpha emitters (pCi/l)	0	15	ND	Erosion of natural deposits

† - Samples were last tested in 1995

†† - Samples were last tested in 1998

“Additional Information”

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 five 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 were that our water did not tend to promote significant leaching of these minerals. The 90th 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.

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 four (4) out of 22 source water samples tested and zero (0) out of 22 finished water samples tested. We believe it is important for our customers to know that Cryptosporidium may cause serious illness in immuno-compromised persons such as 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. These people are encouraged to seek advice about their drinking water from their health care providers.

What does all this mean? As you can see by the table, our system had no violations. We’re proud that your drinking water consistently 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. Umpqua Basin Water Association is committed to providing safe high quality drinking water to the nearly 9,000 people we serve. We shall continue to work hard to ensure that our customers receive “*drinking water you can trust*”.

All drinking water, including bottled water, can reasonably be expected to contain 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 Hot Line*” at 1-800-426-4791.

“Ways You Can Save Water Every Day”

Clip this page and post it where you can see it to remind you how you can help conserve water.

Water conservation is something we all should practice. Except for the air we breathe, water is the single most important element in our lives. It's too precious to waste. Here are some useful facts and simple suggestions that will help you understand more about water. They'll help you save hundreds, even thousands, of gallons per month without any great inconvenience.

We drink very little of our drinking water. Generally speaking, less than 1% of the treated water produced by water utilities is actually consumed. The rest goes on lawns, in washing machines, and down toilets and drains.

Every glass of water brought to your table in a restaurant requires another two glasses of water to wash and rinse the glass. Since nearly 70 million meals are served every day in U.S. restaurants, we'd save more than 26 million gallons of water if only one person in four declined the complimentary glassful.

Indoor water use statistics vary from family to family and in various parts of the country, but they average out pretty reliably. Nearly 40% gets flushed down toilets, more than 30% is used in showers and baths, the laundry and dishwashing take about 15%, leaks claim 5% or more, which leaves about 10% for everything else.

If you have a lawn, chances are it's your biggest water consumer. Typically, at least 50% of water consumed by households is used outdoors. Inside your house, bathroom facilities claim nearly 50% of the water used.

Ultra-low-flush toilets, which may cost from under \$100 to over \$300, depending on the type purchased, use only about 1.5 gallons of water per flush. That could cut your family's total indoor water use by as much as 20%.

Select the appropriate water level for the size of your load of laundry. Most clothes washers now offer preset water levels for small, medium and large loads. Use full loads whenever possible.

If somebody in your family likes to shave with water running in the basin, they probably use at least one gallon per minute, most of it wasted. A stoppered basin needs one-half gallon or so of water for adequate razor rinsing.

Fill your dishwasher full because it will use the same amount of water for a normal cycle, whether it contains a full load of dishes or just a few items. Also, there's really no need to fully wash dishes before loading in the dishwasher. Just scrape off the food scraps and rinse.

Do you wash your car at home? Please don't let the hose run. Instead, wet the car thoroughly, then turn off the hose while you swab off the car with soapy water from a bucket. Use the hose again for final rinse. A trigger nozzle is best because it turns off automatically.

Do your lawn sprinkling early in the morning, between 4 and 6 a.m., when water demand is low. After about 10 a.m., both heat and evaporation go up, robbing the lawn of moisture. Also, be sure to adjust lawn watering to the weather. Following a heavy rain, for instance, skip your regular watering day until the grass needs it again. Teach the family how to turn off the automatic sprinkler system in case a storm comes up during the sprinkler cycle.

“If everyone saves a little, we'll all save a lot !”

"THIRTY-SIXTH ANNUAL MEETING"

Umpqua Basin Water Association, Inc. will be holding its Thirty-sixth Annual Meeting at the **Riversdale Grange Hall** on Thursday evening, March 21, 2002, at 7:30 p.m. The agenda includes the election of two (2) Board Members, an update on the current status of the Association, a presentation of the recently completed projects, and an opportunity for questions, answers and general discussion.

Names of the nominees for the Board Member positions are posted in the office of the Association. Copies of the Annual Financial Statement will be available at the Annual Meeting or from the Association's office upon request.

This is your Association. Please join us for the 2002 Annual Meeting and exercise your right to vote and be heard. Light refreshments will be served.

Umpqua Basin Water Association, Inc.

<u>District</u>	<u>Director</u>	<u>Area Served</u>	<u>Term Expires</u>
1	John Stenbeck	Garden Valley West / Lower Garden Valley	March 2004
2	Dick Lewis	San Souci / Braunda / Colonial	*March 2003
3	Doyle Shaver	Lookingglass / Happy Valley	*March 2003
4	Mike Brinkley	Melrose	March 2002
5	Don Bentz	Fisher / Garden Valley	March 2002
6	Frank Schuchard	Wilbur / College	March 2004
At-Large	Mike Luttrell	Entire System	March 2004

*** - Director positions up for election**

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