

ON TAP



"Drinking Water You Can Trust"

Vol. 21 Issue 1

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2006 YEAR IN REVIEW

2006 was a very busy and successful year for Umpqua Basin Water Association, Inc. Our membership continues to grow with the addition of 74 new members giving your Association a total of 3186 members. This is an increase of 2.4% which matches our 10 year average.

Our distribution system also continues to grow with the addition of nearly 20,000 feet (3.8 miles) of new mainline serving 96 new lots. Eight separate extension line projects were built, paid for and donated to your Association by customers and developers with a total value of \$644,709.

In addition, a new 225,000 gallon reservoir was constructed near the end of Moorea Drive and our existing Moorea Drive pump station was upgraded to serve the new reservoir. Umpqua Basin Water Association participated in both projects with Morgan General Contracting to improve service to existing customers and extend service to new customers. Total value of value of those projects was \$217,253 with Umpqua Basin Water Association contributing \$96,500.

Your Association also purchased a small 2 acre lot behind the office/plant complex for possible future expansion at a cost of \$260,000. Potential uses of the property are as an equipment/maintenance yard and/or for business offices. A final Board decision is pending.

Finally, the big project of 2006 for your Association was the construction of a new water treatment plant. Construction began in February 2006 with completion anticipated by the end of March 2007. Cost for the new plant will be \$9.65 million with financing provided by CoBank, the National Bank for Co Operatives. The plant is a state-of-the-art membrane filtration system that will meet all current and anticipated future EPA rules for water quality. We began using the new plant on December 20, 2006, and have achieved excellent results in all water conditions. Please see the accompanying article for an explanation of the filtration process.

PLANNED SYSTEM UPGRADES

The Board of Directors recently adopted a 5-year Capital Improvement Plan that outlines anticipated capital improvement projects thru 2011. Expenditures will be in the \$300,000 to \$500,000 range annually and will be funded within the Association's financial plan through the Capital Improvement and Funded Depreciation Funds. The projects will address growth as well as aging infrastructure. State and County road and bridge replacements will also require some mainline replacement. No additional debt will be incurred to address these needs. Projects of interest include the Del Rio Rd/I-5 interchange realignment, Brown's Bridge and Conn-Ford Bridge crossings, mainline upgrades on Melrose Rd. (Fir Ridge Road to Doerner Rd), Wulff Ln., Champagne Creek Canyon, Wilbur Cutoff Rd., Silver Maple Ln., Jonni Ln., Happy Valley Rd., and a creek crossing in the Diamond Valley Subdivision. In addition, the business billing/accounting system is due for replacement, and an upgrade in the distribution telemetry system is planned. Finally, we will be building an additional reservoir in the Wilbur area to address growing commercial/industrial demand.

THE NEW FILTER SYSTEM

We have installed a Zenon Water ultrafiltration system called ZeeWeed 1000. ZeeWeed ultrafiltration is an advanced water treatment technology that uses immersed hollow-fiber membranes to separate particles from water. This technology produces superior quality drinking water by removing virtually all harmful pathogens and suspended solids.

In the ZeeWeed treatment process, raw water is pre-screened and directed to the ZeeWeed immersed membrane process tanks. Within the process tanks, individual membrane modules are combined to form cassettes.



Filtration is achieved by drawing water to the inside of the membrane fiber under low vacuum pressure. The treated water (permeate) is conveyed to the main permeate collection pipes. The ZeeWeed 1000 Series membrane utilize "Outside-In" flow through a hollow-fiber membrane that has nominal and absolute pore sizes of 0.02 and 0.1 microns respectively. The small pore size excludes particulate matter including solids, bacteria, pathogens and certain viruses.

We have also changed the way we disinfect your drinking water. In the past we were using Chlorine Gas. Chlorine Gas has been used successfully for over 100 years to eliminate diseases in drinking water. The method has been changed to a system called Miox. Miox uses only salt, water and electricity to generate a diluted disinfectant solution called Sodium Hypochlorite. Overall, mixed oxidants (MIOX) provides the Association with a safer and better quality drinking water and eliminates the higher risks associated with handling chlorine gas.

RATE ADJUSTMENT

As a reminder, the Board of Directors adopted a 5 year water rate adjustment schedule that went into effect in 2003. 2007 is the last increase of the adopted 5 year water rate adjustment schedule. The monthly demand charge of \$14.00 per month remains unchanged and the monthly allowance for uncharged consumption remains at 1000 gallons. The commodity charge is now \$4.29/per thousand gallons up to 50,000 gallons and \$2.83/per thousand gallons over 50,000 gallons. The surcharge of .50¢/per 1000 gallon will remain in effect for 15 years as the Association pays off the loan for the new water treatment plant.

FORTY-FIRST ANNUAL MEETING

Umpqua Basin Water Association Inc., will be holding its **Forty-First Annual Meeting** at the Riversdale Grange Hall on Thursday evening, March 15, 2007, at 7:30 PM. The Agenda includes the election of three (3) Board Members, an update on the current status of the Association, a review of 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 office upon request.

This is your Association. Please join us for the 2007 Annual Meeting and exercise your right to vote and be heard. Light refreshments will be served.

Umpqua Basin Water Association, Inc.

District	Director	Area Served	Term Expires
1	John Stenbeck	Garden Valley W. / Lower Garden Valley	* March 2007
2	Jeff Byers	San Souci / Braunda / Colonial	March 2009
3	Roy Ellis	Lookingglass / Happy Valley	March 2009
4	Mike Brinkley	Melrose	March 2008
5	Don Bentz	Fisher / Garden Valley	March 2008
6	Frank Schuchard	Wilbur / College	* March 2007
At-Large	Mike Luttrell	Entire System	* March 2007

* - Director Positions up for election

WATER SECURITY

Drinking water professionals have been aware for a long time of security issues surrounding the provision of drinking water to the public, from securing reservoirs and wells to protecting treatment facilities to guarding materials on those facilities to the distribution system. Working vigilantly to safeguard our most valuable natural resource, water systems around the nation have had emergency preparedness and response plans in place for many years. They work closely with local, state, and federal officials to identify emergency scenarios and develop strategies for cooperative responses. Since 9/11, water systems across North American have revisited their emergency response plans and began taking additional steps to protect treatment plants and pipes. In the U.S., \$2 billion has been spent among water suppliers nationwide to address basic security needs, including improved fencing, lights, alarms and locks.

MANAGER'S CORNER

After 23 years as the Manager of your Association, I will be retiring on April 1, 2007. I have had an interesting and enjoyable ride working in a challenging, and ever changing environment. Your Association is blessed with an outstanding Board of Directors and an exceptional group of employees who are all dedicated to providing you with the highest quality drinking water in Oregon. When you get an opportunity, be sure to thank them for all the good work they do for you. My thanks to the Board, both past, and present, for giving me the opportunity to serve the Association. As I leave, your Association is in excellent health, both physically and financially. I am confident that will continue, and that you will always be provided with "Drinking Water You Can Trust". See you on the golf course!

Noel Groshong

LOUDY HOT WATER

You might have noticed how cloudy, or even milky, hot water looks when it's coming out of your tap. That is because the air, especially the suspended air, has been trying to get out of that hot water, but the pressure in the pipes is holding it in. As soon as you release the pressure, the air tries to get out. The cloudiness of the water is the air forming tiny bubbles. Liquids can contain gasses in solution or in suspension. The liquid is regular water, the gas is regular air. Solution means molecules of the air have been broken apart and evenly dispersed among the molecules of the water. A lot of the air is in suspension, not broken down to the molecular level, but just sort of mixed and just hanging around there in the water without any bonding. Air is already dissolved in the water when it comes from the source; more air is put into suspension especially when it comes out of the tap, and when you add aerators on the tap.

The colder water is, the more pressure it is under. Air that is in suspension escapes the water easier than air in solution, because the molecules of dissolved air are holding on to the water molecules. As soon as cooler water comes out of the tap it begins to lose pressure and some of the air is released, just not as fast since the cooler temperature tries to hold the water. So, cool water is usually not as cloudy as hot water. But as the water sits in a glass it warms up, and the suspended air and the gas molecules start being released by the water.

The gas molecules like to grab hold of each other even more than they like to grab hold of the water. The warmer a molecule gets, the more energy it has, the more energy it has, the less affinity it has for other molecules, especially dissimilar molecules. Anyway, as the air molecules are released they begin to wander around in the water until they bump into another one and hook up until you get large enough groups of air to form bubbles. In fact, once two molecules have wandered around long enough to find each other and get hitched it doesn't take long for them to grab a third one. The bigger the group gets, the faster it gets bigger, that's a reason why it takes a while for the bubbles to form. Most of the bubbles just rise up and out and rejoin the atmosphere. But some of the molecules get stuck on the side of the glass. Just like that lonely molecule searching for another which is also wandering. That immobile molecule latches onto another molecule and then another comes along and grabs on to it. So, the next time you open up your faucet to fill up a pan or a container with hot or warm water, and the water seems a bit cloudy, wait a few minutes, after the molecules finished rejoining the atmosphere, you will have clean water.

OPEN HOUSE & PLANT TOUR

There will be a formal dedication of the new water treatment plant at 11:00 AM on Saturday, March 24, 2007. An Open House and plant tour for all Association members as well as the interested public will follow from 1:00 PM to 4:00 PM. Please join us to get a first-hand look at the new treatment process in action.

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