Water Resource Problems Not Y2K Compliant

Dealing With Ongoing Water Resource Issues .... and Food for Thought

As everyone breathed a sigh of relief with the passing of the 20th Century into the New Millennium, water resources remain a major challenge for all of us.

There may be little relief, in the immediate future, regarding Yavapai County (State? Nation?) water resource issues. Water Mining is occurring both in and outside the Prescott AMA (Active Management Area). Nitrate contamination of ground water is increasing in several areas of Yavapai County. The vast majority of private well owners are not monitoring the quantity and quality of their wells. Public involvement is minimal although they are slowly organizing local water resource / water interest groups. Effluent from waste water treatment plants will probably become a "gold mine" for municipalities. Priorities and pressure to use gray-water by private consumers for gardening and landscaping will surpass the use of effluent by golf course developers. A lack of county and historical information regarding water resources (quality, quantity and consumptive uses) will only aggravate the situation. Climatic shortfalls will deplete aquifer reserves in the state, increasing the demand for imported water. There are probably more ???????

Active participation in water resources will become each residents responsibility in the future. There are few ways to monitor water use (and abuse) if they do not deploy active efforts to keep tabs on water resources.

It is extremely difficult to detect if you are "being robbed" of your personal water resources. Private monitoring is a prerequisite to insuring the integrity of your well and it is not being compromised. As more and more private and/or exempt wells are drilled, water levels of the underground aquifers are sure to be lowered. In turn, increased residential development in Yavapai County will see thousands of new septic systems installed. The possibility of increased levels of Nitrates from septic systems could easily raise nitrate levels above the maximum allowable level of 10 parts per million.

Active monitoring of wells by well owners is a necessity if water quantities and consumptive quality is to be maintained. Water conservation is progressing much too slowly to be effective in reducing water consumption rates; water demand is skyrocketing as we experience exponential growth in the area.

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PRIVATE WELL WATER TESTING COMING IN MAY

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WHATABOUTWATERAND

. . . . . . . . . M.T.B.E.?

Methyl tertiary butyl ether (MTBE) is probably the most common oxidizer additive used in automobile gasoline, other than ethanol. It has become one of
WHATABOUTWATER (CONT.)
the EPA's greatest and most immediate concerns as a pollutant of America's potable water sources in recent years.

MTBE is highly soluble in water and extremely difficult to remove once it enters an aquifer. Investigations have found that leaking storage tanks containing fuel oxygenated with MTBE are the primary source of aquifer pollution. Traditional methods do not provide a viable means of removing MTBE once it becomes mixed with water.

MTBE has been used for the past few years to increase engine efficiency and reduce air pollution. Some scientists are arguing its anti-pollutant effectiveness is over stated and it poses serious threats to our environment. Some attempts are being made to determine if MTBE could be a cause of increased health risks such as respiratory difficulties, heart beat irregularities and insomnia; possibly forming methyl nitrite as a very toxic, exhaust by-product. Some suggest the removal of MTBE from gasolines and replacing its use with ethanol or methanol.

The MTBE problem is widespread throughout the nation. Oxygenated fuels, containing MTBE, have become a concern in the metropolitan areas of Phoenix and Tucson. Oxygenated gasoline is being used in those areas to reduce air pollution. Fortunately, oxygenated gasolines are not being dispensed or used in Yavapai County. Our check with several, local municipalities show they were aware of the MTBE problem in other parts of the country but had little concern it poses a threat to county water quality. Evaluations will be made to determine if closer monitoring is necessary.

PRIVATE WELL WATER TESTING DURING NATIONAL DRINKING WATER WEEK
The UA -Yavapai County Cooperative Extension Office is planning to offer water testing for private well owners. There are over 20,000 privately owned wells in Yavapai County and well owner's have sole responsibility for determining water quality according to Arizona law.

In the past, well testing participants had water tested for pH, nitrates, conductivity and total dissolved solids. Last years cost was only $5.00, which covered shipping and handling costs.

This years testing program will be held the first week in May.

We would encourage well owners to let us know A.S.A.P. if they are interested in participating. The number of participants will be limited by grant-funding. If you would like to reserve a kit for your well, contact your local Cooperative Extension Office at 520-445-6590 in the Prescott Area or 520-646-9113 in the Verde Valley.

The Sooner the Better!

NEW UA - COOPERATIVE EXTENSION WEB PAGE
Yavapai County Cooperative Extension Director, Jeff Schalau, recently opened a WEB page for your access to all local Extension activities, events, resources and newsletters. You are sure to find this new addition a great way to find out what is going on. We are looking forward to providing more resources and information, in the near future.

Try Us at:
http://ag.arizona.edu/yavapal

Quote of the Month:
"If you tell the truth about water resources then you don't have to remember what you said."

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VWA INFORMATION ON NEW WEB SITE
The Verde Watershed Association has recently revised and moved its WEB Site. The VWA Homepage can now be found at:
http://vwa.southwest-water.org

The VWA is also conducting an active effort to encourage local citizens to join their organization in addressing water resource issues. An excellent opportunity to "make a difference" with local input and local residents.

Project "WET" Workshop to be Offered in March
A Project "WET" Workshop will be offered on March 11. The workshop provides educators, K through 12, with curriculum materials and experience for incorporating water-related issues into current curricula.

The cost of the Workshop and Materials is "free" (Teachers are expected to incorporate 10 hours of "WET" into their classroom after completion of the workshop.

For more information, details and location please contact Russ Radden at the Prescott Office, 520-445-6590
WATER RESOURCE ISSUES (From page 1)
Effluent water is becoming a significant political item. Effluent must be processed to a point where it approaches, equals or exceeds the quality of the potable water entering the system. If this high quality product is not used to recharge the local aquifers it will probably be lost to high water use practices such as turf and golf courses. Municipalities will encumber taxpayers to process their effluent and effluent users may have access to the effluent for less than premium prices. Some have suggested a revision of Arizona’s gray-water usage laws in order that homeowners, rather than golf courses and turf growers, be able to use gray-water for personal domestic use such as lawns and gardens. Gray-water technology is available to address historical concerns and is a viable source of water recycling/conservation in other parts of the nation.

All residents should be encouraged to join in or organize citizen, water resource issues/action groups. There is a mandated need and requirement that a "grass-roots" level of input be in place to insure wise, responsible, water resource and watershed management decisions be made. Several such organizations exist in Yavapai County. They actively solicit active membership, participation and contributing input from citizens.

Climatic patterns appear to be providing no immediate and/or long term relief from our current drought conditions. Maybe ARIDZONA would be more appropriate. No matter what the problems are your thoughts and participation are the most important way to deal with them.

Newsletter Review .......... A Time to touch Base
This newsletter celebrated its first birthday in December. It has grown from 65 to 615 recipients.

The intent of the newsletter was to provide readers with a source of information and create an opportunity to increase your awareness...to possibly become more involved with water issues.

It was also a vehicle to carry services and resources provided by your Cooperative Extension Office for Yavapai County residents.

As we entered the new millennium, thought has been given to continue the newsletter, possibly on a bi-monthly basis. It would be greatly appreciated if you could and would take a small portion of your busy day and let us know how the newsletter has done and what would help make it better.

Some of you get enough “mail” and might want to be dropped from our mailing list. Possibly, you have friends or neighbors (in or out of state) that might the reading interesting, in that case we could include them. Let us know.

Your thoughts would be appreciated.

ARIZONA

We can’t spare a drop

Water Education Resources

Your Cooperative Extension Office can provide assistance and resources for any age level, individual or special interest group.

- Speakers and Displays
- Water and Natural Resources Information and Materials
- Classroom / Public Presentations
- Assistance in lesson planning and classroom activities
- Developing Curricula and Projects
- Project "WET" Workshops
- Teacher training
- Ground Water Model
- Septic System Model
- Field Trip Facilitation

Reader’s Message
Any “Food-for-thought”?: We would like to include articles from YOU! Sharing information and ideas are the strengths of public awareness and education.

We encourage you, students, teachers, administrators and community leaders to contribute to this newsletter. Drop us a line!

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