



COOPERATIVE EXTENSION

WATER RESOURCES

Vol. 5 -2K

THE UNIVERSITY OF ARIZONA - YAVAPAI COUNTY - COOPERATIVE EXTENSION OFFICE

September-October, 2000

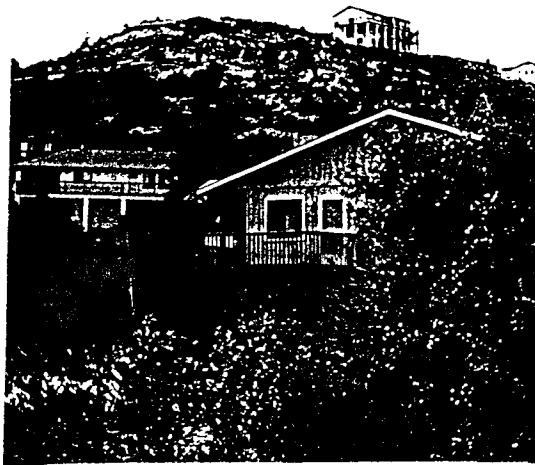
Watershed IntegrityCan We Play the Game Or is the Battle Being Lost?

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WATERSHED INTEGRITY BECOMING A NEED OF THE HIGHEST PRIORITY

What does integrity mean to each of us? We expect it from our friends, our personal and professional contacts, businesses with whom we deal with and their products and services, our schools, our leaders. We are looking for solid, reliable, honest and long term trust.....someone or something we can depend upon to be there and provide good service.



Watershed Integrity????

Watersheds are vital components of our ecosystems....our very lives. Their climatic, geological, hydrological and biotic qualities determine how effective and efficient they are in gathering, absorbing and storing water....both as surface and groundwater.

The water Arizonan's enjoy is dependent on local and regional watersheds and their ability to assure adequate quantities of quality water.

The integrity of our watersheds is becoming questionable. Humans appear to be unable to demonstrate responsible judgement in activities which are resulting in a deterioration of our watersheds.

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WHATABOUTWATERAND

..... **House Plants???????**

Take a good look at your thumb! You knew you had a green thumb several years ago, but since you moved to Yavapai County (or most of Arizona) you may feel it has or is becoming BLACK....Rapidly! What has happened to your ability to produce beautiful, long-lived, house plants?

Few newcomers to Arizona realize that most naturally occurring ground water (well water) is endowed with dissolved mineral salts. It's an understatement to say that Arizona water is "hard". The Total Dissolved Solids (TDS) in Yavapai County averages about **250 ppm (mg/l)**. This equates to ...water-wise...plant-wise.... nearly a level teaspoon of dissolved salts (Calcium, Sodium, Potassium, Magnesium) in every gallon of well water.

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SEP-OCT ISSUE

WAWA.....Houseplants (Page 1)

Some local wells have five times that salt concentration. How does or could that affect your house plants? Over time..... BAAAAAD! Very Bad!

House plants tend to have a high evaporation factor related to the small amount of soil and the containers they are raised in. Clay pots that are not sealed function as "salt factories". Water evaporates quickly through the pores in the clay leaving salt deposits behind. Repeated watering only compounds the problem. More and more dissolved salts accumulate with each watering. As the potting soil becomes more and more contaminated, the salts desiccate the roots and prevent adequate absorption of water and plant well-being falters.

The best fix for your house plants? Replant your salt-stressed plants with fresh potting soil which is rich in organic content. (Avoid using home composted soils if you have been using your high-salt content, well water to prepare it). The least inexpensive alternative is to collect rain water. It can be easily collected in a drum or two under a drain spout. Distilled or reverse osmosis water sources tend to be expensive in the long run.

Last, but not least, use fertilizers sparingly....follow directions on the label (they can contribute to salt build-up as well). Test your soils from time to time for chemical content. The frosty-white, crusty build-up on the surface of the soil or sides of your pots are sure signs of an approaching "salt out".

Best of Luck! You should notice a bit of the green returning to your recovering thumb!

**"Water In Arizona"
Class Offered by Yavapai
College in November**

A solid introduction to local surface and groundwater resources is being offered by Yavapai College, beginning November 2nd thru the 30th. This 2.0 credit hour class will provide knowledge and insight in to the complex nature of historical, current and future water resource usage. It will also provide you with skills to enable you to make wise and prudent decisions

citizens of the Southwest face today.

The class, **GLG 130, 35001**, will meet at the Chino Valley Education Center, 202 North Highway 89, Chino Valley, in Room 112 on Tuesdays and Thursdays, 6:30-9:00 PM, during the month of November. Required field trips are scheduled for 11/4, 11/11, 11/18-19. No class on 11/23

For more information contact the instructor, E.Carr, at 636-0600. Phone registration is available at 776-2199.

**Watershed and Water
Resources Camp-Out
Part of UA-Yavapai and Mohave
County Cooperative Extension
Outreach Program**

Sixty Yavapai and Mohave County high school students will be attending and participating in a 2-day watershed / water resources camp-out, the 21-22 of October at Watson Lake City Park near Prescott.

This program is a joint effort involving the two, local, UA -Cooperative Extension Offices. Hands-On, student-centered, activities will be utilizing field experts, practitioners and support faculty from the University of Arizona College of Agriculture and Life Sciences.

Mini-sessions will provide insight and knowledge about watersheds, hydrology, chemistry, meteorology, wildlife, surface and ground water, historical, current and future water resource decision making.

Currently all reserved spaces are filled. If you or your school would be interested in participating in similar, future, programs contact either of the counties Cooperative Extension Offices:

Yavapai County 520-445-6590
Mohave County 520-753-3788

Quote of the Month:

"Water is the most neglected nutrient in your diet but one of the most vital."

Kelly Barton

"The Love, Care and Feeding of Your Septic System" (a.k.a. On-Site Waste Water Treatment),

The title of the program to be featured and presented by the UA-Cooperative Extension Office, at the Verde Watershed Association general meeting on October 17th, 6:00 - 8:00 PM at the Town Hall in Chino Valley.

The program, concurrent with the V.W.A. general meeting, is open to the general public. Septic system owners, potential septic system owners, as well as members of the VWA are being urged to attend

Many people don't understand the operations, care, maintenance, and servicing of septic systems. These topics are the focal points of the presentation.

Septic systems are also considered "suspect" as contributing to the deterioration of water quality in the county and nation. Dialog regarding septic systems as a non-point source of pollution, their usage / implications / strategies / impacts, and the septic system "boom" in Yavapai County will be included.

A new, revised and updated "A Septic System Homeowners Guide" will be available at this meeting. The cost recovery for printing is \$3.00. The guide and quantity discounts are also available through the Cooperative Extension Offices in Prescott and Cottonwood.

**VERDE RIVER DAYS PROVIDES
WATERSHEDS AND WATER
RESOURCE INSIGHT TO LOCALS**

A beautiful, warm, fall day and several thousand eager visitors made for a really great day, September 30, at Dead Horse Ranch State Park.

Over fifty local, community, county, state, federal agencies and groups provided, insight information, food and entertainment to those participating in Cottonwood's Chamber of Commerce annual event to celebrate the Verde River as an invaluable resource of our county and state.

We will all be looking forward to next years event.

Watershed Integrity (from Page 1)

As an example, say you own a lot, 100' X100'. Your 10,000 square foot home site is, in essence, a "tiny" watershed. Prior to construction and improvements, we could say it is 100% naturally efficient. If you put in a 2000 square foot house, a double garage, driveway (a pool?) and sidewalks, you would reduce the total surface area by about 60% or more. Water that could or would be "processed" by your previously "natural" watershed has been lessened by a significant and similar amount.

This efficiency loss could be accompanied by an expected and increased amount of high-velocity, high-volume, run-off to other neighboring areas with increased erosion, flooding and a greater loss of watershed integrity.

"We" (humans) are increasingly becoming the destabilizing component of our watersheds integrity. Inadequate planning practices or a failure to analyze the dynamics of local watersheds has resulted in the devastation and de-stabilization of our watershed. Watershed integrity is often overlooked.

As mountains are moved, hillsides stripped of vegetation, roads are cut, streams are re-channeled, and housing developments sprawl across hill and dale, the integrity of each developing areas associated watersheds is reduced. We either fail to recognize (or we are in complete denial) that humans are a significant part of nature and a contributor, consumer, modifier of the natural world.

Take a look around you as you travel throughout the area. Do you see major changes in the visual and esthetic qualities of Yavapai County? Changes having an insidious impact on our local water resources and the Verde, Agua Fria and Hassyampa watersheds? Much of what you see reflects increased wasting and consumption of water, increased waste water production, increased non-point source pollution, increased surface erosion, and a multitude of other problems that may or may not be addressed as our population increases.

It is suggested you start with an inventory of your personal watershed (home) priorities. What can you do to improve or insure your "little part of the world" has integrity? Then, take a look at the area, your community and region you live in.

Become politically involved in making sure the integrity of your watershed is not becoming irresponsibly jeopardized by current and future growth. Local watershed advisory groups can provide a constructive avenue to channel your efforts.

We cannot survive without water!

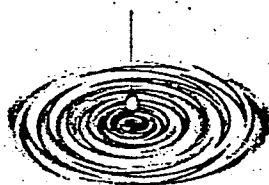
Project "WET" Teacher Training Workshop

(Water Education for Teachers)

**November 18th 9 AM - 4 PM
Prescott, AZ**

For More information contact:
Russ Radden
520-445-6590

VISIT OUR WEBSITE
University of Arizona
Cooperative Extension Office
<http://ag.arizona.edu/Yavapai>



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 Resource 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

Note: It's time to schedule in-class presentations if your is doing a water resource unit it would be helpful to work you into my schedule A.S.A.P.. We are currently refining our curriculum materials to align with AZ AIMS requirements. We AIM to please!

Reader's Message

Any "Food-for-thought"? We encourage you, students, teachers, administrators and community leaders to contribute to this newsletter. Drop us a line!

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Cooperative Extension



WE CAN'T SPARE A DROP