



# Watershed Watch

The Arkansas Watershed Advisory Group assists interested citizens and organizations by promoting local voluntary approaches to watershed management and conservation.

Volume 2, Issue 2 Summer 2003

## FEATURED WATERSHED:

### **UWRB** UPPER WHITE RIVER BASIN

Can two states agree on ways to improve their water quality without relying on the Court system? That's one of the questions that the Upper White River Basin Foundation (WRBF) is trying to answer.

The WRBF was started a little over a year ago and has already garnered strong support from Arkansas and Missouri leaders in its efforts to reverse

*See page 6 for a directory of watershed and environmental groups in the White River basin.*

the downward trend in water quality in the four major lakes that make up the basin. Members of the 12 member board include Beaver Water District Board Chairman John Lewis, Tyson Foods President John Tyson, Bass Pro Shop

Founder and President John L. Morris, and Silver Dollar City Co-Founder Peter Herschend.

Floyd Gilzow, Executive Director, says the WBRF Board members have a clear vision of their goal and are involved on a regular basis in monitoring progress. Their goal is to clean up Beaver, Table Rock, Taneycomo, and Bull Shoals Lakes so they are the four cleanest manmade lakes in North America. They want to specifically focus on improving water quality monitoring, identifying the best upgrades for standard septic tank systems, empowering communities to eliminate septic tanks with improved centralized wastewater treatment systems, and promoting programs that reduce agricultural run-off.

The WBRF led successful efforts to secure an EPA grant to help clean up the bi-state watershed. They are assisting a small town to eliminate traditional septic tanks in favor of more effective treatment. The WBRF operates an almost daily email news service which focuses on water quality issues in Arkansas and Missouri. They helped organize a summit meeting of business, civic, and political leaders in Missouri to create a plan to improve water quality. They've successfully educated state legislators on the impact to water quality if regulations are reduced

*See Featured Watershed, page 2*

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*A sunny day on the West Fork of the White River, located on the southwestern edge of the Upper White River Basin.*



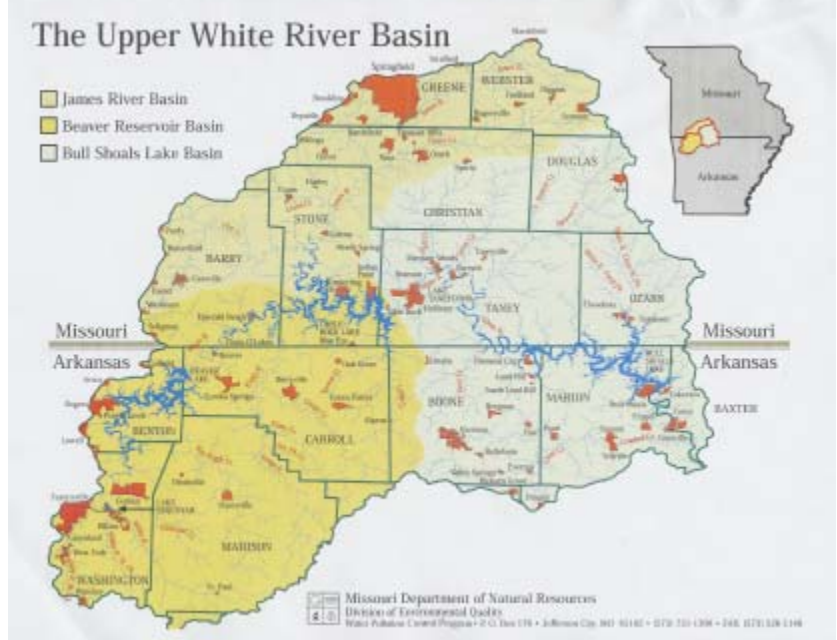
Watershed Watch, the quarterly newsletter of the Arkansas Watershed Advisory Group, is published by the Arkansas Department of Environmental Quality's Environmental Preservation Division through a U.S. Environmental Protection Agency grant.

Visit AWAG on the web at [www.awag.org](http://www.awag.org)

**FEATURED WATERSHED CONT.**

significantly. The WRBF has also sponsored exchange efforts between the Director of the Missouri Department of Natural Resources and the Arkansas Department of Environmental Quality.

Individuals seeking additional information on the WRBF can contact Floyd Gilzow at (417) 334-7644, PO 6218 Branson, MO 65615 or by email at [floyd@whiteriverbasin.org](mailto:floyd@whiteriverbasin.org). The Foundation’s website is [www.whiteriverbasin.org](http://www.whiteriverbasin.org). Anyone wanting to join the free Arkansas—Missouri Watershed News Service may do so by sending an email to Floyd and asking to be added.



**EPA WATERSHED INITIATIVE GRANT TARGETS  
NORTHWEST ARKANSAS AND SOUTHWEST MISSOURI**



The Upper White River Basin of Arkansas and Missouri

has been selected by the Environmental Protection Agency as one of twenty watersheds around the nation for participation in the Watershed Initiative. The nationally competitive grant program attracted over 175 applications from across the nation.

The Basin is home to one million citizens and 14,000 square miles of drainage area in both Arkansas and Missouri. The area contains the fastest growing communities in both states. The \$300,000 grant – to be administered by the White River Basin Foundation (WRBF) – will be used to integrate separate watershed plans; provide organizational capacity building; implement an innovative on-site wastewater system demonstration;

and conduct monitoring with GIS applications for targeting critical areas.

Floyd Gilzow, WRBF Executive Director, says, “Arkansas and Missouri have a strong and growing partnership focused on reducing pollution in this critical watershed for both states. That partnership includes the environmental agencies of both states, business and political leaders, as well as individual watershed groups. Implementation of this grant can only strengthen our ongoing efforts.”

The Upper White River Basin project was created by a coalition of 7 watershed groups spearheaded by the Upper White River Basin Foundation. Arkansas sponsors included the Beaver Lake Watershed Partnership, the Kings River Basin Partnership, and the Leatherwood Creek Watershed Association.

*by Floyd Gilzow, UWRB*

**WHITE RIVER FACTS**

*Courtesy MO Dept. of Conservation*

The White River basin originates in northwest Arkansas, southeast of Fayetteville, in the Boston Mountains. Three forks, the White River, the Middle Fork, and the West Fork, come together in Washington County, Arkansas to form the mainstem White River. The White River is first impounded as Lake Sequoyah, a 500-acre impoundment where the Middle Fork joins the White River.

The White River flows south from Lake Sequoyah and joins the West Fork before entering Beaver Lake. The Beaver Dam is the first in a series of four hydroelectric dams. The White River flows north into Missouri near the town of Eagle Rock in Barry County. The White River turns eastward and is again impounded, this time as Table Rock Lake, just below the confluence of the James River near Branson, Missouri.

Below Table Rock Lake, the White River is impounded by Powersite Dam near Forsyth, Missouri, and forms Lake Taneycomo. The river then takes a southern turn and flows back into Arkansas where it has been impounded again by Bull Shoals Dam near Cotter in Marion County. The White River flows southeast out of Bull Shoals Dam and exits the Ozark Plateau into the Mississippi Alluvial Plain near Newport, Arkansas.

## FEATURED ORGANIZATION



The USDA Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, improve, and sustain our nation's natural resources and environment.

Created in 1933 as the Soil Erosion Service, the agency has also been known as the Soil Conservation Service. Today, the people of the NRCS continue to follow the agency's founding principles as they work with landowners across the nation:

- Assess the resources on the land, the conservation problems and opportunities
- Draw on various sciences and disciplines and integrate all their contributions into a plan for the whole property
- Work closely with land users so that the plans for conservation mesh with their objectives
- Through implementing conservation on individual properties, contribute to the overall quality of the life in the watershed or region

### LEADERSHIP

NRCS puts 70 years of experience to work in helping owners of America's private lands conserve their soil, water, and other natural resources. Local, state, and federal agencies and policymakers also rely on NRCS' expertise - delivering technical assistance based on sound science and suited to the individual customer's specific needs.

NRCS provides educational and training opportunities and certification for employees, to ensure landowners have the most reliable and relevant information available to make the best decisions for their lands.

Most of NRCS' work is accomplished with local partners. Our partnership with conservation districts serves almost every county in the nation, and the Caribbean and Pacific Basin.

### CONSERVATION PROGRAMS

While participation in NRCS programs is voluntary, the benefits are extraordinary. Technical and financial assistance is available through conservation programs including the Conservation Reserve, Emergency Watershed Protection, Environmental Quality Incentives,



*Alma, Arkansas watershed*

Grazing Lands Conservation, Wetlands Reserve, and Wildlife Habitat Incentives programs. As the individual program titles indicate, each of these programs focuses on different aspects of natural resources conservation and can be used to greatly benefit the land and the environment.

### SMALL WATERSHED PROGRAM

The Small Watershed Program, available to protect and improve watersheds up to 250,000 acres in size, brings together elements of federal, state, local, and tribal

governments and agencies to prevent costly damage to private property caused by erosion, floodwater and sediment. The program also helps advance the conservation, development, use, and disposal of water, as well as the conservation and use of land.

The NRCS uses the Small Watershed Program to help sponsors assess the conditions in their watershed, develop solutions for identified problems, and install necessary measures to alleviate those problems.

Measures may include land treatment and structural and nonstructural measures. Federal cost-sharing for installation of the measures is available but the amount is dependant upon the purpose(s) of the project. Loans are available to help finance the local share of the cost.

Rural and urban residents, working through local organizations, such as county or municipal governments, soil and water conservation districts, not-for-profit organizations, or tribal governments, initiate a project by requesting assistance to solve a problem that is important to them.

### FOR MORE INFORMATION

For more information about services and programs provided by the Natural Resources Conservation Service, visit [www.nrcs.usda.gov](http://www.nrcs.usda.gov). For more information about the Small Watershed Program in Arkansas, contact David Weeks at (501) 301-3139 or email

**David.Weeks@ar.usda.gov.**

Read about the Arkansas Game and Fish Commission in the next issue of *Watershed Watch*.

## Paddle Arkansas

by Rob Beadel, ADEQ

Arkansas is blessed to have almost 12,000 miles of flowing creeks, streams, and rivers, many of which are ideal for floating – by canoe, kayak, or raft. The wide variety of streams and rivers in Arkansas provides floating opportunities for everyone from the beginning canoeist to the most experienced kayakers.

Bill Saunders, a member of the Arkansas Canoe Club, Ozark Society, and Save Our Streams, is an avid canoeist and has paddled his fair share of the streams and rivers throughout Arkansas. His 40 years of paddling has taken him to other states as well including: Missouri, Tennessee, West Virginia, Texas, and Colorado. “Arkansas has some very outstanding stretches of rivers that are floatable,” says Saunders, “but some are dependant on the season and you have to catch them at the right time of the year.”



*With outstanding scenery and rapids, several Arkansas streams provide outdoor enthusiasts with plenty of summertime fun.*

**“Best of the Best”  
Character Key**

Difficulty: Class I: easy  
to Class V: expert

Shuttle Available: Y: yes; NK: not known

When Floatable:  
**PS** (prime season, Jan to April)\*  
**LS** (longer season, Jan to mid-June)\*  
**YR** (year around)  
 \* Possibly later in year if sufficient rains (contact outfitter)

Access/campsites:  
**M** – many to **L** – limited

Especially scenic/ great rapids:  
 ★ – good to ★★ – excellent

Exceptional fishing: **EF**

Exceptional trout fishing: **ETF**

Occasional tree blockage: **OTB**

Mostly slow pools: **MP**

Bill has put together a list of his 30 “**Best of the Best**” stretches of floatable streams in Arkansas. The following are among Bill’s favorites:

### Major Streams – NW / Western Arkansas

**Buffalo National River:** “100 miles of free-flowing heaven.”

*All segments:* Y, M, ★★, EF

*Comments:* frequent gravel bars; weekends are crowded

*Upper part:* Boxley to Ponca low water bridge: 9 mi.

Challenging Class **II, PS, OTB**

*Ponca/Steel Creek to Kyle’s Landing:* 9 / 7 mi. Very outstanding Class **II+**, **PS\***

*Middle part:* Kyle’s to Rush: 66 mi. Class **I, MP**

*Lower part:* Rush to White River: 24 mi. Class **I, MP, YR**

**Big Piney Creek: Treat to Long Pool:** 10 mi. Very Outstanding Class **III, Y, PS\*, M, ★★**

**Illinois Bayou** (don’t let the name mislead you): All: **NK, L**

*Snow Creek to Hwy 27:* 6 mi. Challenging Class **II+**, **PS, ★**

*Hwy 27 to Scottsville:* 11 mi. Class **I-II, PS\***

**Mulberry River:** Two segments Very Outstanding, Class **III, Y, PS, M, ★★**

*Wolf Pen to Redding (both USFS accesses):* 14 unforgettable, challenging miles.

*Campbell Cemetery to Mill Creek (I-40):* 15 challenging miles.

**Kings River:** 25 mi. Class **I, Y, LS\*, L, EF, OTB** on upper parts.

**Lee Creek:** 20 mi. Class **II+**, **NK, PS, L, ★**. A favorite of kayakers.



*Floating along the Buffalo National River in Northwest Arkansas. Bill Saunders of the Arkansas Canoe Club calls the Buffalo “100 miles of free-flowing heaven.”*

**Major Streams – Central / N. Central Arkansas**

**Crooked Creek:** “One of the USA’s top 15 smallmouth bass streams”  
*Pyatt to Kelly’s Slab:* Two sections, one 5 mi. the other 10 mi.  
Class I, NK, LS\*, L, EF, OTB  
*Kelly’s Slab to Yellville:* 5 mi. Class I, NK, LS\*, L, EF

**Eleven Point River:** 80 miles of cool, clear spring-fed water in Missouri above Dalton, AR  
*MO Hwy 142 to Dalton:* 16 mi. Class I, NK, YR, OTB in Arkansas, lower parts MP. Comments: stone dams are tricky  
*Dalton to AR Hwy 90:* 9 mi. Class I, NK, YR, OTB in Arkansas, lower parts MP

**Little Red River:** *Below Greer’s Ferry Dam:* Class I+, YR, Y, M, ETF  
*Above Greer’s Ferry Lake:* Expert only. Class III+, NK, PS, L, OTB

**North Cadron Creek:** *Below county bridge North of Guy:* Class I+, Y, PS\*, L, ★. Very nice water for intermediates; a kayaker’s favorite.



*Above: Navigating rapids on the Archy Fork of the Little Red River.  
Below: Surfing the Spring River.*



**Spring River:** Mammoth Spring is the start of this Class I-II+, Y, YR, M, ★, ETF  
*Dam 3 to Many Islands:* 9 mi. Comments: numerous tricky waterfall ledges; weekend crowds  
*Many Islands to Hardy:* 9 mi. MP on lower end; Scout and/or line the 6 feet “high falls.”

**Strawberry River:** *Hwy 167 to AR 58:* 22 mi. segmented by 2 low water bridges. Class I, NK, LS\*, L, EF, OTB, MP

**White River:** johnboat recommended.  
*Below Bull Shoals Dam:* 93 mi. of Class I+, YR, ★, ETF, MP. Comments: all services available.

**Major Streams – Southwestern Arkansas**

**Caddo River:** *Above Lake DeGray:* Class I, Y, LS\*, L, EF, OTB. Comments: nice water for beginners.

**Cossatot River:** 20 mi. of Class V, NK, PS, M. Comments: Arkansas’ most challenging; experts only.

**Little Missouri River:** *Above Lake Greeson:* 20 mi. of challenging Class III+, NK, PS, M.

**Ouachita River:** *Above Oden:* 25 mi. of Class I-II, Y, PS\*, L, EF, OTB. Comments: clean, clear water.  
*Below Oden:* 25 mi. of Class I, Y, LS\*, M. Comments: Nice, clean water for beginners.

**Saline River:** *Above Jct. Hwy 5 & 298:* 12 mi. of Class I, NK, LS\*, L, EF, OTB  
*Below Jct. of Hwy 5 & 298:* 100 mi. of Class I, NK, LS\*, L

**RIVER CLASS RATINGS**

Floatable streams and rivers are often categorized based on an international scale of six levels of difficulty:

- Class I: EASY** – Moving water with few riffles and small waves. Few or no obstructions. Correct course is easy to determine.
- Class II: MEDIUM** – Fairly frequent, but unobstructed rapids. Course generally easy to recognize. Some maneuvering is required.
- Class III: DIFFICULT** – Numerous rapids with high and irregular waves. Narrow passages that often require complex maneuvering. Course not always easily recognizable.
- Class IV: VERY DIFFICULT** – Long rapids characterized by high and irregular waves with boulders directly in swift current. Course often difficult to recognize requiring some scouting from bank.
- Class V: EXCEEDINGLY DIFFICULT** – Continuous rocky rapids with high and irregular broken water which cannot be avoided. Extremely fast flow, abrupt bends, and strong cross currents. Difficult rescue conditions. Frequent inspections from bank necessary.
- Class VI: LIMIT OF NAVIGABILITY** – Class V difficulties increased to the upper limits of skill and equipment. Extremely dangerous. Only for teams of experts.

## PADDLE ARKANSAS CONT.

Saunders notes floaters generally average 2 mph paddling speed. It is important to plan your float trip in advance, be prepared for the unexpected, wear a life vest, and don't litter!

If you are ready to check out Bill's "Best of the Best" list or start your own list of favorite float streams in Arkansas you can get more information from the Arkansas Floater's Guide. A copy of the guide can be found at the Arkansas Department of Parks and Tourism website at:

[http://www.arkansas.com/outdoors\\_sports/float/](http://www.arkansas.com/outdoors_sports/float/)

For more information on floatable streams and rivers in Arkansas, directory of outfitters, canoe clubs and organized float trips, or current water levels visit these other useful websites:

<http://www.arkansascanoecub.com/>  
<http://www.ozarksociety.net/>  
<http://arkansas.sierraclub.org/>

*Thanks to Bill Saunders for his contributions to this article. For more information on the Arkansas Canoe Club, email Bill at [wasaunders@aristotle.net](mailto:wasaunders@aristotle.net).*

*Additional information was provided by the Arkansas Floater's Guide, published by the Arkansas Department of Parks and Tourism.*

*Photos courtesy of Jason Beck, ADEQ.*

Would you like  
to receive  
Watershed  
Watch  
electronically?



Email Rob Beadel at  
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Or call  
(501) 682-0012

## UPPER WHITE RIVER WATERSHED / ENVIRONMENTAL GROUP DIRECTORY

### Upper White River Basin Foundation

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### Beaver Lake Watershed Partnership

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### Kings River Watershed Group

Contact: Page Shurgar  
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### Leatherwood Creek Watershed Group

Contact: Barbara Harmony  
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[peace@ipa.net](mailto:peace@ipa.net)

### Association For Beaver Lake Environment (A.B.L.E.)

Contact: Dr. William F. Horn  
(501) 925-1468  
[wfhorn@ipa.net](mailto:wfhorn@ipa.net)

### James River Basin Partnership

Contact: Diana Sheridan  
(417) 836-8877  
[dianasheridan@smsu.edu](mailto:dianasheridan@smsu.edu)

### Watershed Committee of the Ozarks

Contact: Loring Bullard  
(417) 866-1127  
[jan@watershedcommittee.org](mailto:jan@watershedcommittee.org)

### Table Rock Lake Water Quality

Contact: David Casaletto  
(417) 739-4100  
[trlwq@lvbw.net](mailto:trlwq@lvbw.net)

## WEST FORK OF THE WHITE RIVER NEWS

A watershed assessment of the West Fork of the White River has been underway to determine and evaluate current watershed conditions. The assessment projects have been funded through Nonpoint Source 319 grants, which are provided by the Arkansas Soil and Water Conservation Commission. Eight study sites from the headwaters to the mouth were used to assess the physical, biological, and chemical conditions of the river. The Environmental Preservation Division of the Arkansas Department of Environmental Quality (ADEQ) has been performing assessment work, which includes evaluating stream stability to determine sediment contributions from eroding stream banks.

University of Arkansas, Department of Biological Science staff, Dr. Arthur Brown, Andrea Radwell, Robin Reese, and Jan Hinsey, recently, completed a biological assessment of fishes, macro-invertebrates, and meiofauna, and evaluated fish habitat. Dr. Marc Nelson of the Arkansas Water Resource Center has established a continuous water quality monitoring station at the mouth of the river to evaluate chemical parameters during storm events and base flow. The data collected will serve as a

baseline for comparative purposes in the future as efforts are made to restore the environmental quality of the West Fork. A complete report of the biological assessment can be found online at [www.uark.edu/depts/awrc/AllPubs.htm](http://www.uark.edu/depts/awrc/AllPubs.htm) - find publication MSC-307. A summary of the ADEQ Environmental Preservation Division's West Fork Project can be found online at <http://www.adeq.state.ar.us/ep/projects/westfork.htm>.

by Andrea Radwell at [aradwell@uark.edu](mailto:aradwell@uark.edu)



Using a Hess Sampler, Robin Reese collects macroinvertebrates at Winn Creek, a tributary of the West Fork White

## CELEBRATE OCTOBER 18 AS WORLD WATER MONITORING DAY

The 2002 National Water Monitoring Day held last October, in conjunction with the inaugural Year of Clean Water and 30th Anniversary Celebration of the Clean Water Act, was deemed a success. Over 75,000 people participated in water quality monitoring, water festivals and other educational outreach activities in Fall 2002. There were over 5,100 sites registered across the country. Every state, including the District of Columbia and Puerto Rico, was represented. In addition, local press covered the event and raised awareness of the continued need to care for local watersheds.

Desiring to build on the success of the first year, America's Clean Water Foundation (ACWF) and its new international partner, the International Water Association (IWA), are joining together to coordinate World Water Monitoring Day with existing partners in Fall 2003. It is their hope to bring

professional water quality monitoring agencies, volunteer monitoring organizations and first-time citizen monitors together to screen the health of local watersheds across the United States. In addition,



*ADEQ's Rob Beadel, joined by Bill Saunders, demonstrates water monitoring techniques for UALR students.*

select countries will be invited to pilot the event internationally. As with the first National Water Monitoring Day, the event will focus on the four basic parameters of temperature, acidity (pH), dissolved

oxygen (DO) and clarity/turbidity to introduce citizens to water monitoring and help them understand its importance in protecting our water resources.

Please mark the date now and plan to celebrate World Water Monitoring Day on October 18, 2003. The actual monitoring window will run from September 18 through October 18 to allow for weather conditions and preexisting volunteer monitoring programs.

Visit the new website for World Water Monitoring Day at [www.worldmonitoringday.org](http://www.worldmonitoringday.org). It provides helpful information about ways to increase local involvement in your watershed and how to register sites this year. Also visit [www.yearofcleanwater.org](http://www.yearofcleanwater.org) and click on "National Events" or contact [e.moyer@acwf.org](mailto:e.moyer@acwf.org) for additional information.

### SECCHI DIP-IN NEWS

This year, volunteers across North America sampled water clarity using a secchi disk, transparency or turbidity tube from June 28 to July 13 as participants in the Great North American Dip-In. The information was then recorded in Ohio's Kent State University website, <http://dipin.dent.edu/>.

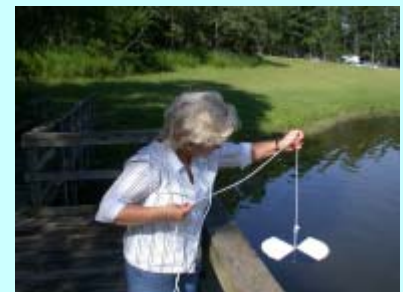
Two Arkansas watershed groups participated in the Great North American Dip-In, an annual event that



*Jennifer Michaels, member of Lake Fayetteville Watershed Partnership, records water clarity measurements.*

gets voluntary water quality monitoring programs to participate in collecting water clarity data. Lake Fayetteville Watershed Partnership has participated in the Great American Dip-In for the past 2 years. Lake Fayetteville is located in Northwest Arkansas and is a subwatershed of the Illinois watershed.

The Lower Little River Watershed Coalition (LLRWC) sampled Dierks Lake at three locations and all readings were similar, ranging from about 3.5 to 4 feet. The LLRWC built their secchi disk themselves for \$19.50; they used a piece of scrap steel, which cost \$8.00, and bought the rest of the parts from Wal-Mart for \$11.50. They made the pattern by painting the disk black, then covering it with white contact paper and cutting out and peeling off the triangular pattern. Phillip Fields, watershed coordinator for LLRWC,



*Deborah Fields, a LLRWC volunteer, prepares to take measurements at Dierks Lake.*

said that the group had fun doing the activity and had several folks asking what they were doing and how the disk works. The LLRWC made several friends and was able to educate citizens on water quality. The LLRWC is looking forward to being involved in the dip-in in the future. Fields also reported that the website to record the results is user-friendly.

*by Ellen McNulty,  
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## Arkansas Watershed Advisory Group

### AGENCIES

Arkansas Dept. of Environmental Quality  
Arkansas Department of Health  
Arkansas Dept. of Parks and Tourism  
Arkansas Forestry Commission  
Arkansas Game and Fish Commission  
Arkansas Geological Commission  
Arkansas Highway & Transportation Dept.  
Arkansas Natural Heritage Commission  
Arkansas Soil & Water Conservation Comm.  
Arkansas State Plant Board  
Arkansas State University  
Pulaski Technical College  
Rogers Water Utilities  
U of A Arkansas Water Resources Center  
U of A Cooperative Extension Service  
U of A at Pine Bluff  
National Park Service

### AGENCIES

Natural Resources Conservation Service  
U.S. Army Corps of Engineers  
U.S. Fish and Wildlife Service  
U.S. Forest Service  
U.S. Geological Survey

### CITIZENS

Robert Haralson  
Bill Layher  
Anne Miners  
Jerry Masters  
Elvis Vaughn

### ORGANIZATIONS

Arkansas Association of Conservation Districts  
Audubon Arkansas  
The Nature Conservancy  
Winrock International

Visit AWAG on the web at [www.awag.org](http://www.awag.org)