

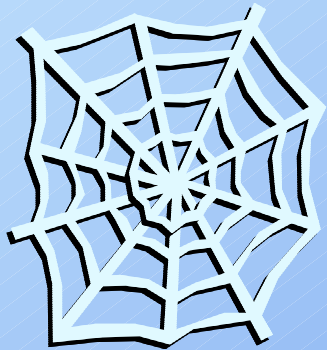
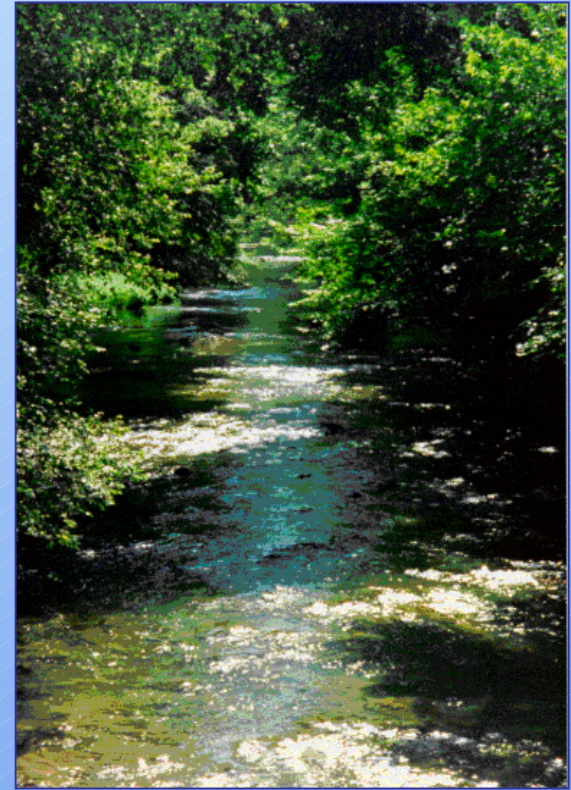
Forming Partnerships: The Mud Creek Urban Nonpoint Source Project

Michele Steele
University of Arkansas Cooperative Extension Service



Northwest Arkansas

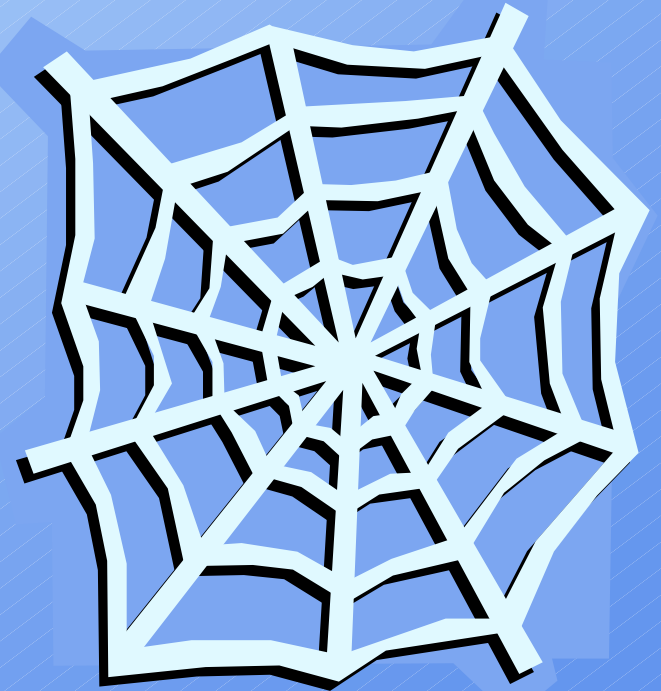
- Experiencing exponential growth
- Urban areas infiltrating rural areas
- Urban storm water runoff increasing
- City residents unaware of their role in water quality



Mud Creek is a tributary to the Illinois River, one of the two major watersheds in Northwest Arkansas. **The Mud Creek Project was the first to target urban nonpoint source pollution prevention in the state.**

Partnership Formation

- **Introduces varying perspectives**
- **Reaches new audiences**
- **Strengthens programs**
- **Accomplishes more**
- **Enhances credibility**
- **Provides permanence**



Varied Perspectives



- ❖ **Organizations**
- ❖ **Agencies**
- ❖ **Backgrounds**
- ❖ **Interests**
- ❖ **Experiences**

Steering Committees

Local stakeholder input is invaluable to guide the planning, implementation, and evaluation processes

and...



steering committee members also bring a network of connections to new potential partners, audiences, and resources

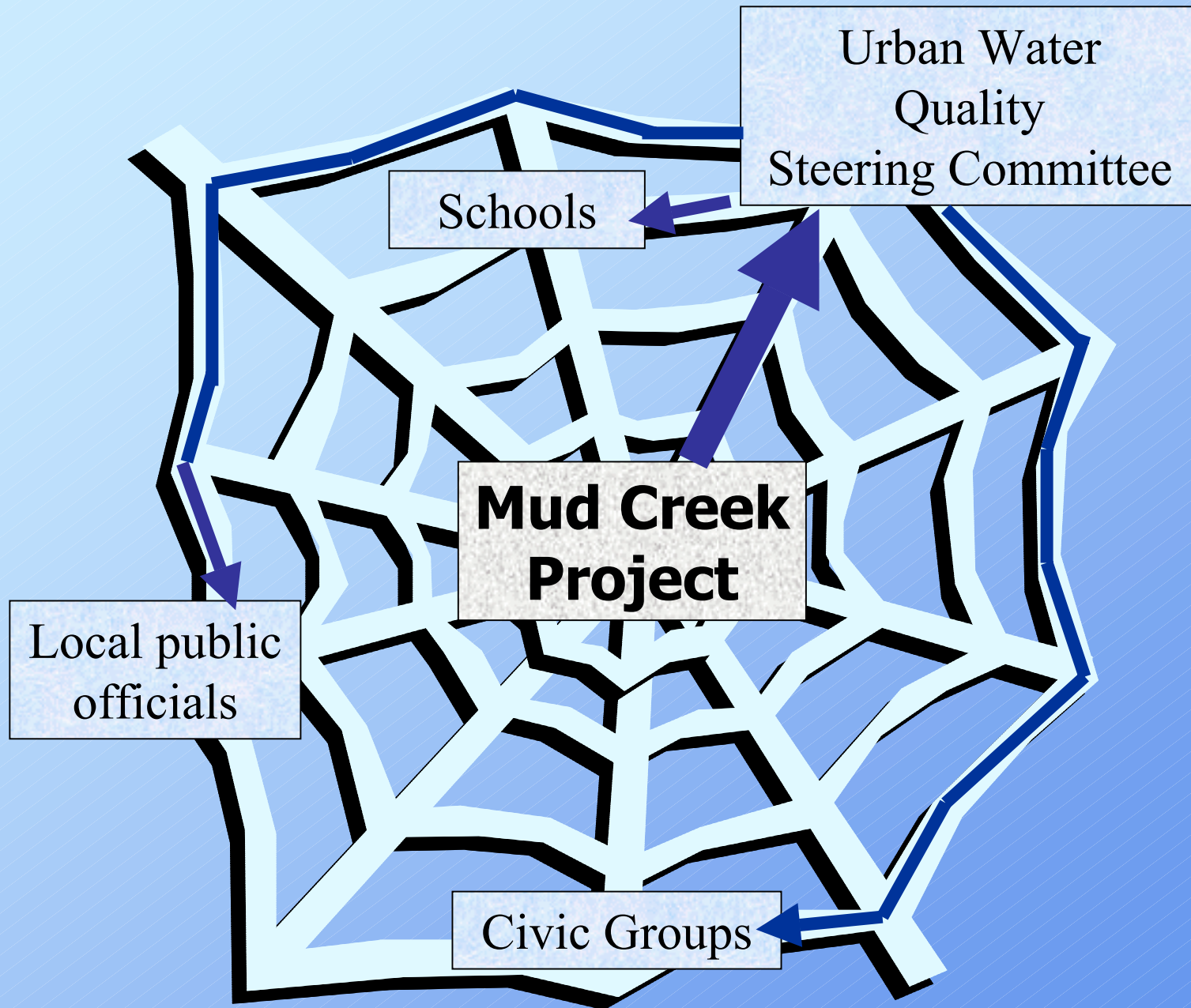
A stylized spiderweb graphic composed of thick, white, irregular lines that form a complex, interconnected web pattern. The web is centered on a blue background with a fine, diagonal grid pattern. In the center of the web is a rectangular box with a light beige, textured background. Inside this box, the words "Mud Creek" and "Project" are written in a bold, black, sans-serif font, stacked vertically.

**Mud Creek
Project**

Urban Water
Quality
Steering Committee

**Mud Creek
Project**





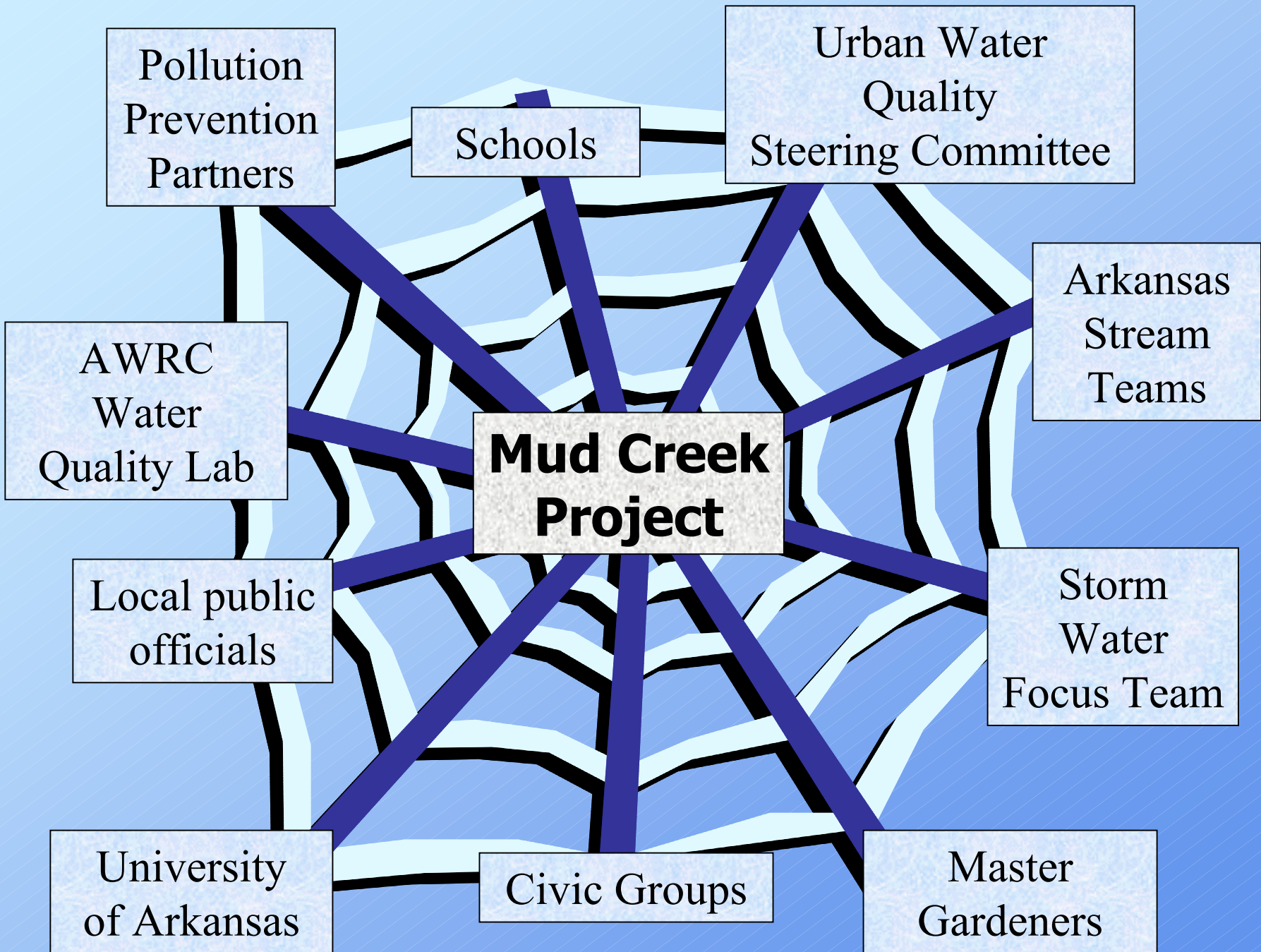
Urban Water
Quality
Steering Committee

Schools

**Mud Creek
Project**

Local public
officials

Civic Groups



Reaching New Audiences

The Cooperative Extension Service in Arkansas is familiar with certain segments of the population involved with agricultural, 4-H and soil testing programs

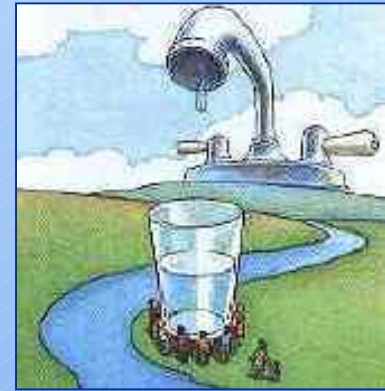
By partnering with local government, civic organizations, educators, and business leaders who have their own familiar clientele-base, Extension has been able to tap into a network of new contacts for water quality education programs

Touring on the “Kiwanis Circuit”

- Member of urban water quality steering committee was program coordinator for local Kiwanis Club
- Arranged educational presentation to his club
- Composed letter to all Kiwanis clubs in 4-County area promoting the program
- Presentations made to 6 Kiwanis Clubs
- 203 area residents heard the urban water quality message



NWA Regional Water/Wastewater Trainings



- The Fayetteville Wastewater Treatment Plant's Laboratory Supervisor knew about Extension's water quality education programs through the "Pollution Prevention Partners"
- She is responsible for developing quarterly training agendas for all of the water/wastewater operators in the region
- Since 1999, Cooperative Extension Service programs have been featured at 4 different training sessions
- 267 training participants learned about nonpoint source pollution prevention efforts and techniques

Strengthens Programs



Educational programs are often expanded and improved as a direct result of partnership development

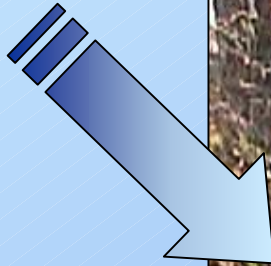
Creekside Learning



5th Grade Students “Kick and Pick” for Creek Critters



When one teacher changed schools, her 7th grade Science students were then brought to the creek...



A parent chaperone arranged for additional programs where her second child attended school ...



Tributary and Watershed Sign Programs



Increased Accomplishments

The more partnerships established, the greater the impact of the water quality educational efforts

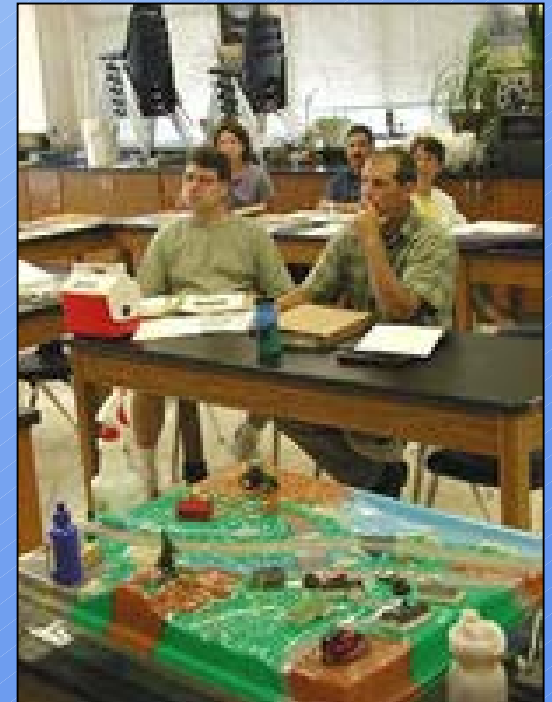
This is true of partnerships with groups, agencies, individuals and the media



“Train-the-Trainer” Programs

- ❖ 4-H Program Assistant Training
- ❖ County Agent In-Service
- ❖ Master Gardeners, Master Composters
- ❖ Teacher In-Service
- ❖ 4-H Teen Leaders
- ❖ High School Students

These help establish and expand successful programs



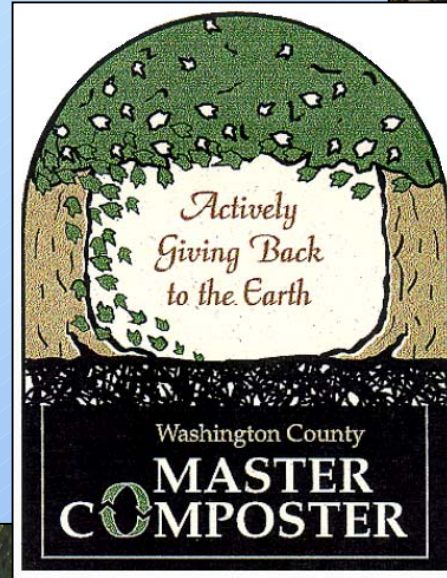
Master Composters

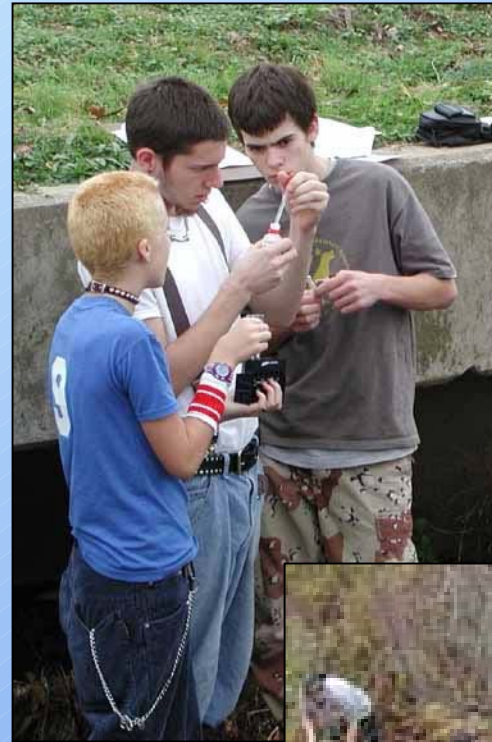
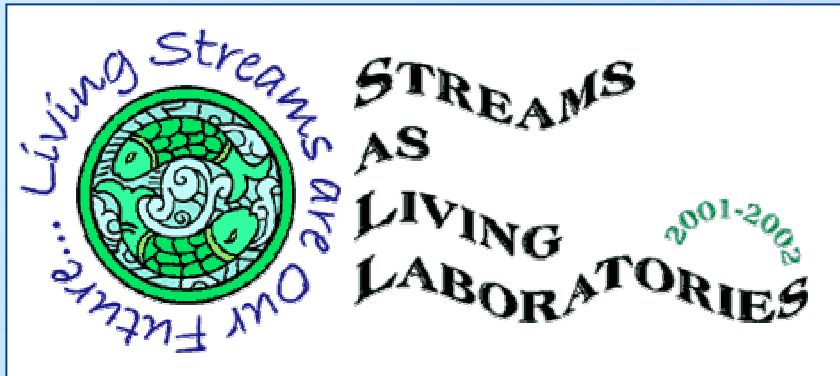
Youth programs

Workshops

Displays

Demonstration site





Media Partnerships

Storm Drain messages painted during a 4-H County Summer Camp were featured in local newspapers...



NORTHWEST ARKANSAS

Fayetteville's newspaper serving Washington County since 1860

Locally owned by Community Publishers Inc.
An edition of the
Arkansas Democrat & Gazette
Copyright © 2001, Community Publishers Inc.

TIMES

MONDAY — August 20, 2001

Kicking game highlights
UA scrimmage - Page A7

Manhole painting teaches kids about pollution prevention

Grant money from the EPA funds the UA Cooperative extension environmental awareness program.

BY MATT WAGNER
Northwest Arkansas Times

Local children are using manhole covers as a medium for their message-driven masterpieces, which warn would-be polluters not contaminate the region's drinking water when they dump oil, chemicals and other undesirable materials into stormdrains.

Walking around the downtown Square or along Dickson Street without encountering the stenciled words "Don't Dump — Drains to Creek" against a backdrop of vibrant colors and creative patterns is becoming exceedingly more difficult. But the culprit is not a clever environmentalist painting the circular canvases under cover of night. Instead, it's the work of the federal government.

Using grant money from the U.S. Environmental Protection Agency, the University of Arkansas Cooperative Extension Service launched the innovative awareness program last summer in an effort to educate people that stormdrains carry untreated runoff to nearby streams and creeks. A natural habitat for many wildlife species, these tributaries eventually empty into Beaver Lake or

See MANHOLE, page A5

ANDY SHUPE Northwest Arkansas Times

Local High School Conducted Design Contest



Public requests for messages painted at specific locations



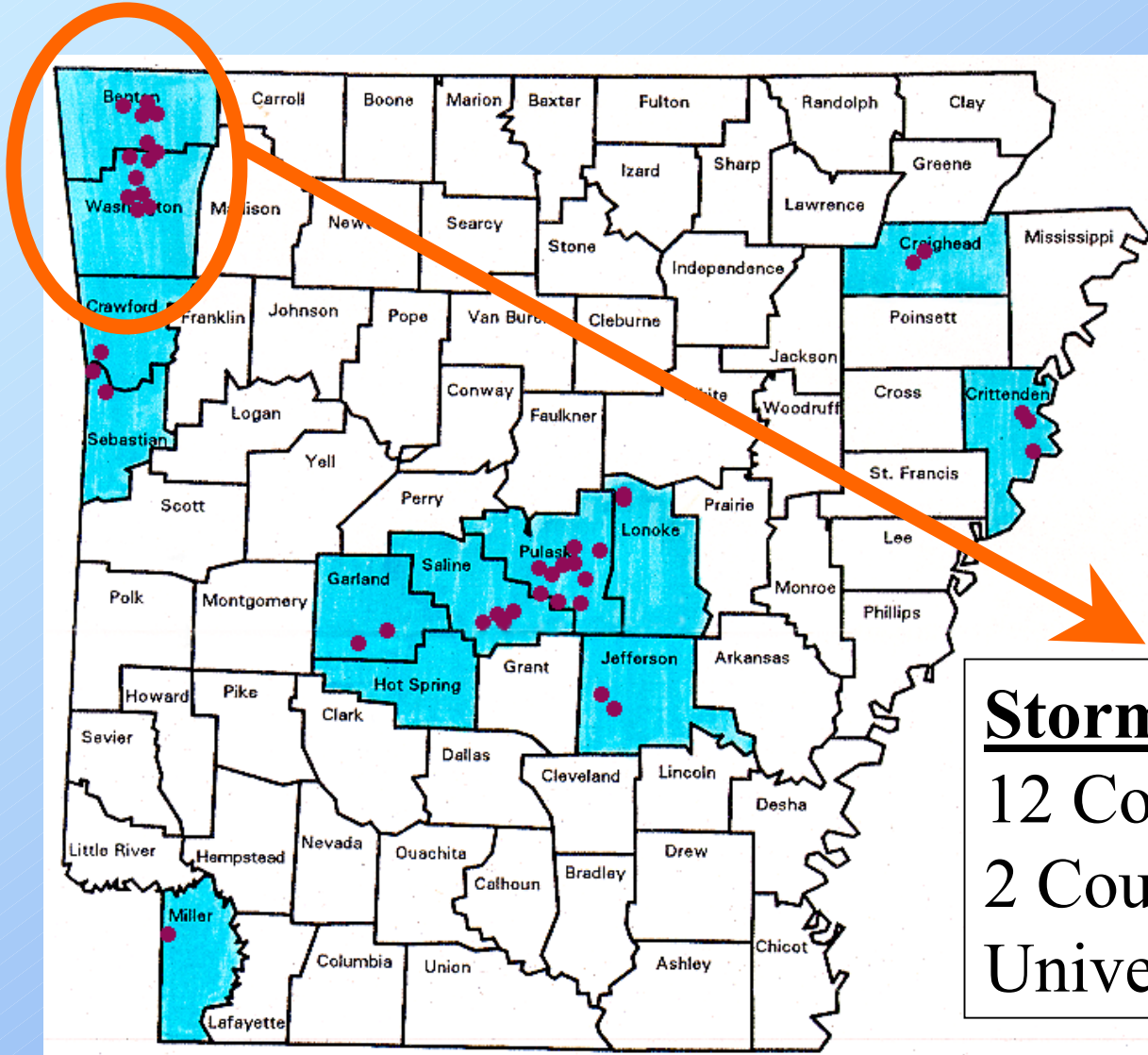
Fayetteville begins ordering covers with messages forged into them

Enhanced Credibility



As effective partnerships are established, the reputation and credibility of the Cooperative Extension Service is enhanced and educational programs further expand and flourish

Cities and Counties affected by Phase II Storm Water Regulations



Storm Water Education
12 Communities
2 Counties
University of Arkansas



“Storm Water Focus Team” Regional Partnership



- **Northwest Arkansas Regional Planning Commission**
- **University of Arkansas Cooperative Extension Service**
- **University of Arkansas**
- **Washington County**
- **Washington County Environmental Affairs**
- **Cities of Fayetteville, Springdale, Bentonville, Rogers, Greenland, Farmington, and Lowell**


Extension's Role

- ❖ Fact sheet for public officials
- ❖ Phase II Storm Water Forum
- ❖ Education efforts spreadsheet
- ❖ Youth curriculum
- ❖ Presentations to civic groups
- ❖ Public awareness campaigns

Public education and outreach
Public participation/involvement

Storm Water Phase II


The quality of the nation's waters have improved dramatically since the passage of the Clean Water Act in 1977, however, degraded waterbodies still exist.



In 1990, EPA's Storm Water Phase I program addressed storm water runoff from: 1) "medium" and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, 2) construction activity disturbing 5 acres of land or greater, and 3) ten categories of industrial activity.

As the next step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted runoff, Storm Water Phase II Final Rule expands the Phase I program by addressing storm water runoff from: 1) "small" MS4s, generally serving populations of 10,000 or more or "urbanized areas" and 2) construction activities disturbing between 1 and 5 acres of land. Storm water management programs are carried out through the National Pollutant Discharge Elimination System (NPDES) permit coverage as MS4s are considered "point sources" of pollution because they discharge storm water through a pipe.

The Phase II Rule defines a storm water management program for a small MS4 as a program composed of six elements that, when implemented together, are expected to reduce pollutants discharged into receiving waterbodies to the "maximum extent practicable" (MEP).



A group of stakeholders meets to discuss important issues affecting their watershed

Phase II requires 6 minimum control measures:

- Public education and outreach
- Public participation/involvement
- Illicit discharge detection and elimination
- Construction site runoff control
- Post-construction site runoff control
- Pollution prevention/good housekeeping

On-line fact sheet series—www.epa.gov/npdes/stormwater

Page 1

Storm Water Phase II Focus Team

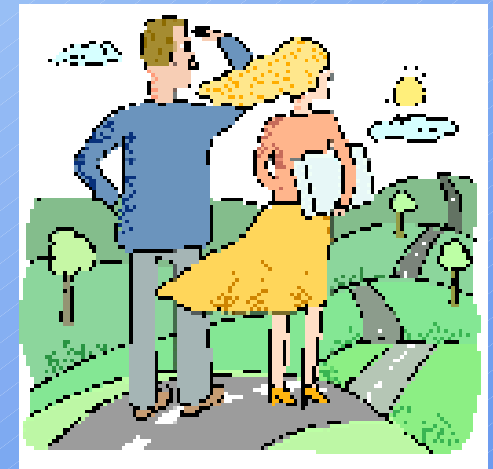


Willingness to work together helps:

- Communities understand new regulations
- Reduce the financial cost for communities
- Increases the effectiveness of the programs
- Protects water quality on a regional basis

Provides Permanence

It is imperative to find ways to institutionalize successful educational programs so that they continue long beyond the life of the grant

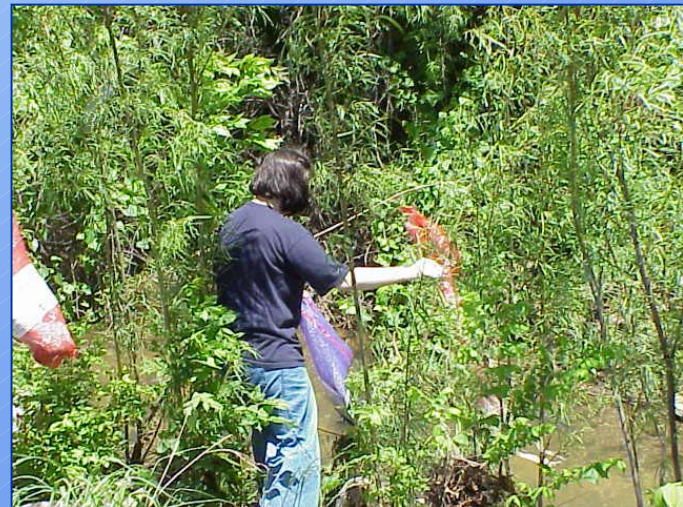


Arkansas Stream Teams

Springdale 4-H Club

Savoy 4-H Club

Fayetteville High School's
"School Within A School"



Permanent messages on all new development



Stumbling Block

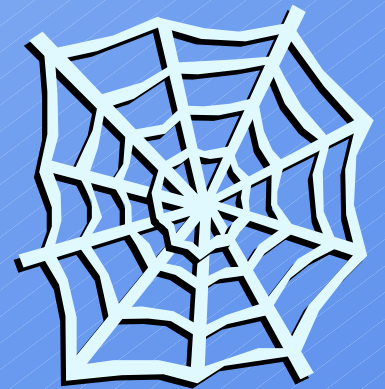


When developing partnerships, link to the organization not the individual to provide continuity and permanence

Example: Since 1997, seven different people have been in the “Environmental Educator” position - the key contact in our partnership with the Tri-County Solid Waste District



Capitalize on Partnering Opportunities!



Fayetteville's “Pollution Prevention Partners”

Fayetteville Wastewater Treatment Facility
(Operations Management, Inc.)

U of A Cooperative Extension Service

City of Fayetteville - Solid Waste Division

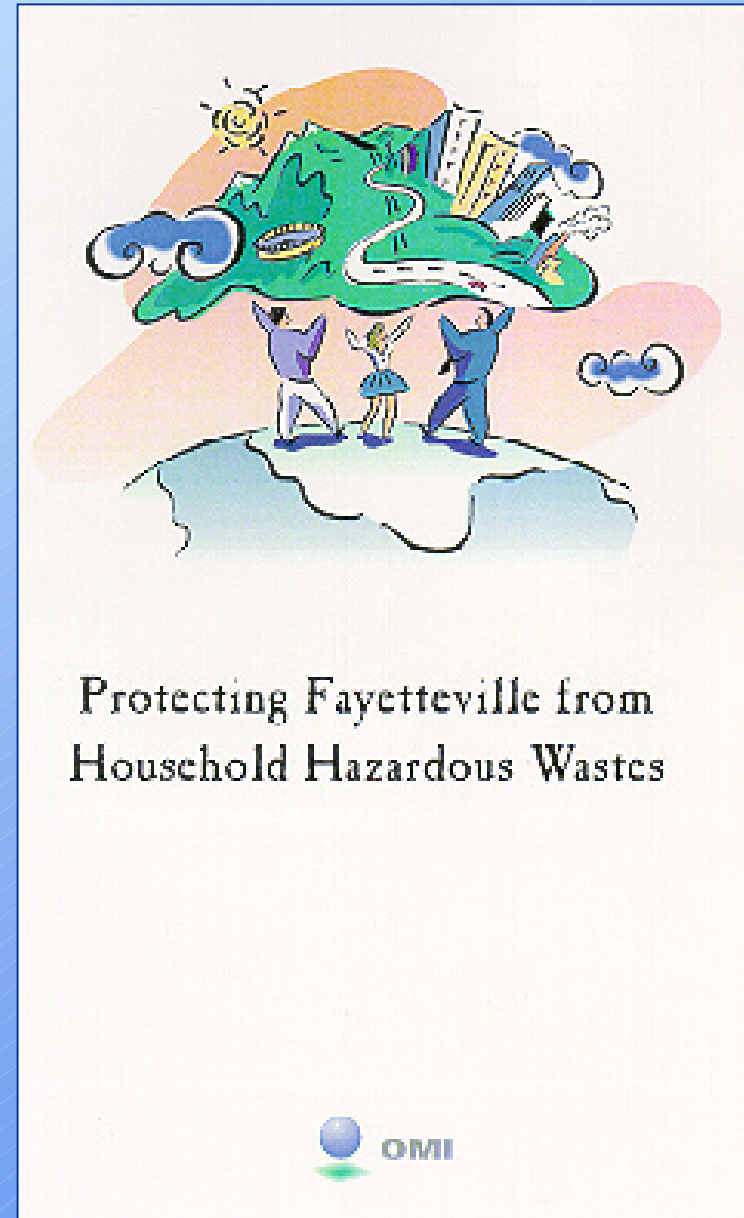
Tri-County Solid Waste Management District

University of Arkansas Physical Plant

*Formed in 1998 in response to well-publicized
pesticide misuse/improper disposal incidents*

“Pollution Prevention Starts at Home”

- Public education program
- Proper use and disposal of household hazardous products
- 20 minute slide/LCD program
- Presented by Fayetteville’s “Pollution Prevention Partners”




From the “Pollution Prevention Partners” came...

- Tri-County Solid Waste asked Extension to conduct a water quality program during a Teacher In-Service Training
- Repeat broadcasts of the training were televised on the local cable channel
- A teacher saw the program and contacted Extension to come to all of the 2nd grade classes at the school where she taught
- The Fayetteville Public Librarian also saw the program and asked Extension to present a water quality program as part of their “Nature in Focus” lecture series

Extension has also turned to the “Pollution Prevention Partners”

- Paint for the storm drain stenciling has come from the Tri-County Solid Waste’s “Household Hazardous Waste Collection Trailer”
- 4-Hers have toured the Wastewater Treatment Plant as part of their “Wet and Wild” Summer Day Camp
- The City of Fayetteville Solid Waste Division offers tours of its Composting Facility as part of Extension’s Master Composter Training each year
- The Tri-County Solid Waste District hosted an Extension “Farm Pond Management Workshop”
- The U of A Physical plant has worked with Extension to set up a recycling program for the local County office

A cartoon illustration of a purple and pink spider on a white web against a blue background. The spider is positioned at the bottom left of the web. A large, white, rounded rectangular speech bubble with a black border is centered on the web, containing the text. The web is composed of thick white lines forming a complex, irregular pattern.

**Partnership opportunities
are everywhere – The key
is to be prepared to look
for them and act on them!**