

Arkansas Nonpoint Source Pollution Program



NATURAL RESOURCES
DIVISION

FY2021 Projects

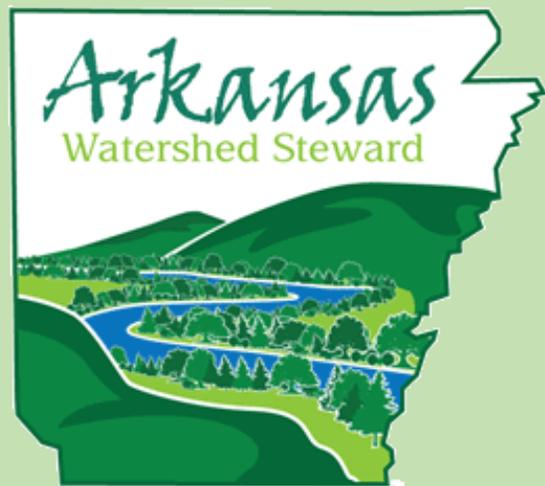
Update of the Watershed Stewardship Program in Arkansas: Phase II

Project #: 21-200

Lead Project Partner: Jefferson County Cooperative Extension Service

Status: Active

The Arkansas Watershed Steward Program was created as a 319 project in 2013 (Project #12-500). The need for the Program arose from the need to foster awareness, education, and responsible stewardship of Arkansas' most important resources. The initial project culminated in the Arkansas Watershed Stewardship Handbook, created by the Extension Service in cooperation with over a dozen partners. It also resulted in a number of educational events and meetings. Water quality impairments across the state show a need for adequate stewardship from everyday landowners, especially in areas without active watershed groups. Project #19-200 sought to grow the Program, first through strategic planning by a steering committee and updating the Handbook. Phase II (Project #21-200) is building on Phase I by creating online Arkansas Watershed Steward training modules, complete with recorded presentations, a discussion board, and quizzes. A curriculum development committee will be formed to develop the content, as well as continue to update the Handbook and previously developed PowerPoint slides. For more information, go to <https://www.uaex.uada.edu/environment-nature/water/ar-watershed-stewardship.aspx>.



*"Citizens Caring for
Water Resources"*

Arkansas Nonpoint Source Pollution Program



NATURAL RESOURCES
DIVISION

Lower Ouachita-Smackover Watershed SWAT Model and Watershed Management Plan

Project #: 21-300

Lead Project Partner: Southwest Arkansas Planning and Development District

Status: Active

Dominated by forest used for silviculture and wetlands, the Lower Ouachita-Smackover Watershed is located entirely in the Gulf Coast Plain. Five streams and rivers within the 8-digit HUC are on ADEQ's 2018 303(d) List for levels of metals, nutrients, turbidity, dissolved oxygen, and pH, depending on the stream. This project will examine past monitoring data, identify sources of the pollutants, and conduct surveys. A SWAT model for the watershed will be generated with up-to-date data, and using information from this model, an EPA 9 Element Plan for the watershed will be developed. Additionally, the project aims to engage and educate the community and stakeholders about water resources and BMPs.

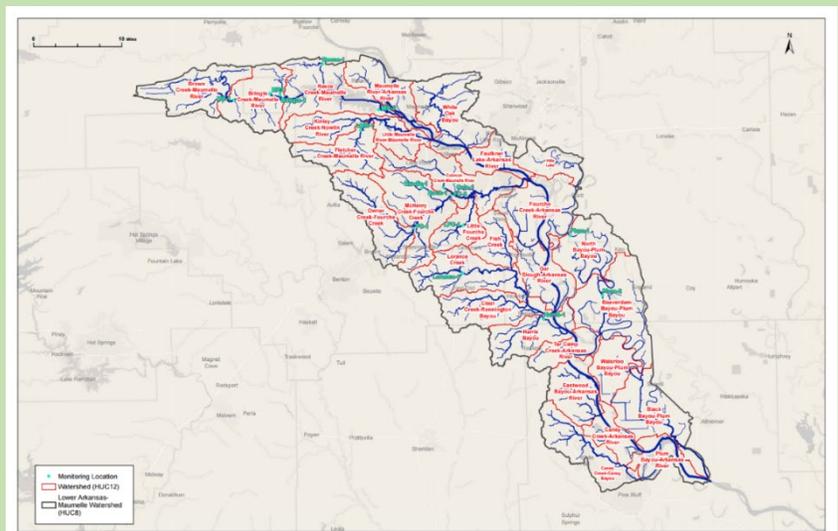
Lower Arkansas-Maumelle Monitoring and Assessment

Project #: 21-400

Lead Project Partner: Audubon Arkansas

Status: Active

In cooperation with the City of Little Rock, Friends of Fourche Creek, CAW, UALR, ADEQ, and the City of Maumelle, Audubon Arkansas will collect data on the Lower Arkansas-Maumelle HUC-8 Watershed. This project will represent Phase I of II of a larger effort to develop a SWAT model and EPA 9-Element Watershed Management Plan for the watershed. The watershed drains into the Arkansas River and encompasses most of Pulaski County and portions of Saline, Perry, and Jefferson Counties. The two HUC-12 sub-watersheds of interest are Fourche Creek and the



Arkansas Nonpoint Source Pollution Program



NATURAL RESOURCES DIVISION

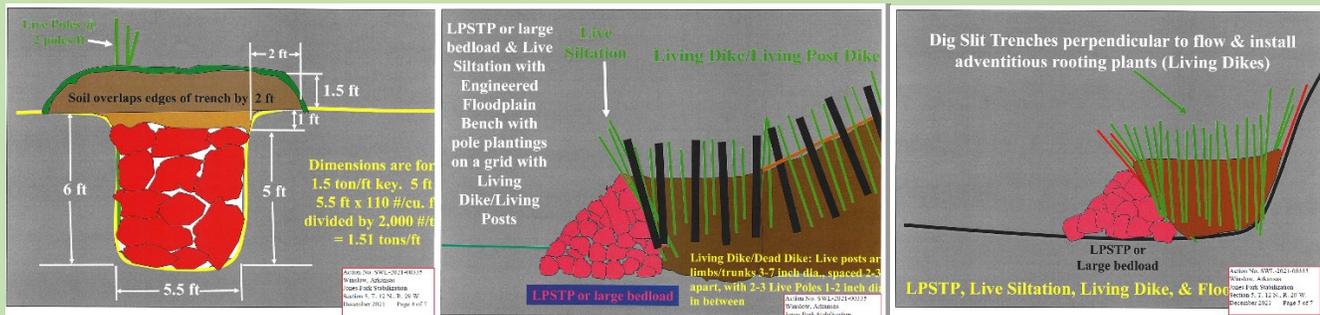
Maumelle River, which feeds into Lake Maumelle. Fourche Creek, dominated by urban land use, is listed on ADEQ's 2018 303(d) List for metals, fecal coliform, sediment, and dissolved oxygen. Other significant land uses within the watershed are agriculture (row crops) and forest. Monitoring and assessment of the watershed will inform watershed management decision-making and help better identify problems.

Jones Fork/Winfrey Valley Stream Bank Stabilization

Project #: 21-500

Lead Project Partner: Crawford County Road Development

Status: Active



Part of the greater Upper Frog Bayou Watershed, banks Jones Fork Creek has contributed over 20,000 cubic feet of sediment into the waterbody over the last 5 years. Along with the City of Fort Smith, Crawford County Road Department will re-slope, stabilize, and re-vegetate nearly 700 feet of eroding stream bank. The project will be completed December 2023.

Arkansas Nonpoint Source Pollution Program



NATURAL RESOURCES DIVISION

South Fork Spring River Sub-Watershed Cost Share

Project #: 21-600

Lead Project Partner: Fulton County Conservation District

Status: Active

A sub-watershed of the Spring River Watershed Basin, the South Fork Spring River and its tributaries flow through the Ozark Highlands of Fulton County. The South Fork provides quality recreational opportunity year-round, but is being affected by over-grazing, unrestricted cattle stream access, and stream bank erosion. The high number of cattle and dairy farms in the area highlights the great potential of implemented BMPs to enhance and protect water quality. The Fulton County Conservation District plans to implement BMPs and provide technical and financial assistance to farmers within the watershed.

Fulton County Conservation District

Board of Directors:
Luis Covas, Chairman
Logan Stone, Vice-Chairman
Justin Luther, Sec./Treasurer
Nathan Criss, Board Member
Darick Brown, Board Member

Personnel in the Salem Field Office:
Kelly Shrable, NRCS District Conservationist
Aaron Shelton, NRCS Soil Conservationist
Derek Hall, NRCS Technician
Kenny Crawford, District Technician
Blake Greene, District Technician
Kim Krupa, District Technician/Secretary
Meagan Land, Program Assistant

NOTICE:
OUR OFFICE IS OPEN MONDAY-FRIDAY 8:00 A.M. TO 4:30 P.M.

8 Benefits of Rotational Grazing

No matter where on the globe you are located, grass is one of your untapped resources for profitability. Like other business entities, you have assets and one of your biggest assets is often your land. It's a precious commodity that is no longer being produced so it must be cared for and cherished to optimize its potential and to maximize your profits.

To maximize and optimize the use of this precious asset many farmers/ranchers are turning to rotational grazing. Rotational grazing has many benefits – all leading to higher profits on your land:

- Increased soil fertility
- Increased forage production
- higher quality forage stand
- Controlled forage utilization
- Less wasted forage
- Improved drought management
- Consistent animal monitoring
- Extended grazing periods

Why rotational Graze?

More than 25% of agricultural land in the American Midwest is in some form of pasture. Most of this pastureland is continuously grazed resulting in 80% of

Monthly Board Meetings

Monthly board meetings are held on the first Thursday of each month at 6:00 p.m. at the NRCS office at 236 Byron Rd.

Buffalo River Tributary Cost Share

Project #: 21-700

Lead Project Partner: Buffalo Conservation District (Searcy County)

Status: Active

Part of the White River Basin, the Buffalo River Watershed spans ten counties. The Buffalo National River draws approximately \$55 million annually to the region,

Arkansas Nonpoint Source Pollution Program



NATURAL RESOURCES
DIVISION

including Searcy County. Other waterbodies including Calf, Bear, Tomahawk, Brush, and Lower Big Creeks are all part of the watershed in Searcy County. However, several portions of the Buffalo River in Searcy County have been identified as impacted on ADEQ's 2018 303(d) List due to total dissolved solids. While the source of the impact on water quality is unknown, nonpoint source pollutants from both urban and rural portions of the watershed are thought to be the cause. This project will encourage landowners to implement BMPs on their properties, such as cattle exclusion fencing, alternate cattle water sources and restoring riparian buffers. The Buffalo Conservation District will also encourage cattle operators to utilize a nutritional monitoring tool designed for free-grazing managers to assist with nutrition and grazing management. The Buffalo Conservation District will provide technical and financial assistance to participating landowners.

Abandoned/Outdated Agricultural Pesticide Collection and Disposal Project

Project #: 21-800

Lead Project Partner: Arkansas Department of Agriculture

Status: Active

Unknown quantities of unused and outdated pesticides are stored on farms across Arkansas. These pesticides pose a direct threat to both ground and surface waters, especially in light of increasing frequency and intensity of rain events. Since 2005, the Department of Agriculture's Abandoned Agricultural Pesticide Disposal Program has collected over 5 million pounds of unwanted pesticides. Funding from the 319 Program will help further and continue important work the Pesticide Disposal Program is accomplishing.

Poison Springs Complex Road Infrastructure Stabilization

Project #: 21-900

Lead Project Partner: Arkansas Forestry Division

Status: Active

The Poison Springs Complex is contained within three different 8-digit HUCs: the Little Missouri, Upper Ouachita, and Lower Ouachita-Smackover Watersheds. The Lower Ouachita-Smackover Watershed is a priority watershed in the 2018-2023 NPS Management Plan. Sedimentation of the Mill Creek arm of Lower White Oak Lake has

Arkansas Nonpoint Source Pollution Program



NATURAL RESOURCES
DIVISION

been a concern for managers. Though the Nature Conservancy and others have conducted thorough unpaved road assessments across the state, little assessment has been done on roads within the Poison Springs Complex. This project, lead by the Department of Agriculture Forestry Division, will conduct an unpaved roads assessment in the Mill Creek Watershed and implement road improvements and BMPs. The goal of the project is to reduce sedimentation due to unpaved roads, the second leading cause of sedimentation in the state.

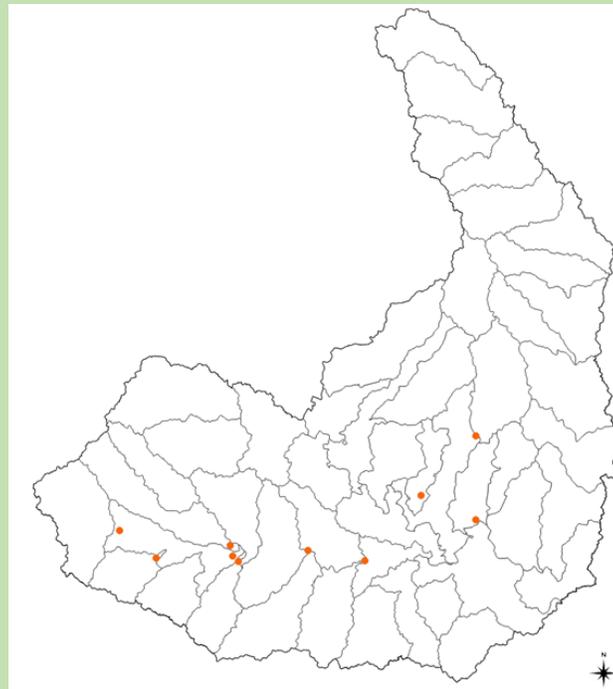
Lower Ouachita-Smackover Water Quality Monitoring

Project #: 21-1000

Lead Project Partner: Equilibrium

Status: **Active**

Primarily rural and forested, the Lower Ouachita-Smackover Watershed has 21 segments listed in ADEQ's 2018 303(d) List of Impaired Waterbodies. Contaminants include chloride, copper, lead, mercury, nitrates, sulfates, and total dissolved solids, with inadequate levels of pH, dissolved oxygen, and turbidity. The sources of pollution are unknown. The watershed is also considered a priority watershed in the 2018-2023 NPS Pollution Management plan, which calls for strategic water monitoring of the watershed. From October 2021 to December 2025, Equilibrium will monitor various parameters of water quality in 10 sub-watersheds (12-digit HUCs), including but not limited to Mill Creek-Smackover Creek, Sloan Creek, Gum Creek, Black Lake, and Dry Branch-Champagnolle Creek. Monitoring provides crucial information to natural resource managers in identifying problems and trends. This information is necessary to implement solutions to problems and protect our water resources.



Arkansas Nonpoint Source Pollution Program



NATURAL RESOURCES
DIVISION

Arkansas Silviculture BMPs Outreach Project

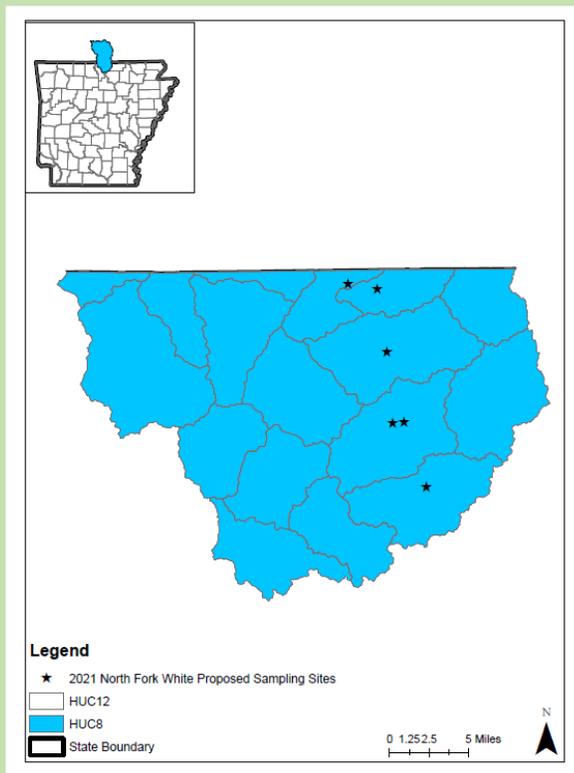
Project #: 21-1100

Lead Project Partner: Arkansas Forestry Division

Status: Active

Considered priority watersheds in the 2018-2023 NPS Management Plan, the Lower Ouachita-Smackover, Lower Little, and Upper Saline Watersheds are located in an area with many timber-harvest operations. Silviculture has been identified as a source of impact (though not impairment) to water quality and is most commonly associated with sedimentation. With this project, the Forestry Division will work with landowners and partners such as the Arkansas Forestry Association and the Arkansas Timber Producers Association to conduct educational trainings on silviculture BMPs. The Forestry Division also aims to contract with consultants to develop Forest Stewardship Management Plans for landowners within the project area. The goal of the project is to increase landowners' awareness and practice of BMPs and therefore reduce nonpoint source pollution.

North Fork White River Watershed Monitoring



Project #: 21-1200

Lead Project Partner: Arkansas State University

Status: Active

According to ADEQ's 303(d) List, several major tributaries of the North Fork White River Watershed are not adequate for supporting aquatic life or primary contact. Impairments in the watershed include total dissolved solids, nitrate levels, and low dissolved oxygen. ASU's Ecotoxicology Research Facility will monitor for multiple water quality parameters in 6 sub-watersheds (12-digit HUCs) including Outlet Big Creek, Outlet Big Creek tributary, South Brushy Creek-Norfolk Lake, Outlet Bennetts River, Little Creek, and Bennetts Bayou.

Arkansas Nonpoint Source Pollution Program



NATURAL RESOURCES
DIVISION

Water quality data will illuminate problems and trends and will be used in a watershed modeling project. The monitoring project will conclude December 2024.

Eleven Point River Watershed Monitoring

Project #: 21-1300

Lead Project Partner: Arkansas State University

Status: **Active**

Thirty-three miles of the Eleven Point River is classified as impaired due to low dissolved oxygen and therefore not supportive of aquatic life, according to ADEQ's 303(d) List of Impaired Waterbodies. Agricultural activities in the area have been identified as the source of pollution. Similar to the monitoring project described above, ASU will monitor for multiple water quality parameters in four sub-watersheds (12-digit HUCs), including Dry Creek, Eassis Creek, Thompson Creek, and Hubble Creek. Again, this monitoring data is valuable in providing insight into water quality problems and trends and will lend itself to implementing solutions and protecting water resources.

