

Arkansas's Nonpoint Source Pollution Program



**NATURAL RESOURCES
DIVISION**

**Tate Wentz
Water Quality Section Manager**

ANRD-Water Quality Section

- Nonpoint Source Program
- Arkansas Unpaved Roads Program
- Arkansas Nutrient Reduction Strategy
- Wetland and Riparian Zone Tax Credit Program



Pollution Sources and Delegated Authority



Sources of Water Pollution



Nonpoint Source

NPDES

MS4



Water Quality and Agriculture

- From the USDA soil portal, the cost of soil erosion is estimated at \$44.39 billion in the United States.
- This value includes lost productivity, along with sedimentation and eutrophication of water reservoirs.
- Lost farm income is estimated at \$100 million per year as a result of soil erosion in the U.S.

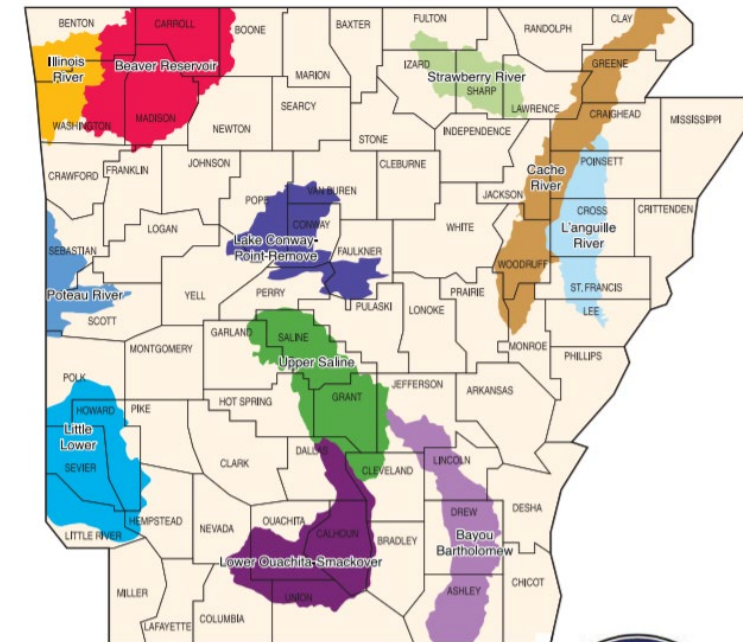


ANRD-Water Quality Section

Arkansas Nonpoint Source Pollution (NPS) Management

- Annually funded at ~\$3 million
- Subaward NPS projects
 - Watershed Management Plans
 - NPS Best Management Practices implementation
 - Bank Stabilization
 - Education & Outreach
 - Low impact development/green infrastructure
 - Title 10 Cost Share Program with Conservation Districts

Arkansas Natural Resources Commission



2018-2023 Nonpoint Source
Pollution Management Plan



ANRD-Water Quality Section

Arkansas Nonpoint Source Pollution (NPS) Management

FY24 Request for Project Pre-Proposals

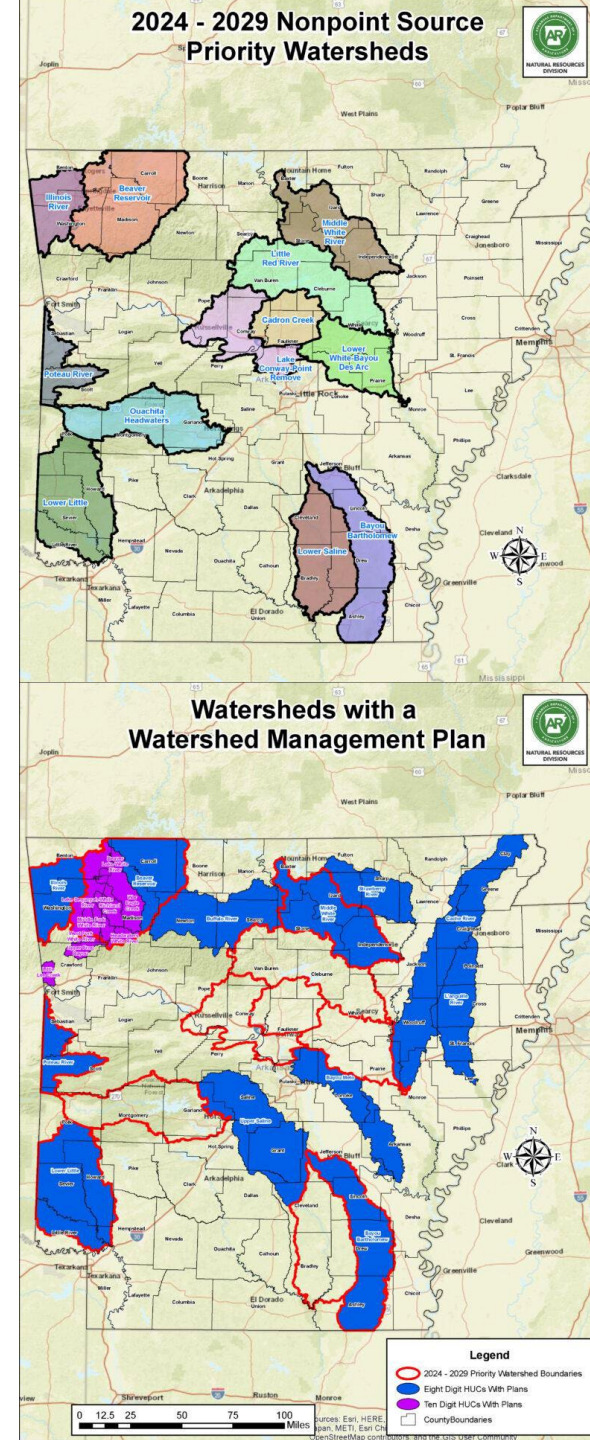
July 17-September 15

<https://www.agriculture.arkansas.gov/natural-resources/divisions/water-management/nonpoint-source-management/>

ANRC.Nonpoint@agriculture.arkansas.gov



Arkansas Association of Conservation Districts Annual Meeting
July 12-13, 2023



Title X Cost Share Program

- Adopted February 16, 1994, by Arkansas State Legislature
- Voluntary program
- Producer/Landowner best management practice (BMP) implementation
- 319 grant facilitated through county conservation districts
- NRCS standards
- Decreasing nonpoint source pollution
- Not competing with NRCS programs



No-Till on Recently Planted Soybean Field



Two budgets in one project

Conservation District

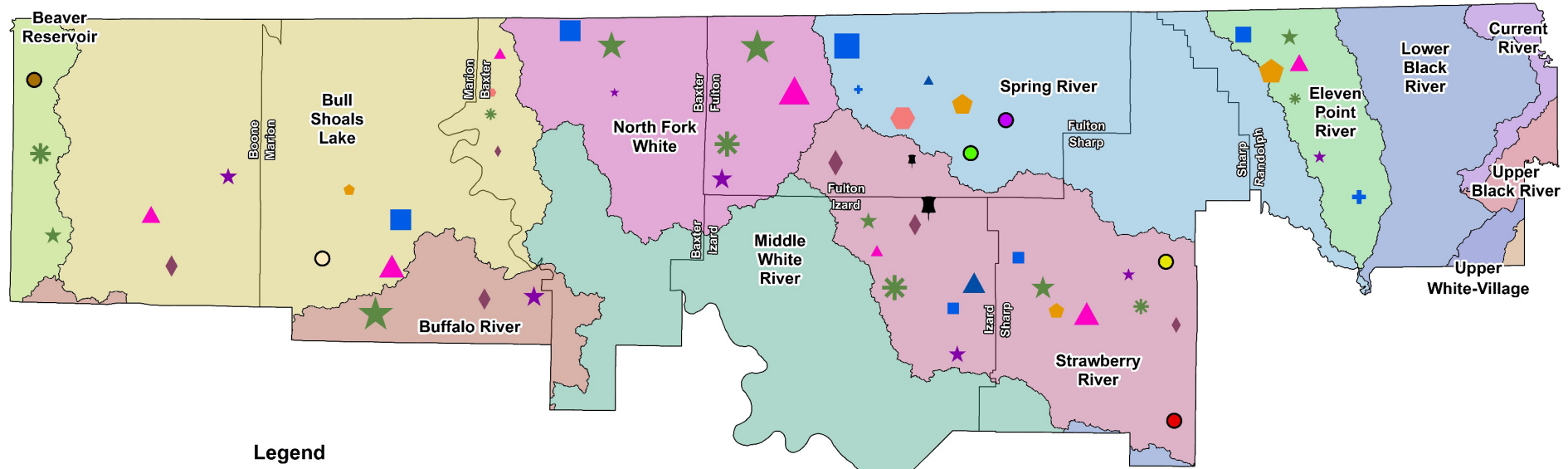
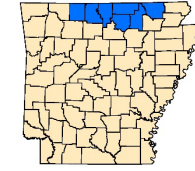
- \$75,000 BMP implementation
 - Not total project amount
- 60% Federal : 40% Match
- Match Sources
- Reporting
- Work with landowners

Landowner

- \$15,00 per Landowner
 - Max for Federal \$
- 40% Landowner : 60% Federal
- NRCS cost list
- Implement approved BMP's
- Paid after final inspection



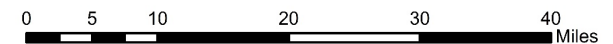
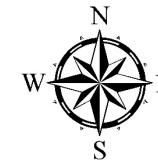
BMP Total Allocated Funds by Practice Type (North Central Arkansas)



Legend

- ★ Brush Management (acres)
- ✚ Critical Area Planting (acres)
- ▲ Fencing (feet)
- ⬠ Forage & Biomass Planting (acres)
- ✱ Heavy Use Area
- Herbaceous Weed Management (acres)
- Nutrient Management (acres)
- Pasture Planting (acres)
- Pest Management (acres)
- ◆ Pipeline (feet)
- ⬠ Pond (cubic yards)
- Prescribed Grazing (acres)
- ⚙ Pumping Plant
- Warm Season Grasses (acres)
- ★ Watering Facility
- ▲ Water Well (feet)
- Weed Management (acres)

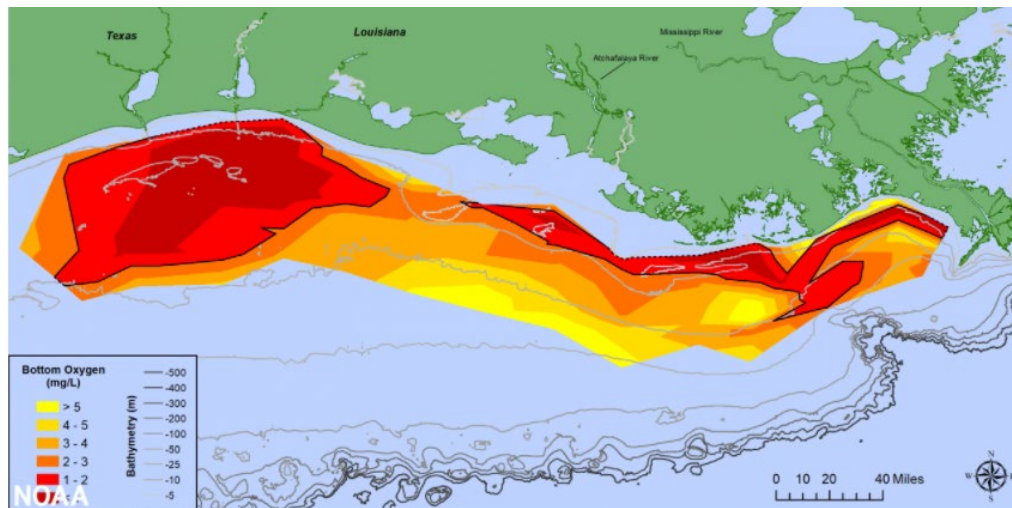
***Total Allocated for the North Central Area for 2009 - 2020:
\$1,092,567**



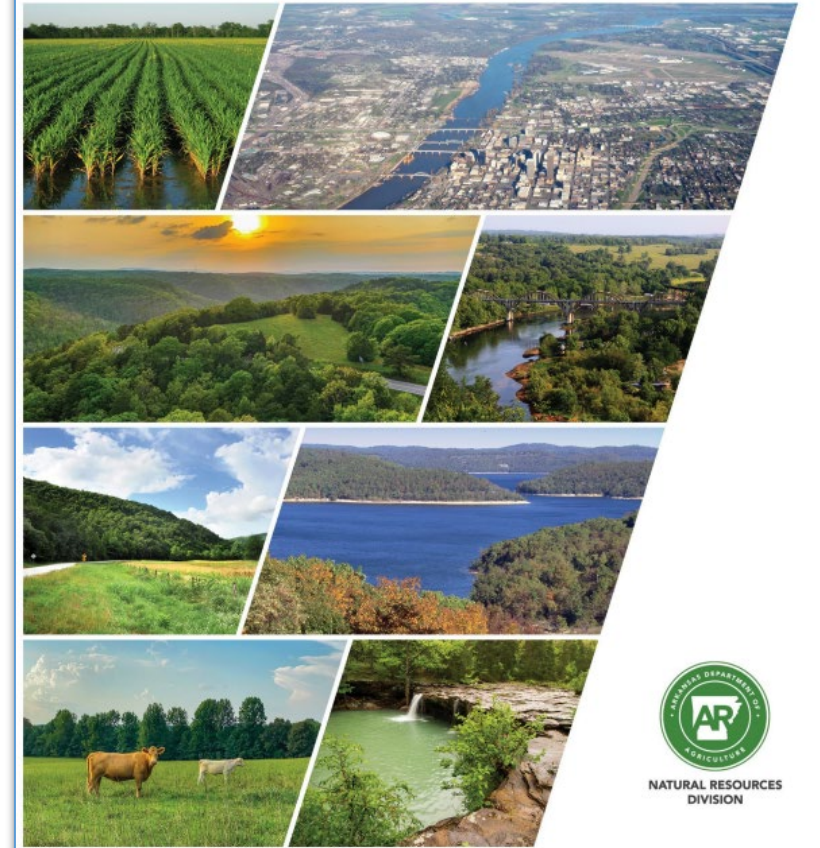
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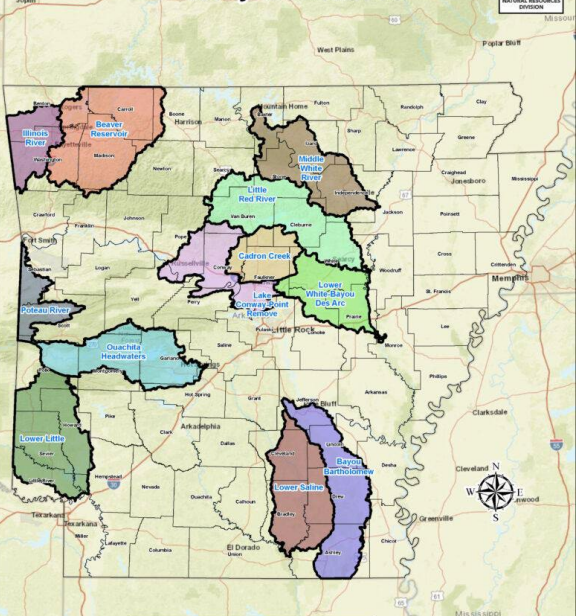
Nutrient Reduction Strategy

- Gulf of Mexico Hypoxia Taskforce
- First update since 2014
- IJA funding for Gulf Hypoxia Program
- \$4,174,999 available for AR

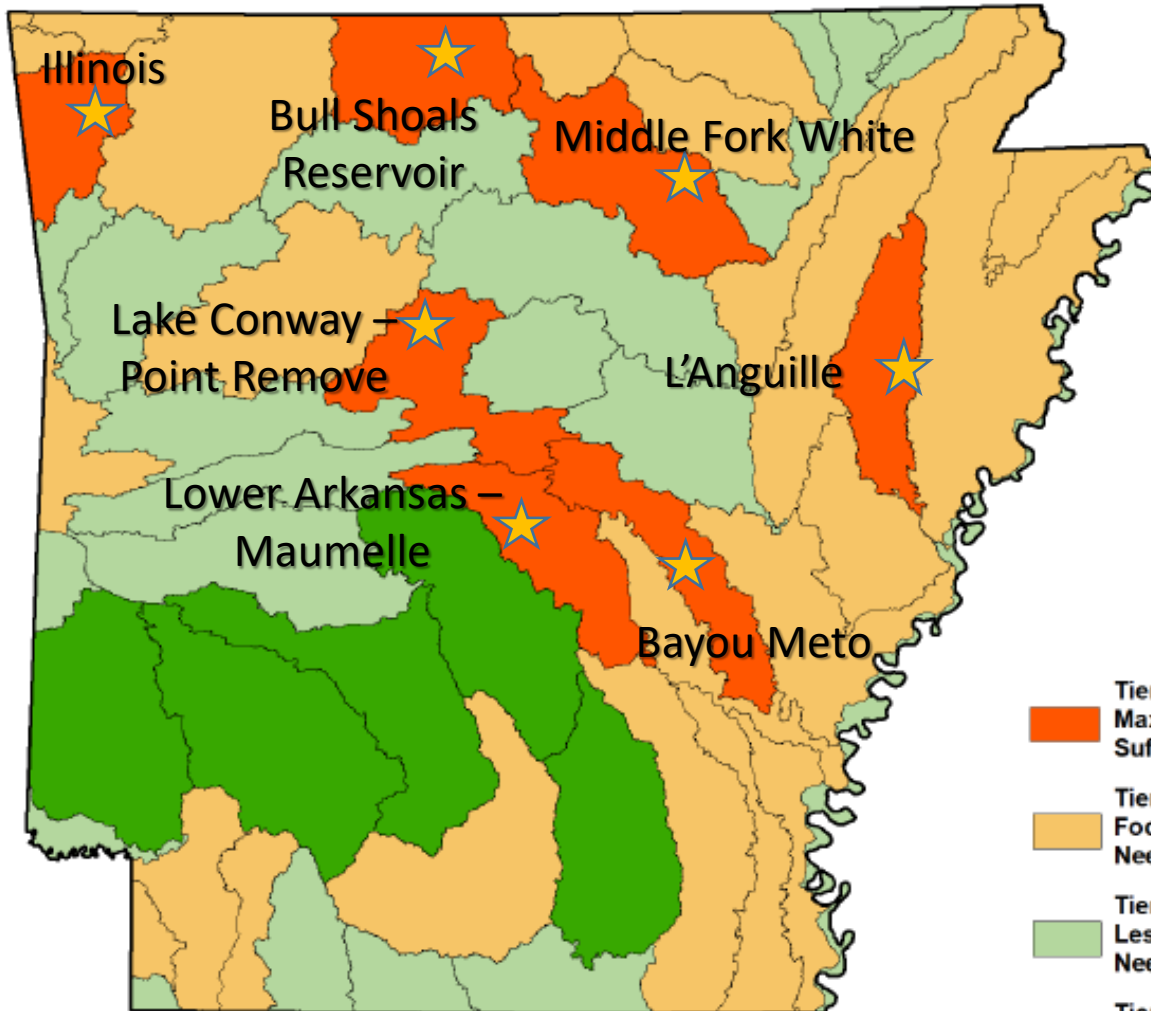


2022 Arkansas Nutrient Reduction Strategy (ANRS)

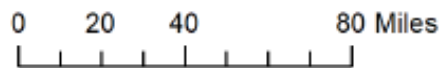




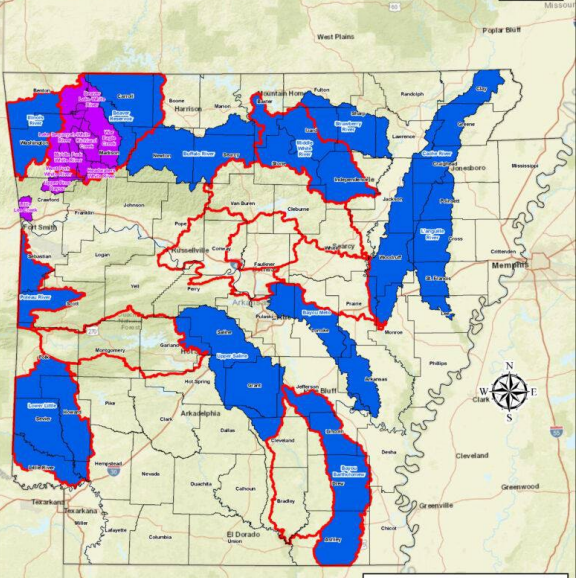
Prioritization Map



- Tier 1
Max Focus
Sufficient Monitoring
- Tier 2
Focus
Need More Monitoring
- Tier 3
Less Focus
Need More Monitoring
- Tier 4
Least Focus
Sufficient Monitoring



Watersheds with a
Watershed Management Plan



Legend

- 2024 - 2029 Priority Watershed Boundaries
- Eight Digit HUCs With Plans
- Ten Digit HUCs With Plans
- County Boundaries



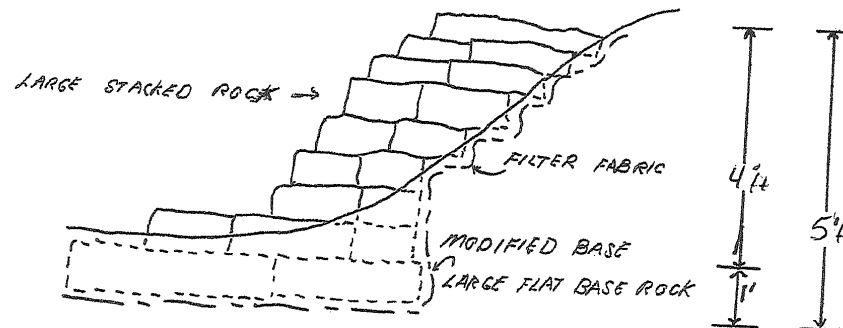
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Wetland and Riparian Zone Tax Credit Program

- Since 1996, nearly 250 applications & ~\$5.7 million in tax credits



UPPER WALL - APPROXIMATE LENGTH: 40 FEET



ARKANSAS DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES DIVISION

CREATION AND RESTORATION OF PRIVATE WETLANDS AND RIPARIAN ZONES TAX CREDIT APPLICATION

ATTN: Sue Filat-Alami - Arkansas Department of Agriculture - Arkansas Natural Resources Division
10421 West Markham Street, Little Rock, AR 72205 - Phone: (501) 682-1611 Fax: (501) 682-3991

Note: This application is for participation in the tax credit program for the creation and restoration of private wetland and riparian zones, and refers to Subtitle III of the rules governing the program. Applicant should check with the U.S. Army Corps of Engineers to find out if a Section 404 permit will be required for the project prior to completing this application. Use additional sheets as necessary.

1. APPLICANT INFORMATION

Date _____
Name _____ Fed EI No. and/or S.S. No. _____
Address _____ City _____
State _____ Zip _____
Telephone (Home) _____ (Work) _____ (Mobile) _____
(FAX) _____ Email _____

2. OWNERSHIP INFORMATION

2a. Type of Ownership (Individual, Corporation, Partnership, etc.) _____

2b. Officers/Shareholders/Partners, and Their Percentages of Ownership _____

2c. Address, Phone and Facsimile Numbers of Participating Taxpayers (Attach)

2d. Contact Person (Name, Address, Phone, FAX) _____

2e. Current and Historical Ownership Information (include whether adjacent land is owned by applicant)

W&RTC Successes

- Since 1996...
 - Nearly \$5.7 million in tax credits approved
 - Over 250 applications
 - Over 30 miles of restoration
 - Last four years,
 - 19 (10 projects; 1,232 ft.)
 - 20 (10 projects; 2,189 ft.)
 - 21 (19 projects; 4,327 ft.)
 - 22 (17 projects; 2,170 ft.)
- Currently at \$500,000 cap
- Approve ~\$600,000-\$900,000 annually
- Current claims ~\$250,000, annually



Common NRCS Practices

- Cover Crop (340)
- Cross Fencing (382)
- Wildlife habitat Planting (420)
- Tree/Shrub Establishment (612)
- Forest Stand Improvement (666)
- Heavy Use Area Protection (561)
- Riparian Forest Buffer (391)
- Wetland Creation (658)
- Silvopasture (381)
- Watering Facility (648)
- Herbaceous Weed Treatment (315)
- Wetland Enhancement (659)
- Wetland Restoration (657)
- Wetland Wildlife Habitat Management (644)







Common Land Unit

- Non-Cropland; Cropland
- Tract Boundary

Wetland Determination

- Restricted Use
- ▼ Limited Restrictions
- Exempt from Conservation Compliance Provisions

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

Imagery Year: 2021

2022 Program Year
Map Created February 15, 2022

Farm 322
Tract 390

Tract Cropland Total: 218.05 acres

Practice: 391 - Riparian Forest Buffer

Scenario #1 - Hardwood with Pasture Foregone Income

Scenario Description:

Establish a buffer of hardwood trees into a suitably prepared pasture site to restore riparian plant communities and associated benefits. The buffer will be located adjacent to and up-gradient from a watercourse or water body extending a minimum of 35 feet wide. The planting will consist of hand planted bare-root deciduous trees. Generally, planting spacing is at 12' x 12'; however, other spacing may be used depending on the objectives. Resource concerns to be addressed are Soil Erosion - excessive bank erosion; Water Quality - excess sediment and organics in surface waters and elevated temperature; Degraded Plant Condition - inadequate structure and composition; and Inadequate Habitat for Fish and Wildlife - habitat degradation.

Before Situation:

Typical sites include former riparian forests and habitat used for forage, cropland, speculation property, or other nonforest condition which contains undesirable amounts or types of vegetation. Active bank erosion is depositing sediment, nutrients and organics in the riparian area. Water temperature is high due to lack of shade. Habitat is not desirable for wildlife.

After Situation:

A buffer of trees will be established along the riparian corridor which will provide stability, filtration, shade, and desirable habitat to address the above mentioned resource concerns.

Feature Measure: Area of planting

Scenario Unit: Acres

Scenario Typical Size: 5.00

Scenario Total Cost: \$2,406.56

Scenario Cost/Unit: \$481.31

Cost Details:

Component Name	ID	Description	Unit	Cost	QTY	Total
Equipment Installation						
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hours	\$18.34	8	\$146.72
Hand tools, tree planting	1590	Various hand tools for digging holes and planting trees such as augers, dibble bars, planting shovel, hoe-dad. Equipment only. Labor not included.	Hours	\$12.81	16	\$204.96
Foregone Income						
FI, Grazing AUMs	2079	Grazing is the Primary Land Use	Animal Unit Month	\$20.02	10	\$200.20
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hours	\$23.16	16	\$370.56
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hours	\$47.39	8	\$379.12
Materials						
Tree, Hardwood, Seedling, Small	1509	Bare root hardwood seedlings 6 to 18 inches tall; includes tropical containerized seedlings of 8 cubic inches or smaller. Includes materials and shipping only.	Each	\$0.67	1500	\$1,005.00
Mobilization						
Mobilization, Material, distance > 50 miles	1043	Mobilization cost of materials for special cases where the distance from the supplier delivery point to the job site exceeds 50 miles. The costs for shipping by UPS or bulk freight shipping to a location within 50 miles of the job site have already been included in the component price.	Dollars	\$1.00	100	\$100.00

EQIP Scenarios

Practice No.	Name	Scenario No.	Description	Scenario Unit	Scenario Cost	Cost/Unit	Farm A 56.84 ac
644	Wetland Wildlife Habitat Management	6	Development of Deep Micro-Topographic Features w/ Heavy Equip.	20 ac	\$2,171.08	\$108.55	@ 56.84 \$6,169.98
391	Riparian Forest Buffer	2	Hardwood with Row Crop Foregone Income	5 ac	\$2,557.06	\$711.41	@ 10 ac \$7,115.10
587	Structure for Water Control	3	Commercial Inline Flashboard Riser Reg.	1,000 diameter inch foot	\$6,877.16	\$6.88	@ 2,000 \$13,760
						TOTAL	\$27,045.08
						60%=\$16,227	40%=\$10,818

Questions

Tate Wentz

Water Quality Section Manager

Natural Resources Division-Arkansas Dept. of Agriculture

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501.682.3914

