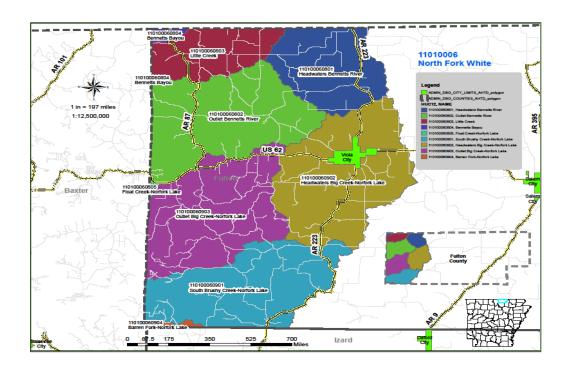
# North Fork White Sub Watershed Cost Share Project 19-1000



## **Background**

The North Fork of the White River Watershed and its tributaries (HUC 11010006) are in the Central Plateau region of the Ozark Highland Ecoregions of Arkansas. Historically, turbidity levels in this region are often higher than other regions within the Ozark Highlands. This, along with silt and total suspended solid inputs during storm events add to the need for improvement. The goal set forth at the beginning of the 19-1000 Project consisted of improving land usage to produce a positive effect on the resource concerns within the watershed. The plan was to implement best management practices to reduce livestock traffic in and around the North Fork White River and its sub watersheds. A secondary goal was to construct a soil erosion educational demonstration project. This consisted of a sediment trap to be used to measure the amount of sediment run off after each rain event. Along with the sediment trap, native plants and rocks were going to be placed at the demonstration area for filtration as well as beautification.

Fulton County Conservation District will determine success of this project if the following is achieved: 1) water quality improves as per state regulations, 2) all conservation practices have been implemented to NRCS standards and specifications, 3) landowners implement and maintain best management practices and incorporate those practices into their daily operations, and 4) there is a soil loss reduction from the completed demonstration project.



# **BMPs for Project**

The project began with the formation of a steering committee. The committee's first task was to review and approve the priority BMPs for the project area, as noted below. Additional responsibilities continued throughout the project.

ВМР	USDA-NRCS Code
Brush Management	314
Herbaceous Weed Control	315
Critical Area Planting	342
Fence	382
Forage/Biomass Planting	512
Livestock Pipeline	516
Heavy Use Area Protection	561
Watering Facility	614

A total of 151 farms had conservation plans written on them. And a total of 300 farms had return visits. Of those 151 conservation plans written, 18 landowners received funding assistance as noted in the funding section below.

#### **Technology Transfer**

The project announcement was promoted through news media and word of mouth. Once the project was in place, newsletters, as well as radio announcements were utilized to relay information to the public.

The information distributed to the public consisted of informative news articles, rental equipment available, reminders such as poultry registration, board member election opportunity, no ground disturbance timeline, conservation license plates availability, items available to purchase through the district, and our own little twist of tried-and-true recipes.

# Field Days and Outreach Efforts

This was an interesting time with outreach efforts due to Covid-19 restrictions. Covid-19 hit the United States in January 2020 and came to Salem AR in March of the same year. Life seemed to come to a halt. Offices closed and teleworking became the norm. Public meetings were shut down, which limited our opportunities for outreach through field days; however, we still managed our outreach efforts by using alternative methods when restrictions lifted but with precautions in place. We presented water conservation to kids in the three schools in Fulton County. Approximately 80 second graders and teachers were reached through this effort with hopes of them retaining this presentation. A commercial exhibit at the Fulton County Fair was another public outreach. We presented conservation brochures in 2021 and 2022 and fair attendance in 2022 was approximately 5,000 individuals. If we even touched a small percentage of



attendees with our information, we feel that our outreach efforts were successful.

#### **Equipment Usage**

This project included making sprayers and no-till drills available to landowners within the watershed. Sprayers were rented out 38 times during this project timeline for a total of 58 days. The no-till drills were rented out for a total of 83 days with a total of 1,154.3 acres used to establish or renovate pasture.





#### Reporting

All quarterly and annual reports due to ANRC were submitted on time. One of the financial reviews was completed late due to Covid-19 restrictions and the lack of an auditor to conduct the review. However, it was submitted once an independent auditor was obtained to perform the review.

Additionally, due to covid, we were unable to participate in a project review meeting for one of the two required but in place of that review, the three district employees attended the Arkansas Nonpoint Source Pollution Annual Meeting held in June and found it to be a valuable tool for future use and very informative.

# **Demonstration Project**

The demonstration project consisted of constructing a sediment trap to record the amount of sedimentation collected after each rain event; install rock, shrubs, and vegetation to measure sediment after rain garden is installed; and continue to monitor and measure the amount of sedimentation throughout the remainder of the project.

A reduction of sediment occurred with the addition of each level of construction. The end results provide proof of the benefits of the project as noted on each report submitted. Our evaluation is that the trap, rocks, and foliage reduce the ground erosion caused from water runoff from the parking lots and ball fields. A total of 78 readings were obtained during the timeline of the project.



## **Funding**

Planned budgeted funding consisted of \$119,575 from EPA and \$93,371 from district match. Actual funding received and matched is\$119,575 and \$93,321 respectively.

A total of \$75,000 was available for cost share for landowners and 18 landowners were able to utilize the cost share program to improve land uses in the North Fork White Sub Watershed. Below is the breakdown for each year.

1st Year: \$58,173 paid out from ANRC / \$92,319 matching funds from landowners.

## Practices for year one:

NRCS Code	NRCs Practice	Amount Implemented
314	Brush Management	448.5 Acres
315	Herbaceous Weed Control	67 Acres
382	Fence	13,563.5 Feet
512	Forage and Biomass Planting	346 Acres
516	Livestock Pipeline	510 Feet
561	Heavy Use Area	5285 Square Feet
614	Watering Facility	1 Fountain Tank

2<sup>nd</sup> Year: \$13,441 paid out from ANRC / \$21,458 matching funds from landowners.

# Practices for year two:

NRCS Code	NRCs Practice	Amount Implemented
382	Fence	1350 Feet
516	Livestock Pipeline	2508 Feet
561	Heavy Use Area	900 Square Feet
614	Watering Facility	3 Fountain Tanks
		1 238-gallon Tire Tank
642	Water Well	452 Feet

3<sup>rd</sup> Year: \$3,386.00 paid out from ANRC / \$5,078.50 matching funds from landowners.

# Practices for year three:

NRCS Code	NRCs Practice	Amount Implemented
314	Brush Management	10.25 Acres
382	Fence	4615 Feet

#### **Success**

So many times landowners have a hard time qualifying for EQIP dollars through NRCS due to installing a single or only a few practices. This grant has allowed us to service those landowners that still need essential practices performed but fall short of EQIP acceptance due to various reasons. With the practices that have been performed under this grant, we feel that the water quality in the North Fork White River Sub Watershed has improved and if the landowners maintain their practices, then the water quality should show improvement, as per state regulations, for many years to come. As for meeting NRCS standards and specifications, all check outs done on the practices that received funding had been verified by our technicians to be in compliance. Our final success story is the soil loss reduction shown by our demonstration project. The sediment trap, along with the supplementary materials, has significantly stopped soil erosion in the park. No longer is there a deep gulley where the water flowed freely prior to the project.

Fulton County Conservation District and its Board of Directors are grateful for the opportunity to participate in this program and to offer cost share solutions to area landowners that improve water quality within the North Fork White Sub Watershed.



I believe water will be the defining crisis of our century — from droughts, storms, and floods to degrading water quality. We'll see major conflicts over water and the proliferation of water refugees. We inhabit a water planet, and **unless we protect, manage, and restore that resource**, the future will be a very different place from the one we imagine today. <u>Alexandra Cousteau</u>