

Project #: 00-1000

Project Name: Lake Brewer Watershed Nonpoint Source Pollution Control

Watershed: Cadron, 11110205

County: Conway County

Project Type: Technical Assistance, Education, BMP Implementation

Pollutants: Nutrients, Sediment, Bacteria

Project Summary

The Brewer Lake Watershed consists of the upper 23,127 acres of the Cypress Creek Watershed (a sub-watershed of the Cadron Creek Watershed), located in the southeastern part of Conway County. Brewer Lake is the water supply for Conway Corporation and the Conway County Regional Water System. The lake is also used for boating and fishing.

The project goals and objectives are to maintain or restore all designated uses of Lake Brewer and Cypress Creek above the lake; to implement conservation plans on 75 farms covering 15,000 acres within the watershed and thereby improve the majority of the pastureland to good or excellent condition; and to provide training for all Conway County equipment operators in the proper ways to apply Best Management Practices (BMPs) to county unpaved roads.

Land use in the watershed consists primarily of small farms with a total area of 23,127 acres. There are 18 confined feeding operations and approximately 2,400 unconfined beef cattle on the farms. Local agricultural professionals estimate that only about 25% of the pastures are managed at a high level of management. The unconfined cattle and pastures are a potential source of nutrients, bacteria, and sediment to the Brewer Lake, Cypress Creek, and on into Cadron Creek. Approximately 75 miles of unpaved roads are another potential source of sediment and nutrients to the streams and Brewer Lake. In addition, it is estimated that about 20 miles of streambank within the Brewer Lake drainage area are eroding in excess of a natural rate.

The intent of this project is to address two potential nonpoint sources of pollution to Brewer Lake: pastures, and unpaved county roads. The Conway County Conservation District will furnish additional technical assistance to landowners within the watershed to develop and carry out good pasture management plans. In addition, the district will offer cost share for applying BMPs as an incentive, and will make a no-till pasture seeder available to cooperators.

Priority for application (in descending order) are farms within the high priority area immediately upstream from the lake; farms with confinement animal feeding operations; dairies, hog farms, and poultry farms; and farms with riparian area pastures and/or critically eroding streambank or other critical areas.