United States Environmental Protection Agency

This document is one of the project summaries from the EPA's Targeted Watershed Grants 2005 Annual Report published in December 2005. The reference number is EPA 840-R-06-001. You can find the entire document at **http://www.epa.gov/twg**.

EPA'S TARGETED WATERSHED GRANTS 2005 ANNUAL REPORT

December 2005

Fourche Creek

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WHY IS THIS WATERSHED SPECIAL?

The Fourche Creek watershed in Arkansas drains and filters over 99 percent of the Little Rock metropolitan area and encompasses at least six third-order streams and numerous tributaries that discharge into it. The creek catches, stores, and releases floodwater from the Little Rock area. A classic urban watershed, the City of Little Rock cites the economic value and savings from natural purification in the Fourche Bottomlands to be in the millions of dollars. However, despite decades of neglect and abuse, Fourche Creek still boasts more than 50 species of fish, stands of 300-year-old bald cypress, and core bottomland region that still maintains its wetland functions. An estimated 90,000 of the watershed's 108,000 acres lie within the city limits of Little Rock, and of those, approximately 2,000 are intact wetlands. The core intact wetland area of Fourche Creek remains undeveloped, but is surrounded by encroaching commercial and industrial sites and crisscrossed by utility corridors.

ENVIRONMENTAL CHALLENGES

In 2003, Fourche Creek was identified by EPA as a federal priority with its Brownfield designation. The greatest threats to the Fourche watershed include sedimentation and floodplain encroachment:

- Streambank erosion and stormwater runoff problems exist due to development and urban sprawl.
- Dwindling wetland habitats and floodwater storage capacity threaten the watershed's ability to act as a natural filter.

Students learn water quality monitoring techniques.

RESTORATION ACTIVITIES

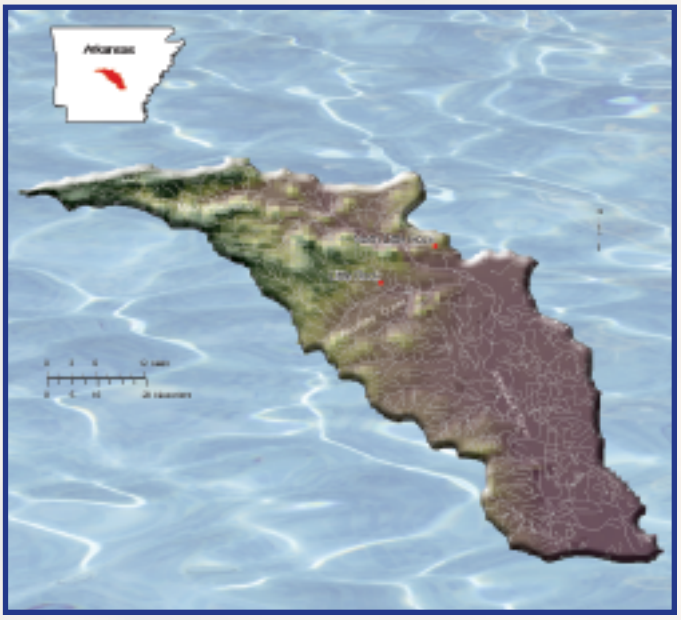
As the largest urban environmental restoration project ever undertaken in Arkansas, the Targeted Watersheds Grant funds will allow Audubon Arkansas to improve water quality, restore wetland functions, and enhance educational opportunities and community awareness. The project has six primary goals:

- Revitalizing wetland function by stabilizing 4,500 linear feet of rock vane and crib wall; reforesting 50 acres; enhancing 4,500 linear feet of stream corridor; establishing six stormwater retention basins; reducing sediments by five percent, plus facilitating one large-scale stream restoration project
- Increasing habitat and wetland floodwater storage capacity by bringing 20 critical acres of stream corridors in the floodplain into perpetual conservation easement status
- Establishing education and watershed awareness programs for the public, including students and developers
- Reducing floatable trash by 20 percent through a partnership with the City of Little Rock and a Central Arkansas waste management firm, which has agreed to accept free of charge all litter collected in the watershed, as well as build a trash collection device across the main stem of the creek
- Using the project web site, www.fourchecreek.org, as a center for outreach and communication
- Continuing to conduct monthly water quality sampling at eight sites along Fourche Creek for more than 40 parameters

A STRONG PARTNERSHIP FOR CHANGE

Audubon's broad array of partners includes:

- State, county, and local level public partners such as Arkansas Forestry Commission, City of Little Rock, and Pulaski County Conservation District
- Private partners such as Sierra Club, Central Arkansas Chapter of Audubon Society, and the Ross Foundation
- Other supporting groups such as Boy Scouts of America, US Army Corps of Engineers, Natural Resource Conservation Service



Interns learn about wetland and forest habitats.

A project goal is to reduce floatable trash by 20 percent.

"The Fourche Creek float was an experience I never thought I would have in the heart of Little Rock. The ancient trees, the shade, the winding stream channels, and the flash of birds: green heron, great horned owl, and Mississippi kites. I would never have known about it had I not been involved with Audubon."

– David Stafford, Sturgis Scholar UALR