Reinvesting in Arkansas' Watersheds

THE CASE FOR REINVESTING IN THE MUDDY FORK OF THE ILLINOIS RIVER WATERSHED



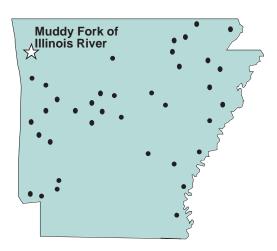
THE SITUATION: NORTHWEST ARKANSAS' AGING DAMS COULD

LOSE THEIR ABILITY TO PREVENT FLOODING, PROVIDE WATER SUPPLY, AND CONTROL EROSION

During the 1960s and 70s, four dams were built by the Soil Conservation Service on the Muddy Fork of the Illinois River. These sites have provided flood protection, recreation, and two municipal and industrial water supplies for the cities of Prairie Grove and Lincoln.

This watershed project has greatly contributed to the economic growth of the area by providing over \$542,000 of annual benefits. Other benefits include fish and wildlife habitat, habitat for endangered species, improved water quality, erosion control, increased employment, and fire protection.

Many of these benefits were not anticipated nor accounted for in the original plan. These lakes have served northwest Arkansas with 35 years of multiple benefits. As these dams age, their ability to continue to provide all these benefits in the future has to be looked at.



The population of Northwest Arkansas, where the Muddy Fork of the Illinois River watershed is located, has grown more in the last 15 years than any other region in Arkansas. This growth has caused changes in land use that impact watersheds. Four dams were built in the 1960s and 1970s at a current expenditure of \$7.7 million federal cost and \$7.2 million local cost. By reinvesting in these watershed now, the benefits provided by these watershed projects will continue to be realized.





PROJECT DESCRIPTION

Size: Covers 47,122 acres

Number of dams: 4

Project start: April 1963.

• Project end: September 1977.

Design life: 50 years.

Primary purposes: Flood prevention, water supply, and recreation.



PARTNERS

Washington County Conservation District

City of Lincoln, Arkansas

Arkansas Game and Fish Commission

City of Prairie Grove, Arkansas

United States Department of Agriculture-Natural Resources Conservation Service

Arkansas Soil and Water Commission

The Bottom Line:

WITHOUT UPGRADING THESE DAMS, NORTHWEST ARKANSAS IS MISSING OUT ON OPPORTUNITIES TO KEEP COMMUNITIES ALIVE AND PROSPEROUS.



This youngster enjoys water from a fountain that is supplied by the water supply lake in the Muddy Fork watershed.

4

WATERSHED HAS PROVIDED ECONOMIC OPPORTUNITY FOR MUDDY FORK WATERSHED

Larry Oelrich, Public Works Director for the city of Prairie Grove, stated, "Prairie Grove has experienced a 40 percent growth between 1990 and 1997. Much of this growth is attributed to having a good water supply provided by site #4." He added, "Magnetech Industries that recently located in Prairie Grove employs about 300 people. One of the key reasons they located here was having an adequate water supply." Multiple purpose site #4 provided a water supply for 650 customers in the 60s and now provides water for 1,500 customers with businesses that employ over 435 people.

"The lakes provide multiple benefits of flood control, recreation, waterfowl habitat, wetland benefits, and water quality improvement. Why allow something as good as these lakes to deteriorate. It would truly be a waste if they didn't continue to provide all these functions."

Jerry Hutton Watershed landowner and Arkansas State Rep.

The environmental impact is hard to measure but is still very important. Mr. John Norvell, superintendent of the water department for the city of Lincoln said, "I often see golden and bald eagles wintering on the lake." Multiple purpose site #2 provides a water supply for 1346 water meters serving 2,500 to 3,000 people and 182 commercial and industrial meters.

The present and future economic, social, and environmental benefits of these lakes must be addressed. Without continued support the lakes will deteriorate, threatening the many benefits presently provided. Thousands of citizens will risk losing the flood protection, water supply, and recreation provided by these lakes. Many will risk loss of life if the dams fail. Multiple purpose sites 2 and 4 were constructed as a low hazard classification but are currently a significant. This doesn't consider the potential loss of a water supply. Also, site 3 was constructed as an low hazard classification but is currently a high hazard.

Items that need to be addressed on these sites in the future include water quality, sediment accumulation, deteriorated concrete and steel, and downstream development that changes the dam safety requirements. All of these are major expenses that far exceed the financial or technical ability of the local sponsors.



These homes, located directly downstream from the lake, were constructed after the lake was built. In order for the dam on the lake to meet current dam safety criteria, it will need to be rehabilitated.



Under provisions of Public Law 83-566, construction has been completed on 28 projects and one pilot project (Public Law 83-156). Construction is currently in progress on 12 additional projects.

To date, Arkansas has completed 200 dams and over 1,208 miles of channel improvement at a federal cost (PL 83-566) of over \$155 million and a local cost of over \$56 million. An addition \$27 million federal cost and over \$6 million local cost is needed to complete existing watershed projects (34 remaining dams, and conservation practices).

Arkansas has thirteen channel improvement that will soon exceed their project life. Due to 98 dams in 10 watershed projects reaching their evaluated life within the next 10 to 15 years, additional funding will be needed to continue their existing benefits.