THE CASE FOR REINVESTING IN

THE REELFOOT WATERSHED



No, we are not talking about landing a man on the moon – we are talking about the return of the American Bald Eagle to Reelfoot Lake, in northwest Tennessee. The return of the eagle is a long story that involves many different people, organizations and entities of government and began nearly 200 years ago but one of the important parts of this story is the PL-566 small watershed program.

Reelfoot Lake was formed by an earthquake that occurred in the winter of 1811 and 1812 in the New Madrid, Missouri, area. The lake located only a few miles from the Mississippi River and in the Mississippi Migratory Bird Flyway became a haven for all types of flora and fauna. By 1900 the area was widely known as a fishing and hunting paradise. There are newspaper accounts that waterfowl, primarily ducks and geese, were hauled in trains to markets in St. Louis by the boxcar load. The lake was over hunted and fished and the lake began to fill with sediment. Current estimates indicate that only about 9000 acres of open water remain of the original 21,000 acres. The bald eagle, which had been a permanent resident of in the area, left.

About 1950, local groups (including hunters and fishermen) recognized that if something was not done to stop the sediment entering the lake that it would soon be completely filled. At about the same time farmers and landowners in the Reelfoot and Indian Creek Watersheds, having faced flooding and sediment damage on the rich farmland, organized the Reelfoot-Indian Creek Watershed District. Their farmland surrounded the lake and extended upstream along Reelfoot and Indian Creeks. The Soil Conservation Service (now the Natural Resources Conservation Service) was asked to prepare a PL-566 Watershed Plan to protect the farmland from flooding and sediment damage.



The Reelfoot Watershed is one of several watershed projects in Tennessee. Many of these dams will reach the end of their useful life within the next 15 years.



**PROJECT** DESCRIPTION

**Size:** 82.660 acres

No. of dams planned: 15

No. of dams built: 11

Project start: 1960

Most recent dam completed: 1993

Primary purpose: Erosion control, floodwater and

sediment Reduction

**Population served:** 25,000 in the local area plus the recreation associated with the individual watershed lakes and Reelfoot Lake



The Obion County Soil Conservation District

The Reelfoot-Indian Creek Watershed District

Tennessee Wildlife Resources Agency

Tennessee Department of Environment and Conservation

United States Department of Agriculture - Natural Resources Conservation Service

## AN INVESTMENT FOR THE FUTURE

The local, state and federal funding spent to date has been a good investment. In fact, damages averted by the project from a rain in March, 1997, were estimated to exceed all local and state expenditures to date. The average annual benefits of the project exceed \$650,000. This does not include any benefits that accrue to Reelfoot Lake or the hunting, fishing and tourist industries.

Some of the other benefits are:

- 60 Businesses Benefited
- 17 miles of county and state highways protected from flood damage
- 50 bridges and culverts protected from flood and sediment damage
- 750,000 tons of sediment are prevented from entering Reelfoot Lake
- Nutrient loadings in Reelfoot Lake are reduced
- The project is helping the eagle, a threatened and endangered species, to survive by providing a wintering home
- An additional 2700 visitor days of recreational use on the lakes built for flood and sediment control
- Two full time jobs have been created to provide operation and maintenance by the sponsoring agencies

  Three of the four remaining structures lie on the Kentucky-Tennessee State Line. Several legal complications have delayed the installation of these structures. The one structure that remains to be built in Tennessee and is awaiting construction. The Reelfoot-Indian Creek Watershed District has sufficient funds to purchase the land rights for the site but has not done so because of the inadequate and uncertainty of PL-566 funds to cover construction costs.



The eagle, fishing, and hunting on Reelfoot remain only as long as there is a lake.



As a result of the work that has been done to date Reelfoot Lake remains a hunting and fishing Mecca with over 15,000 visitors per year. Thousands more come from all over the south to see the eagles.

In addition to the need to build the remaining sites, several of the existing sites need to be considered for increased sediment storage. Some of the first lakes that were built have prematurely filled with sediment due the rich loess hills that were converted from grass to soybeans during the era when soybean prices soared in the 1970s. The soil was eroding at rates of 150 tons per acre per year. The recent farm bill programs have eliminated these erosion problems but the sediment that filled the lakes remains.

## Where do we go from here?

The project lakes are filling with sediment. Some of the lakes have not been built and sediment continues to fill Reelfoot Lake from these drainage areas even though the sediment production has been greatly reduced.

The benefits as envisioned in the original project are still being realized. Significant other benefits such as the tourist industry that has developed around eagle watching – which occurs during the hunting and fishing off season – have given a real boost to the economy. The benefits realized to date will need to continue and this can only be done with a long term look at the Reelfoot-Indian Creek Watershed Project.



jects across Tennessee. Each of these projects has its own success story to tell and most have similar problems. The local investment in watershed projects statewide is estimated to be \$500 million with an equal federal investment. With this kind of an investment, can we afford not to reinvest in this great natural resource? Can we take a chance that the eagle might not return to Reelfoot Lake in the year 2050?

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