

# Reinvesting in America's Watersheds: A Special Report

## DAMS IN DANGER PEOPLE AT RISK?

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**F**or 50 years, America's small upstream dams have provided for flood protection, municipal water supplies, wildlife habitat, water for livestock, and recreational opportunities. But time has taken its toll. Many of the nation's dams, including those in Indiana, are in desperate need of repair. If problems are not corrected, the consequences are grave—to both people and the environment. Funding is needed, and now is the time to act.



### Across the Nation...

More than 600 dams need to be rebuilt and upgraded to ensure the safety and health of those downstream. In addition, another 1,500 dams need repairs so they can continue to provide flood control, municipal water supplies, recreational activities, water for livestock, and wildlife habitat. An estimated \$540 million is needed to rehabilitate these dams.



Small watershed projects

Ten thousand dams built under Small Watershed Programs make up a \$9 billion infrastructure. These dams provide more than \$800 million in benefits annually. The majority of these dams were built for a 50-year lifespan and some have already or soon will reach that mark. Funds for building these dams have come from four programs: Flood Control Act of 1944 (PL-78-534); Pilot Watershed Program; Watershed Protection and Flood Prevention Act of 1953 (PL 83-566); and Resource Conservation and Development (RC&D).

### In Indiana...

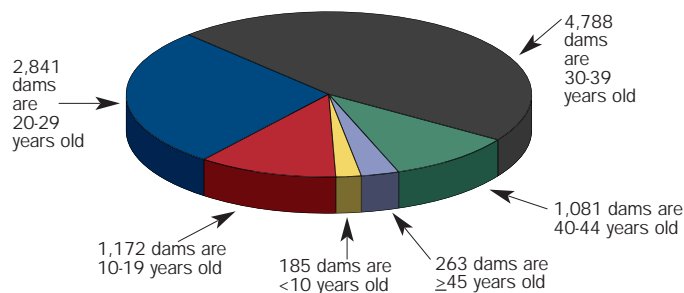
Indiana has 33 small watershed projects authorized under Public Law 566 that include 127 earthen dams. Although the dams were built primarily for flood control, they also provide water supplies, recreation, and fish and wildlife habitat. The dams represent a \$67 million investment by project sponsors. The watershed projects return average annual benefits of more than \$8 million. But these dams are aging:



Indiana's small watershed projects with dams

- Over the next 10 to 15 years, 30 of these structures will reach the end of their 50-year design life.
  - 34 dams that were originally built to protect agricultural lands now have homes or other buildings built downstream. These dams need to be upgraded to meet current dam safety laws to protect people and property.
  - An additional seven dams need immediate attention to address deterioration of components, sediment buildup, and slope instability.
- Action must be taken to avoid loss of life, damage to roads and private property, and loss of drinking-water supplies.

## Our Nation's Aging Dams



### A Case Study...

Saddle Lake is located on U.S. Forest Service property in the Hoosier National Forest. It was planned as a recreational and flood-control dam as part of a four-lake recreational complex located in southern Indiana. The complex provides boating, fishing, hiking, camping, and picnicking to an estimated 1.5 million people within a 60-mile radius. Saddle Lake itself has a surface area of 41 acres with the surrounding recreation area providing 80 camping sites, hiking trails, and a 300-person swimming beach.

Since Saddle Lake dam was constructed in the late 1950s, homes and other buildings have been erected in the downstream flood plain. According to guidelines of the U.S. Forest Service, the Natural Resources Conservation Service (NRCS), and the Indiana Department of Natural Resources Division of Water, if there is a possibility of loss of life from a sudden failure, the dam must be modified to meet more stringent design standards for high hazard dams.

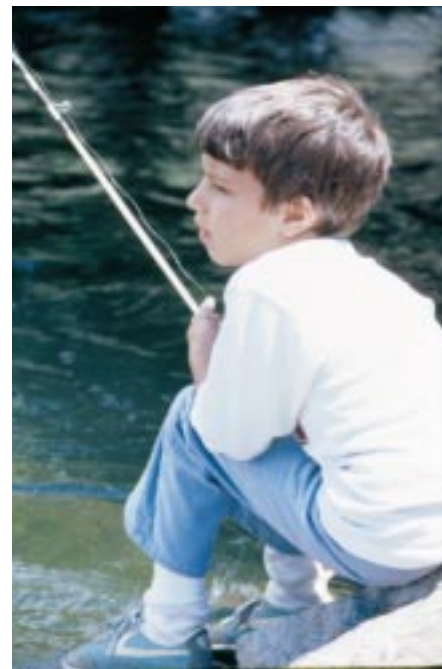
The local communities have recognized that water-based recreation is essential to the growth and well-being of the area. At present, quality fishing is limited, as are opportunities for water skiing and power boating.

The local sponsors of this project, the Perry County and Crawford County Soil and Water Conservation Districts and Middle Fork Watershed Conservancy District, are concerned about Saddle Lake also. They want to see the estimated \$400,000 in recreational benefits and \$100,000 in flooding-reduction benefits continue well into the future.

To address these concerns, the local sponsors and the U.S. Forest Service asked NRCS to develop alternatives to bring the Saddle Lake dam up to high hazard standards. Restoration costs for this work are currently estimated at \$1.5 million.



Above: Saddle Lake dam, located in the Hoosier National Forest, needs an estimated \$1.5 million in restoration costs. The dam needs to be modified to meet high hazard standards to protect homes and buildings that have been built downstream since the dam was constructed in the 1950s.



Right: Saddle Lake was planned as a recreational and flood-control dam. It provides recreational benefits such as fishing, boating, hiking, camping, and picnicking to an estimated 1.5 million people. To ensure that those benefits continue, the dam needs to be restored.

## A Call to Action in Indiana

# 34

dams need to be rebuilt and upgraded to protect life and property in downstream areas

# 7

dams need repairs to safeguard municipal water supplies, provide flood control, and protect natural resources

# \$14 million

is needed to rehabilitate those dams to protect people and natural resources