

# 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 Kentucky, 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.

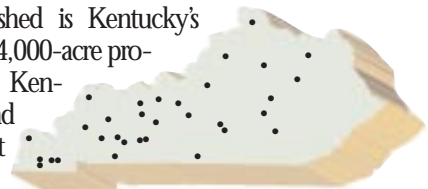


Small watershed projects

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 Kentucky...

Plum Creek Watershed is Kentucky's oldest watershed—a 24,000-acre project in north-central Kentucky in Shelby and Spencer counties. It was completed under the Pilot Watershed program. Eleven dams were built for flood control between 1954 and 1958. Two of these will reach the end of their project life in 2005; all 11 will exceed their project life by 2008.

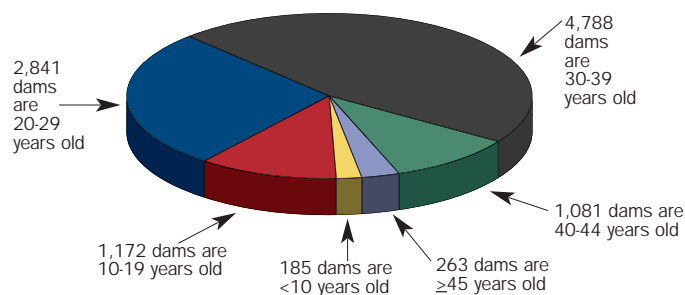


Kentucky's small watershed projects

Kentucky's watershed program includes 195 flood-control dams in 32 watersheds. These dams provide flood protection for about 200,000 acres, including agricultural, urban, and suburban areas. Kentucky has several dams that need major rehabilitation. Consider:

- 30 dams that were built to protect agricultural lands now have homes or other structures built downstream.
- 71 dams, if not repaired, will have significant and adverse environmental, economic, and social impacts.
- 120 dams are more than 30 years old. In five years, two dams will be 50 years old. In 10 years, 18 dams will reach the end of their designed lifespan.

## Our Nation's Aging Dams



# DAMS IN DANGER

PEOPLE AT RISK?

## A Case Study...

In the east-central portion of Kentucky, located in Bath and Menifee counties, the Salt Lick Creek Watershed is experiencing an urgent need for rehabilitation.

Although the watershed project was designed to protect agricultural land, homes have been built downstream. Protecting people and buildings downstream of dams requires higher standards than protecting agricultural land. The Salt Lick Creek Watershed Conservancy District, the local sponsor of the project, assumed operation and maintenance of the dams after construction. They have diligently maintained the dams over the years, but they do not have the funds to make major repairs or the structural upgrades that are being required by the state regulatory authority.

The watershed is in Appalachia and has a drainage area of 25,800 acres, of which 19,031 acres are privately owned land, and 6,769 acres are owned by the federal government and administered by the U.S. Forest Service as part of the Daniel Boone National Forest.

Local sponsors, assisted by the Natural Resources Conservation Service (NRCS), built three floodwater-retarding structures and one multipurpose structure as part of the watershed project between 1973 and 1982. All of these dams provide flood-control benefits for the watershed, and the multipurpose structure also provides recreational activities. This work was accomplished under the Watershed Protection and Flood Prevention Act (Public Law 566).

The Salt Lick Creek Watershed has been highlighted as an example of the need to address the major problems confronting Kentucky's watershed projects. Thirty dams in Kentucky's watershed projects have a potential for loss of life due to downstream development since the construction of the dams. An estimated \$15 million will be required to upgrade these dams to meet state dam safety laws.



TOP: Residential development downstream of the dam has caused a change in the dam's hazard classification. MIDDLE: Kentucky dam safety regulations require the dams to be upgraded to meet safety criteria, or breach of the dam could result in loss of flood-control benefits. LEFT: Residents depend on these lakes for recreation and for drinking water supplies.

## A Call to Action in Kentucky

**30**

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

**75**

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

**\$20 million**

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