

# 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 Iowa, 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.

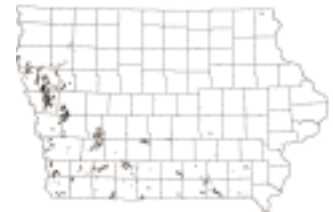


Small watershed projects

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 Iowa...

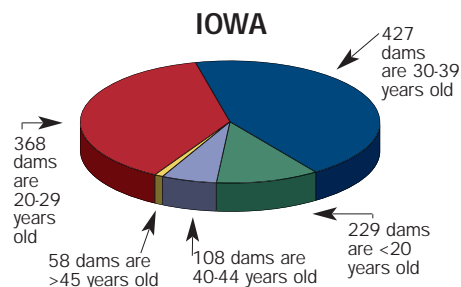
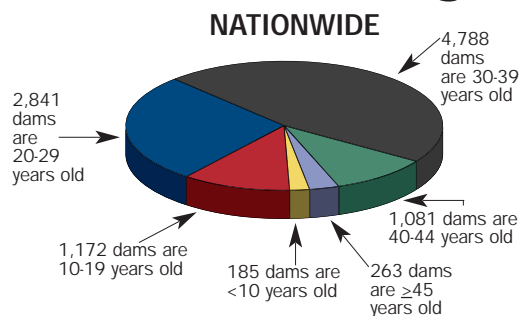
Iowa is home to some of the nation's oldest dams. In 1998, six dams and similar structures reached their 50-year design life; 44 more will reach that milestone in 1999. These dams and structures are filled or filling with sediment, and their pipe spillways are cracked and leaking. These are just some of the problems facing project sponsors and landowners. Consider:



Iowa's small watershed projects with dams

- If not repaired, 268 dams and structures will have major adverse environmental, economic, and social impacts.
- 16 dams built to protect agricultural lands now have homes or other buildings downstream, increasing the hazard to life.
- It will take \$20 million to rehabilitate these 284 dams and structures.
- There are 1,190 flood-control dams and 1,181 grade-stabilization structures in 63 watershed areas. These 2,371 dams and structures represent a \$153 million infrastructure and protect more than 1 million acres.

## Our Aging Dams



## A Case Study...

The Little Beaver Subwatershed, a part of the early Little Sioux Flood Prevention Project, is in desperate need of rehabilitation. The problems include:

- 34,000 tons of sediment have filled the upper detention structure. The structure is so full of sediment that large rains caused a paved county road to be flooded—and capacity to protect against flooding is lost.
- Other dams have leaking and cracking concrete spillways. The county, sponsors, and landowners are concerned.

The Little Beaver Subwatershed covers 2,980 acres in the fragile, erosion-prone Loess Hills of western Iowa. Dozens of nearby projects have similar problems.

The local sponsors and landowners, assisted by the Natural Resources Conservation Service (NRCS), built six small upstream flood control dams and six full-flow grade-stabilization structures as part of the project more than 35 years ago. Two of these dams eliminated dangerous bridges. This work was done under the Flood Control Act of 1944 (Public Law 78-534). The Woodbury County Soil and Water Conservation District, the local sponsor of the project, assumed maintenance responsibilities for the dams after construction. The district has diligently maintained the dams over the years, but does not have the funds to correct serious problems.

The Little Beaver Subwatershed has been selected as a local pilot rehabilitation project. Surveys are under way to determine what is needed and what different alternatives may be available.



**THE PROBLEMS.** Dams filling with sediment (top) and deteriorating concrete spillways (above and left) are major, costly problems in the Little Beaver Subwatershed. Dozens of other dams face the same problems.

## A Call to Action in Iowa

# 16

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

# 268

dams and structures need major work to safeguard Iowa's rural infrastructure and water quality, and protect against economic loss and other quality of life losses

# \$20

# million

is needed to rehabilitate the dams and structures to prevent loss of life or adversely affect quality of life