

THE CASE FOR REINVESTING IN THE LITTLE SIOUX

THE SITUATION: 40 AND 50 YEAR- OLD DAMS ARE LOSING THEIR ABILITY TO CONTROL EROSION, PREVENT FLOODING

Few of us are driving the same cars our parents or we drove in 1960. The cars of 1960 did their job at that time, but there came a time to replace them.

The structures built in the 1950's and 1960's in the Little Sioux Flood Prevention Project have the same situation—they did the job they were built to do for the time intended. But now they are reaching the end of their useful life. Over time, as many of the dams have filled with sediment, or as their aging steel has corroded and concrete has weakened, they have lost their ability to store floodwaters and control gullies. **Not all 1200 dams need serious attention, but about 10 percent of them are in jeopardy today**, needing major repairs, rebuilding of the dam to raise it, dredging, or some other method of rehabilitation.

The Little Sioux project was undertaken by the local community to reduce damages from severe gullying and flash flooding. The project has protected farmlands, roads, bridges, and other community assets. The need to prevent floods, stop severe gully erosion, make safe, longer-lasting roads and protect other community facilities is as important today as it was 40 years ago.



The Little Sioux Flood Prevention Project has 100 subwatersheds that join 60 other watershed projects in Iowa. More than 2600 watershed dams have been built in Iowa, many of them of which will reach the end of their useful life within the next 10 years.

“Bridges are expensive to maintain. You can avoid that expense if you take care of these dams.” – John Cox, local landowner



“Fishing was good when I was a kid, but it’s gone now. The lake’s full of mud.”

–Brian Stickney, Woodbury County farmer



PROJECT STATS

- **Size:** Covers 1.9 million acres in eight counties in Northwest Iowa. 124 subwatersheds.
- **No. of structures:** 1200 major dams built
- **Project start:** Construction began in the 1950's
- **Primary purpose:** control gully erosion, sedimentation, floods and protect farmlands from erosion



PARTNERS

- The Little Sioux Works Committee and Soil and Water Conservation Districts in O'Brien, Plymouth, Cherokee, Buena Vista, Woodbury, Ida, Sac, & Monona Counties.
- USDA Natural Resources Conservation Service; Farm Service Agency; Extension Service
- Iowa Department of Agriculture and Land Stewardship, Division of Soil Conservation
- Many local agencies, groups, and individuals





LITTLE SIOUX DAMS: AN INVESTMENT WORTH PROTECTING

A 1992 study of the dams in western Iowa indicated that 18 percent of all dams, including Little Sioux dams, were in poor shape. These are the dams that need immediate attention.

Half the dams are at a bridge site. Typical bridge maintenance costs are \$1750 per bridge a year, and \$500,000 to replace. An investment in the watershed dams—keeping them working instead of maintaining and replacing the bridges, is much more cost-effective. In the 110 dams at bridge sites in the Little Sioux needing attention now, the savings by not needing to build bridges is estimated at \$49,500,000. In addition, the savings in maintenance are estimated at \$378,000 a year on just these 110 sites.

The dams have done their job in the past. The monetary benefits of the project have already exceeded the costs, and in addition have given benefits which impact the community significantly:

- 300 miles of roads and 620 bridges are safer and longer lasting
- 450,000 visits have been made to the dams for fishing and other recreation
- 1600 acres of wetlands have been created or enhanced
- 136,000 acres have better upland wildlife habitat
- 530 miles of streams have better water

There is a cost to not protecting this investment and not continuing these benefits that should not be overlooked.



CITIZEN'S VIEWS OF THE LUM HOLLOW, LITTLE EGYPT, AND WEBER CREEK SUBWATERSHED DAMS

Recently, local residents were asked what benefits they receive from the dams built in their area. They identified the following benefits:

- Gully control
- Rural fire protection
- Fishing, hunting, camping and ice skating
- Better school bus routes, emergency vehicle access in rural areas with safe dams/bridges
- Livestock water
- Reduced flooding
- Better water quality
- Better fences
- No limits to size of farm equipment as you would have with older bridges



When watershed dams fill with sediment (above), the recreation, gully control, flood control, fish and wildlife benefits, emergency fire protection, road stability and many other benefits are lost. Other problems with aging dams are spillway breakup, deteriorating concrete, eroded berms, seepage through dams, cattle damage, and sloughing of dams.



STATEWIDE PERSPECTIVE ON IOWA'S AGING WATERSHED DAMS

Little Sioux subwatersheds represent 100 of the 160 Iowa watersheds completed or still in construction. The local investment in these projects is \$1.4 billion statewide. The USDA investment through watershed and RC&D programs is \$1.8 billion.

More than 2600 dams have been built as part of these projects. They were built as early as 1944; they controlled gullies and the water storage they provided reduced local flash flooding. Most were designed with a useful life of 50 years, meaning they were likely to fill with sediment over that period of time.

Only a small number of these dams are in critical need of rebuilding or repair at this time, but many will soon reach their 50-year lifespan. An organized approach is needed to analyze the extent of repair and rebuilding needed, to prioritize those with greatest need, and to make necessary repairs or improvements.