SMITH CREEK

HABITAT REHABILITATION AND ENHANCEMENT PROJECT

Pool 13
Upper Mississippi River Mile 545.0

Jackson County, Iowa
Rock Island District

LOCATION:
Smith Creek is a 3,050-acre watershed located approximately 10 miles south of Bellevue, Iowa in the east central portion of Jackson County, Iowa, that drains directly into Brown's Lake. Brown's Lake is an existing EMP project that was dredged in the early 1990's to restore deep-water habitat to the backwater complex.

RESOURCE PROBLEM:
The Smith Creek watershed is composed of approximately 50% cropland and 50% grazed forest and pasture land. Most of the cropland is on 5-14% slopes, with the forest and pastureland on 14-25% slopes. Sediment and agricultural nutrients are produced from excessive sheet and rill erosion on cropland and numerous gullies from the Smith Creek watershed and are being deposited into Brown's Lake. This ongoing siltation is increasing the delta at the mouth of Smith Creek and will over time eliminate deep-water aquatic habitats created by the Brown's Lake EMP project. The restored deep-water habitats were and continue to be successful according to measured increases in fish populations.

PROJECT FEATURES:

* Build a 22 acre Moist Soil Management Unit (MSMU) using material excavated during construction of the project's sediment trap feature;
* Excavate an 8 acre terraced sediment trap; to act as a final filter before Smith Creek flows into Brown's Lake and the Mississippi River.
* Construct a 5-15 acre secondary catchment site downstream of the sediment trap;
* Build 17 sediment basins and implement conservation practices on 1,500 acres by incorporating filter, buffer, and riparian strips and terracing in upland areas.

PROJECT OUTPUTS:
The project goals are to protect and sustain aquatic habitat at Brown's Lake and improve wildlife habitat in the Smith Creek watershed. The objectives identified to achieve these goals are: (1) reduce sediment deposition; (2) improve water quality; and (3) provide reliable food resources for migratory birds and resident wildlife. The sediment trap, secondary catchment, and upland sediment basins would decrease the amount of sediment delivered to the Brown's Lake backwater complex from Smith Creek and also improve water quality. This reduction in sediment will extend the project life of the existing deep-water habitat previously created at Brown's Lake. The MSMU would establish a better and more reliable food source for resident and migrant wildlife. The MSMU would also improve vegetative diversity in the project area.

FINANCIAL DATA:
Preliminary estimates indicate $540,000 is needed for general planning and design. Total construction cost is estimated at $1,300,000. Project features located on Federally owned lands, managed by the U.S. Fish and Wildlife Service (USFWS) as a refuge, would be 100% Federally funded. The project features not located on Federally owned lands will be cost shared at 65% Federal and 35% nonfederal with the Iowa Department of Natural Resources (IDNR) and the Jackson County Soil and Water Conservation District (SWCD). Operation and maintenance responsibility will be split between the USFWS, the IDNR, and the Jackson County SWCD.

STATUS:
Brown's Lake post-construction monitoring data has provided significant baseline information for Smith Creek. Initial coordination and analysis to produce the draft definite project report is suspended until FY 2005 due to EMP budget constraints