

UPPER MISSISSIPPI RIVER SYSTEM ENVIRONMENTAL MANAGEMENT PROGRAM
FACT SHEETCONWAY LAKE
POOL 9, UPPER MISSISSIPPI RIVER, IOWA

LOCATION: Conway Lake is a 235-acre backwater lake located about 3 miles upstream of Lansing, Iowa. The lake is about 1.5 miles long and 1/4 mile wide. Shore Slough, which abuts the lake to the south, is a 102-acre backwater slough that is about 1.7 miles long. The areas are bounded on the west by the Soo Line Railroad embankment and on the east by floodplain lands in the Lansing Big Lake Bottoms. The site lies within the Upper Mississippi River National Wildlife and Fish Refuge.

RESOURCE PROBLEM: During times of normal pool levels, Conway Lake becomes land-locked and there is very little water flow through the lake. After high water events, fish are trapped in the lake. Low dissolved oxygen levels occur in late summer and winter, creating unsuitable fish habitat. Shallow depths and high fertility cause excessive aquatic plant growth in about 90% of the lake. Shore Slough also experiences poor fish habitat conditions because of flow from the Lansing Bottoms. Sedimentation and excessive current negatively impacts on its value for wintering schools of fish (primarily bluegill) and turbidity creates poor water quality the entire year.

PROPOSED PROJECT: The proposed project would consist of dredging about 200,000 cubic yards of sediments from Conway Lake and Shore Slough to provide deep water fish habitat. Material from the dredging would be used in the construction of about 18,000 feet of dike about 7 feet high around the lake and slough to prevent the entrance of flows and poor quality water from the Lansing Bottoms. Diversion of a small creek and spring and installation of a gated culvert would provide for the circulation of high quality water through the system. Rock and bio-engineering would be used to stabilize banks.

PROJECT OUTPUTS: The project would increase the volume of the aquatic system by 30% and improve water quality and circulation in 357 acres of valuable backwater habitat. Major fisheries improvements are anticipated, primarily for bluegill, black crappie, largemouth bass, white crappie, northern pike, and catfish. Quantifiable estimates of the fish use and habitat enhancement potential are not possible at this time.

FINANCIAL DATA: The general design phase of the project is estimated to cost \$400,000 and construction costs are estimated at \$3,162,000. Annual costs for operation, maintenance and rehabilitation (OM&R) are estimated at \$5,000. Because the project would be located on Federal lands and "managed as a national wildlife refuge" within the meaning of Section 906(e) of the 1986 Water Resources Development Act (WRDA), general design and construction costs would be 100-percent Federal. The project lands are managed by the U.S. Fish and Wildlife Service (USFWS). Therefore, in accordance with Section 107(b) of the WRDA 1992, all costs for OM&R would be the responsibility of the USFWS.