

10 March 1988

FACT SHEET

LONG LAKE - SPRING SLOUGH REHABILITATION
POOL 7, UPPER MISSISSIPPI RIVER, WISCONSIN

LOCATION: Long Lake and Spring Slough are backwater areas of the Mississippi River. They are on the Wisconsin side of the river in the upper end of Pool 7 near Trempealeau, Wisconsin between river miles 711 and 713. The site lies within the Upper Mississippi River Wildlife and Fish Refuge.

RESOURCE PROBLEM: The Long Lake - Spring Slough backwaters have low dissolved oxygen (DO) levels during portions of the year. While Long Lake has some deepwater areas that can sustain a fish population all year, Spring Slough is shallow and annually closes with submergent vegetation. The low DO in Spring Slough is carried through Long Lake, contributing to low DO problems there.

PROPOSED PROJECT: At present the proposal includes dredging a 500-foot long channel to Long Lake along a pre-lock and dam streambed and dredging openings in Spring Slough to improve flow through these areas. The improved flow would aerate the backwaters and improve the DO levels. The backwater levels currently rise and fall with river levels from lateral flow. Open culverts would be installed in the Long Lake channel to permit 0 to 200 cfs during low flow conditions. Sediment traps would be located on both sides of the culverts and be easily reached from land for maintenance. A partial closure structure at the river end would also help prevent bed load sediments from entering the backwater area. The channel location was selected for its proximity to roads for ease of maintenance and because wing dams and an island would protect the opening from excessive sedimentation. Water with low DO levels has been found to flow from Mud Lake into Long Lake. Flows from the Mississippi River to Long Lake may be hindered as a result of this project. This will be taken into consideration when considering the feasibility of the project.

PROJECT OUTPUTS: Increased flows would increase DO levels in 50 acres of backwaters in the project area, thereby improving the area's ability to support fish populations. There are currently populations of northern pike, largemouth bass, and panfish in the area. Project benefits would be quantified during preparation of the definite project report.

FINANCIAL DATA: The General Design phase of the project is estimated to be \$40,000 and construction costs are estimated at \$200,000. Funding would be 100-percent Federal because the project is located on the Upper Mississippi River Wildlife and Fish Refuge.