# Habitat Restoration: Mississippi River, Clear (Finger) Lake, Pool 5, Minnesota

## Location/Description

Part of the Corps of Engineers' Environmental Management Program, the 25-acre Clear Lake is one of six backwater lakes in the Finger Lakes complex located on the Minnesota side of the Mississippi River in upper Pool 5, immediately below the Lock and Dam 4 dike. The site lies within the Upper Mississippi River National Wildlife and Fish Refuge.

With construction of the Lock and Dam 4 dike, fresh water flows could only enter the Finger Lakes overland during high water. This caused low dissolved oxygen conditions in the lakes at other times of the year, hampering fish productivity. The Finger Lakes habitat project completed in 1994 introduced flow from Peterson Lake into the lakes using three gated culverts to provide year-round fresh water flow into the lakes, addressing the problem of low dissolved oxygen during the summer and winter. However, lack of deep water in Clear



Clear Lake (upper left) downstream of Lock and Dam 4, Minnesota.

Lake is considered a limiting factor for good quality fish habitat conditions as well as the effectiveness of the original Finger Lakes project.

The need for topsoil on the Dam 4 embankment protection project provides the opportunity to deepen about 2 acres of Clear Lake and use the dredged material for topsoil. The project would improve fishery productivity in 25 acres of backwater habitat.

#### Status

A construction contract was awarded in July 2008 with construction to begin in 2009 and be completed by September 2009. The plans and specifications were completed in May 2008. A cost sharing arrangement between the Corps' Operations and Maintenance authority and the Environmental Management Program will result in a project with costs that are justified for the benefits attributable to both programs. No future operation and maintenance would be required for the dredged area.

#### Authority

The Clear Lake habitat project was planned under the authority of the Upper Mississippi River System - Environmental Management Program and constructed in accordance with a Definite Project Report dated May 1990. The Environmental Management Program was authorized by Section 1103 of the Water Resources Development Act of 1986 and reauthorized by the Water Resources Development Act of 1999.

The project is being planned and designed as part of a cooperative effort of the Corps of Engineers, the Wisconsin and Minnesota Departments of Natural Resources, the U.S. Fish and Wildlife Service, and local interests.

### Fiscal

Project design and construction costs are 100 percent Federal because the project is located on lands managed as a national wildlife refuge. Operation and maintenance costs of the existing gated culvert for Clear Lake would remain the responsibility of the U.S. Fish and Wildlife Service.

Federal cost \$270,000 Non-Federal cost \$0 Total cost \$270,000