# Polander Lake Habitat Project, Winona, Minnesota

## Location/Description

Polander Lake is a 1,000 acre backwater lake on the Minnesota side of the Mississippi River channel in pool 5A near Winona, Minn. The site lies within the Upper Mississippi River National Wildlife and Fish Refuge. Historically, Polander Lake had an abundance of emergent aquatic plants and provided a good staging area for migrating waterfowl. The area of emergent vegetation has declined over the years and has been replaced by submerged vegetation. The changes were caused by sedimentation, wave action and water velocities that increase turbidity, inhibit the growth of rooted aquatic plants and decrease the lake's structural diversity.



Stage 1 of the project included constructing a closure across a side channel carrying Pap Slough flows into the lake, a 1,000-foot rockfill island in the upper portion of the lake to reduce wave action and bank stabilization of two existing barrier islands. Stage 2 consisted of a 6,000-foot island complex in the lower portion of the lake to increase aquatic plant growth and dredging to provide deepwater fish habitat.

### Status

A construction contract for Stage 1 awarded in July 1994 was completed in October 1994. Repair of a closure that washed out during a high-water event was completed in September 1996. A construction contract for Stage 2 awarded in July 1999 was substantially completed in September 2000. Seeding and some minor flood damage repair were accomplished in 2002. Stage 2 was constructed in conjunction with a channel maintenance project to unload the Wilds Bend channel maintenance placement site. Planting of trees and shrubs on the islands was completed in June 2003.

## Authority

The Polander 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 March 1992. 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 was planned and designed as part of a cooperative effort of the Corps of Engineers, the Minnesota and Wisconsin Departments of Natural Resources, the U.S. Fish and Wildlife Service and local interests.

#### Fiscal

Project design and construction costs were 100-percent federal because the project is on lands managed as a national wildlife refuge. Operation and maintenance costs are 100-percent Federal (a responsibility of the U.S. Fish and Wildlife Service).

Federal cost \$3,137,000 Non-federal cost \$0 Total estimated cost \$3,137,000