

# BERTOM AND McCARTNEY LAKES

## HABITAT REHABILITATION AND ENHANCEMENT PROJECT

**Pool 11**  
**Upper Mississippi River Miles**  
**599.0 - 602.8**

**Grant County, Wisconsin**  
**Rock Island District**



### **RESOURCE PROBLEM:**

This backwater complex was once a highly productive fishery that also provided valuable waterfowl and wildlife habitat. Sedimentation was rapidly decreasing the extent and diversity of aquatic habitat in this area. Critically low winter dissolved oxygen levels resulted in fish kills. Wind and wave action caused sediment resuspension and turbidity, which in turn reduced light penetration and impacted aquatic vegetation productivity. Fish attracted to stable temperatures associated with anoxic spring-fed flows in the project area were trapped and killed as a combined result of shoaling, ice cover, and lack of inflow, circulation, and escape opportunities.

### **PROJECT FEATURES:**

- \* Construct a barrier island from dredged material in McCartney Lake;
- \* Dredge approximately 374,000 cubic yards of material from the side channels and sloughs adjacent to McCartney Lake;
- \* Line approximately 1,500 feet of a side channel with rock of several different sizes, gradations, and types;
- \* Install protective fish cover structures within the rock-lined side channel; and,
- \* Construct an underwater rock partial closing structure at the rock-lined side channel opening.

### **PROJECT OUTPUTS:**

The underwater rock partial closing structure reduces the movement of Mississippi bedload sediment into Bertom Lake. Aquatic habitat was increased and diversified by dredging the sloughs and side channels adjacent to McCartney Lake. Providing deep water and access channels to and from the spring-fed flows will reduce winter fish kills. The placement of rock substrate will create valuable fish and mussel habitat. The barrier island provides wind-fetch protection for approximately 10 surface acres of the lake. As an unexpected positive attribute, the barrier island has developed into a perched wetland that provides valuable wildlife habitat.

### **FINANCIAL DATA:**

General design costs were \$354,827, and construction costs were \$1,989,089. Annual costs for operation, maintenance, and repair are estimated at \$5,500 and are the responsibility of the U.S. Fish and Wildlife Service. The Wisconsin Department of Natural Resources is the non-Federal project sponsor.

### **STATUS:**

Project construction was completed in June 1992. An initial performance evaluation report was distributed in May 1995. The 10-Year post construction evaluation report was completed in May 2002; and the 11-Year post construction evaluation report was completed in September 2003 (both the 10 and 11-Year documents were distributed in January 2004). Funding has been postponed for performance monitoring due to budget constraints. Performance monitoring will continue once funding becomes available.