

# Lower Pool 4 - Big Lake | HABITAT REHABILITATION & ENHANCEMENT PROJECT



## PROJECT SUMMARY ▶

Under the Upper Mississippi River Restoration Program, the U.S. Army Corps of Engineers is studying the feasibility of enhancing and restoring habitats at the Big Lake area in Pool 4 of the Mississippi River. The site is in the Upper Mississippi River National Wildlife and Fish Refuge near Wabasha, Minnesota. The project sponsor is the U.S. Fish and Wildlife Service, and the project is 100% federally funded. The project area consists of open backwater, meandered side channels, main channel border and island formations.

## THE PROBLEM ▶

As with the much of the Upper Mississippi River, sedimentation of backwater areas is an ongoing issue. The project area is greatly influenced by the input of sand from the Chippewa River that enters Pool 4 around river mile 764, about six miles upstream of the project area. Big Lake has lost much of its island complex and bottomland forest to wind and wave erosion. The barrier islands between the lake and Catfish Slough have been degraded and/or eliminated over the past several years.

In the project area, single age floodplain forest habitat is declining and unable to naturally regenerate due to invasive species. Reed canary grass and flowering rush have invaded the project area. Changes to flow, island loss, and sediment deposition has limited depth diversity used by native fish and mussels throughout the study area.

## STUDY INFORMATION ▶

The U.S. Fish and Wildlife Service is the Project sponsor. The Construction of the project is 100% Federally funded.

The project first cost, including contingencies; planning, engineering, and design; construction management, and monitoring is about \$37 million.

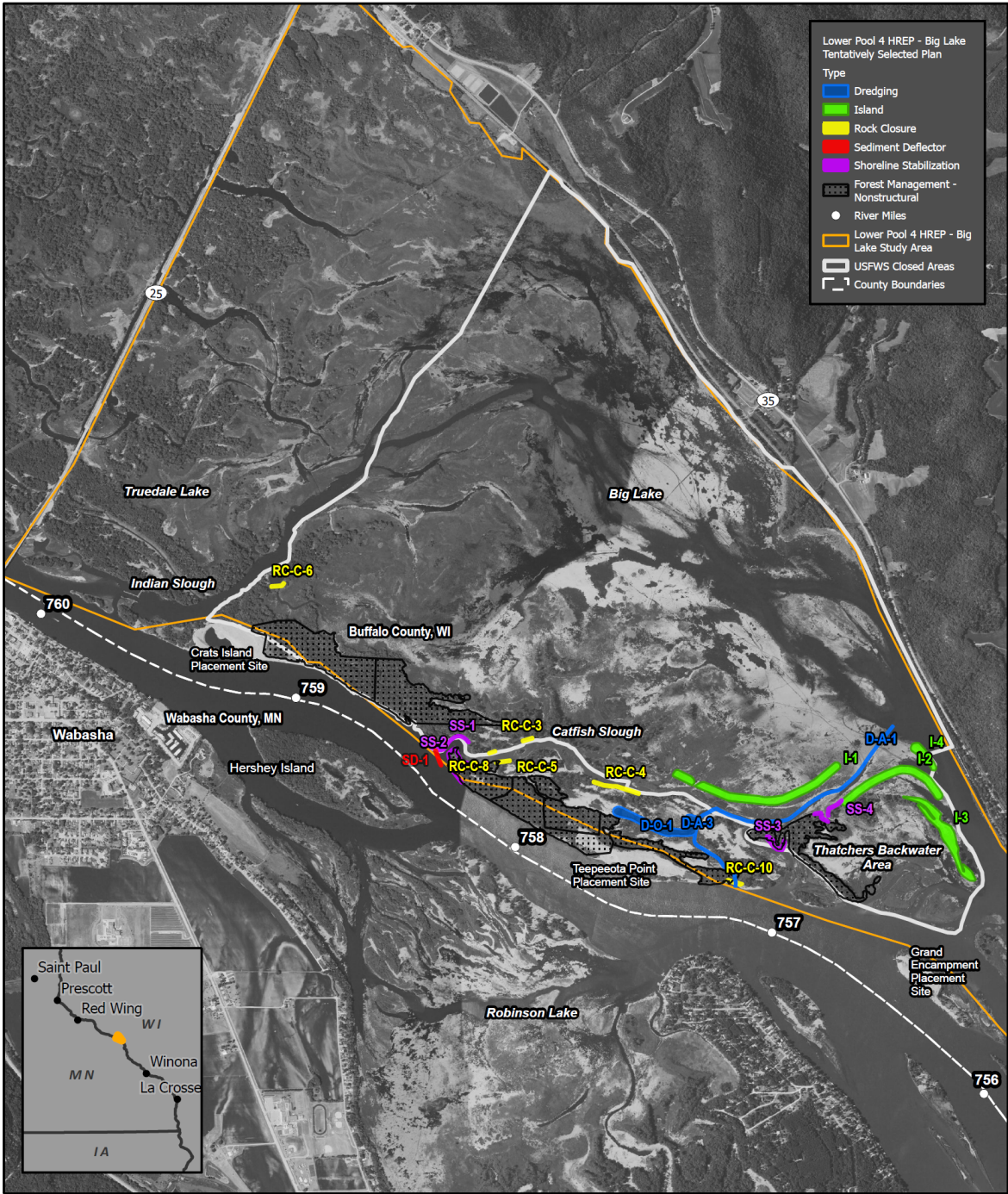
## PROJECT PARTNERS ▶



US Army Corps  
of Engineers®  
St. Paul District



## SITE MAP ▶



## PROJECT OBJECTIVES ▶



Protect, restore, or create naturally regenerating, resilient, and diverse bottomland forest habitat that will benefit migratory and resident birds and other species



Maintain a balance of coverage and relative abundance of native emergent, rooted floating leaved, and submersed aquatic vegetation communities



Protect, restore, or create flowing channel habitats and backwater habitats that provide flow conditions and sediment dynamics that will benefit native fish (including migratory species) and mussel populations



## PROPOSED RESTORATION MEASURES ▶

The Draft Environmental Assessment investigates the feasibility of alternative measures to address problems and opportunities associated with the project. The Tentatively Selected Plan, shown in the site map to the left, includes proposed restoration measures to achieve project objectives.

The proposed restoration measures include:

- Island creation
- Dredging for access and habitat benefits
- Forest management and promoting natural regeneration
- Shoreline stabilization features (4)
- Sediment deflector
- Rock closures (6)

Construction will also utilize fine material sediment from overwintering fish habitat and access dredging.

## CONTACT INFORMATION ▶

Comments from the public on the Draft Environmental Assessment are welcome! Written comments are requested by **November 13, 2023** and may be submitted to:

Elliott Stefanik, Biologist, Elliott.L.Stefanik@usace.army.mil