

Lower Pool 4 | Robinson 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 habitat at the Robinson 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. Robinson Lake has lost much of its island complex and bottomland forest to wind and wave erosion.

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. Poor water circulation and high nutrient concentrations have led to extensive algal growth and low oxygen conditions.

PROJECT OBJECTIVES ►

- 1  Maintain or create desirable coverage and relative abundance of native emergent, rooted floating leaved, and submersed aquatic vegetation communities.
- 2  Protect, enhance, and restore backwater *[shallow and deep]* habitats to restore, maintain or create depth diversity and flow conditions suitable for native backwater biota.
- 3  Protect, enhance, or restore existing islands.
- 4  Protect, enhance, and restore naturally regenerating, resilient, and diverse bottomland forest habitats.

PROPOSED RESTORATION MEASURES ►

A management measure is a feature *[a structural element that requires construction or assembly on-site]* or an activity *[a nonstructural action]* that can be combined with other management measures to form alternative plans. Several measures were identified in the early planning stages. Many of these were partially developed, then were determined to not be feasible and did not undergo further evaluation. Measures that would meet the goals and objectives are:

- Habitat and access dredging
- Island restoration/creation
- Floodplain forest restoration *[nonstructural]*
- Thin layer placement of dredged material for forest restoration
- Emergent wetland creation
- Spawning reef for lake sturgeon and other fish species

PROJECT PARTNERS ►



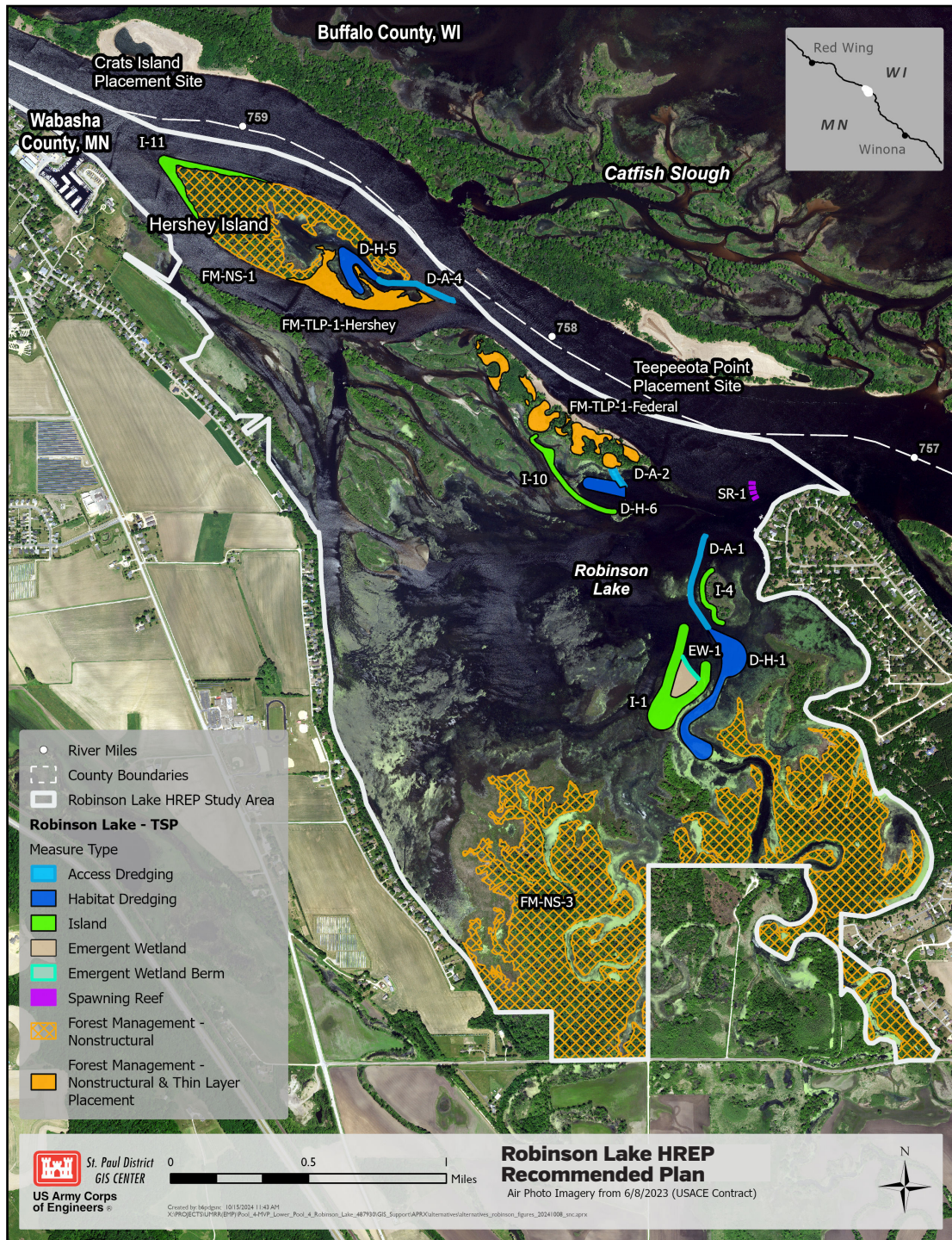
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RECOMMENDED PLAN ►



CONTACT INFORMATION ►

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PROJECT WEBSITE ►

<https://www.mvr.usace.army.mil/Missions/Environmental-Stewardship/Upper-Mississippi-River-Restoration/Habitat-Restoration/St-Paul-District/Lower-Pool-4/>