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## Missouri River Recovery Program: Emergent Sandbar Habitat **Program**

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# Missouri River





#### HABITAT FOR A HEALTHY RIVER

States, cities and individuals benefit greatly from a healthy and thriving Missouri River. Maintaining a healthy river, including protecting species that live along the river, is a top priority for the U.S. Army Corps of Engineers and the U.S. Congress.

The survival of the endangered least tern and threatened piping plover is crucial to maintaining a thriving ecosystem on the Missouri River. While both shorebirds nest elsewhere as well, the sandbars of the

Least tern, listed as endangered 1985



Missouri River and reservoir shorelines are important to their overall survival. In 2002, the U.S. Fish and Wildlife Service designated areas along much of the Missouri River as critical habitat for the piping plover. Both bird species prefer bare sandbars with little to no vegetation.



Piping plover, listed as threatened 1985 The Emergent Sandbar Habitat Program is part of a broader effort, called the Missouri River Recovery Program, to recover populations of endangered and threatened species and the river ecosystem. Protecting

these species by creating and maintaining habitat is part of the Corps' responsibility to comply with the Endangered Species Act by implementing the U.S. Fish and Wildlife Service's 2003 Amended Biological Opinion on the Operations of the Missouri River Main Stem System. Recovery efforts create a healthier river ecosystem overall, which benefits the Missouri River's many uses.

The goal of the Emergent Sandbar Habitat Program is to provide sufficient sandbar habitat throughout the Missouri River system to allow self-sustaining populations of terns and plovers to thrive.

#### WHY THEY ARE IN TROUBLE

In the days before Missouri River flows were regulated, annual spring flooding would clear existing sandbars of vegetation and create new sandbars that would provide habitat for the terns and plovers during their breeding season. When the river flows became regulated by dams, this process of creating breeding habitat was diminished. In addition, modifications to other river systems have reduced nesting habitat throughout the terns' and plovers' species range. It is now time to protect the least tern and piping plover for future generations by maintaining and creating adequate sandbars for the birds as we continue to use the river for other purposes.

# Habitat Recovery through Collaboration

The Corps works with American Indian Tribes, U.S. Fish and Wildlife Service, National Park Service, basin states and stakeholders to determine the best locations to create sandbars and to assure that public and agency concerns are considered and addressed. Once sandbars are created, a team monitors the habitat's effectiveness. Monitoring results are analyzed by the Corps' Integrated Science Team and a multi-agency team who together make future Emergent Sandbar Habitat Program design recommendations.

#### SANDBAR CREATION AND MAINTENANCE

Sandbars can be created, enhanced or maintained using several methods. The most common methods used by the Corps include the following:



- When river flows are higher, dredging is conducted to create new sandbars.
- After the navigation season, when the river flows are lower, construction using heavy equipment is conducted.
- Removing vegetation from existing sandbars also creates habitat the birds can use.

Emergent sandbar habitat development is planned to avoid, to the extent possible, residential areas, marinas, municipal intakes, other areas with high concentrations of recreational boating, and environmentally and culturally sensitive areas. The Corps posts restriction signs warning people to keep off sandbars during active nesting periods.

The mission of the Missouri River Recovery Program is to implement actions to accomplish Missouri River consistent periods.