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MISSOURI RIVER



US Army Corps
of Engineers



R E C O V E R Y P R O G R A M

PUTTING THE PIECES TOGETHER: MRRP MAIN PROGRAMS

The Missouri River Recovery Program (MRRP) is a comprehensive effort led by the U.S. Army Corps of Engineers in partnership with the U.S. Fish and Wildlife Service, Tribes, states, other federal agencies and non-governmental organizations to develop and implement actions to create a healthy Missouri River.

The MRRP consists of:

- ◆ The Missouri River Bank Stabilization and Navigation Project (BSNP) Fish and Wildlife Mitigation Project
- ◆ The Amended Biological Opinion and the Corps' Record of Decision related to the Master Water Control Manual for the Missouri River
- ◆ The 2007 Water Resources Development Act

Each of these guiding authorities set out goals and requirements for helping with river recovery. They support, compliment and reinforce each other in achieving the goal of Missouri River recovery.

How MRRP PROGRAMS WORK TOGETHER

This diagram shows how the MRRP programs overlap and support each other to achieve the main goal of recovering and restoring river resources.

Water Resources Development Act (2007) authorizes:

- ◆ Missouri River Ecosystem Restoration Plan (MRERP)
- ◆ Missouri River Recovery Implementation Committee (MRRIC)
- ◆ Work on fish passage at Intake in Montana

Bank Stabilization and Navigation Project Mitigation Program (WRDA 1986 & 1999)

- ◆ 50+ Fish and Wildlife Projects
- ◆ Aquatic & Terrestrial Habitat
- ◆ Iowa, Nebraska, Kansas, Missouri
- ◆ 166,750 Acres of Acquisition Authority
- ◆ Monitoring Program

Biological Opinion (2003)

- ◆ Flow Management
- ◆ Habitat Restoration
- ◆ Rearing and stocking pallid sturgeon
- ◆ Conducting studies
- ◆ Adapting as we learn

FISH AND WILDLIFE MITIGATION PROJECT

The Bank Stabilization and Navigation Project (BSNP) Fish and Wildlife Mitigation Project was authorized in the Water Resources Development Act (WRDA) of 1986 and then modified in 1999. The goal of the mitigation project is to restore fish and wildlife lands that were lost or damaged due to the channelization and bank stabilization of the Missouri River below Sioux City, Iowa. The legislation authorizes the purchase of 166,750 acres of land along the river from willing sellers, who are paid fair market value for their property. These lands are then restored with native vegetation, wetlands and water features that connect to the river. Over 50 projects creating new aquatic and terrestrial habitat are in progress or have been completed in Missouri, Kansas, Nebraska and Iowa.

BIOLOGICAL OPINION

In 2000, and amended in 2003, the U.S. Fish and Wildlife Service released a Biological Opinion (BiOp) on the Corps' management of the Missouri River. The goal of the BiOp is to protect and recover the populations of three threatened and endangered species on the Missouri River: the pallid sturgeon, least tern and piping plover. The BiOp outlines several required and recommended actions including:

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Flow Management. The Corps investigates the effectiveness of releasing water from Missouri River dams in the spring as a strategy for increasing pallid sturgeon spawning, reproduction and flood plain connectivity. This strategy is frequently referred to as the “spring pulse.” The Corps’ Master Water Control Manual, the guiding document for how the Corps manages water in the Missouri River, describes the criteria for determining whether a spring pulse can take place without causing flood damage and negatively impacting other river uses.

Habitat Restoration. The Emergent Sandbar Habitat Program and Shallow Water Habitat Program work to provide habitat throughout the Missouri River system to establish thriving populations

of least terns, piping plovers and pallid sturgeon. Habitat is created, enhanced or maintained through a variety of methods, such as dredging, construction, vegetation removal and modifying river flows during certain times of the year.

Rearing and Stocking. The Pallid Sturgeon Propagation and Population Augmentation Program staff raises pallid sturgeon in state and federal hatcheries and then releases these fish into the river. Raising pallid sturgeon in hatcheries and stocking them in the river are not solutions to saving the species but buys time to implement the other essential components of species recovery.

Conducting Studies. The Integrated Science Program (ISP) ensures that decisions about recovery

and ecosystem management are made using the best available science. The ISP develops monitoring and research requirements, leads scientific inquiries and communicates Missouri River basin science to stakeholders. The ISP also reports results and organizes scientific conferences and workshops.

Adapting as we Learn. Recovery activities under the BiOp are guided by an adaptive management approach. Adaptive management combines collaboration and planning with science (monitoring and measuring performance) to learn more about the complex Missouri River ecosystem and the effectiveness of recovery activities. Adaptive management allows recovery activities to be modified as new information becomes available.

WATER RESOURCES DEVELOPMENT ACT OF 2007

The Water Resources Development Act of 2007 (**WRDA 2007**), passed by the U.S. Congress, expanded the geographic reach of recovery efforts and added important aspects to the overall program.

- ◆ The Missouri River Ecosystem Restoration Plan (**MRERP**) is a collaborative, long-term study and plan to guide the implementation of mitigation, recovery and restoration activities in the Missouri River basin. The Corps is working with the U.S. Fish and Wildlife Service to develop the MRERP in coordination with other federal and state agencies, basin Tribes and other basin stakeholders, including the Missouri River Recovery Implementation Committee (**MRRIC**).
- ◆ The MRRIC makes certain that stakeholder and public values are considered and incorporated into the implementation of recovery activities. The MRRIC is made up of representatives of basin Tribes, states and stakeholders, as well as federal agencies. The MRRIC will provide recommendations to the Corps and other agencies regarding the existing MRRP and will play a key role in the development of the MRERP.
- ◆ Under WRDA 2007, the Corps can expand its recovery efforts to South Dakota, North Dakota and Montana. WRDA 2007 specifically authorizes the Corps to participate in restoration efforts on the Yellowstone River by creating fish passage at Intake, Montana.

Starting with the Fish and Wildlife Mitigation Project almost a quarter-century ago, the Corps has been working with its Tribe, state and federal agency partners to recover the populations of native river species. Creating a healthier river environment for native species also brings other significant benefits such as reducing flood damages and increasing recreation opportunities. As we learn more about species and ecosystem recovery, the Corps has been able to build upon its efforts to form a more comprehensive and collaborative approach to restoring the health of the Missouri River.

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