



U.S. Fish & Wildlife Service

Missouri River

Least Tern *Status: Endangered*

Piping Plover *Status: Threatened*

A large river ecosystem, like the Missouri River, can support an abundance of wildlife. It was once home to a diverse array of birds, fish, and other wildlife that found suitable habitat in its channels, backwaters, wetlands, and adjacent uplands.

Shorebirds, like the least tern and piping plover, depend on the Missouri River for nesting habitat on which to breed and raise their young. Their preferred habitat is sparsely vegetated sandbars along rivers or lakes and reservoir shorelines. The serious decline of these bird species is directly related to the current operation of the system and the elimination of habitat necessary for their survival.

The large reservoirs formed by the six dams on the river have greatly changed the character of the river and the fish and wildlife it supports.

The U.S. Fish & Wildlife Service received a new



Photos by Nebraska Game and Parks Commission



Least terns (above) and piping plovers (to the right and lower left) are shorebirds that nest on sandbars along the Missouri River.

Biological Assessment from the Corps of Engineers (Corps) on November 3, 2003. The Biological Opinion of 2000 is still in effect. The Corps' proposed action incorporates a majority of the elements of the original 2000 Biological Opinion's RPA, including sedimentation studies,

system unbalancing, and habitat creation and rehabilitation. The proposal does not include the environmental flow releases from Gavins Point Dam, which were described in RPA II.A (i.e. spring rise and summer low flow). In lieu of these flow changes, the Corps proposes to accelerate habitat

formation, implement adaptive management including a research/monitoring/evaluation/incorporation into operations component that includes a series of flow tests. Additionally, the Corps is proposing a modification of the Ft. Peck test.

The Service has determined that drought conservation measures and system unbalancing may have a neutral to slightly beneficial effect on the birds by creating more emergent sandbar habitat. Gavins Point summer flow tests will be based on adaptive management incorporating information on

runoff, habitat availability, fledge ratios, and population conditions at the time and flow scenarios selected will hopefully minimize avian effects. Gavins Point spring conditioning flows will redistribute organic material across newly constructed sandbars and smooth surfaces from traces of mechanical equipment.

A second fall test from the Ft. Randall Dam will be conducted. This will increase sediment flushing and hopefully increase bird habitat. In summary, the positive and negative effects of the Corps' 2003 Biological Assessment proposal when combined with the current species' status /updated baseline and the 2000 Biological Opinion RPA elements still in effect

continue to avoid jeopardy for both bird species.

A more natural hydrograph may eventually be needed in the Missouri River, however, this habitat creation/rehabilitation and flow experimentation approach will provide more precise information on exact flows required to move forward toward operations of the Missouri River in keeping with protection of fish and wildlife along with serving other project purposes.

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