



U.S. Fish and Wildlife Service

Fact Sheet and Recommendations

2011 Flood Clean-up and Repair

This fact sheet is intended to provide background information on wildlife species that could be affected by clean-up and repair work taking place in the main channel of the Missouri River—post flood. The U.S. Army Corps of Engineers (Corps) Regulatory Program reviews permit applications for work taking place in the waters of the United States according to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. When applying for a permit to conduct work on the Missouri River, applicants should read through the following information to gain a better understanding of the process and what actions may or may not affect wildlife species that are also using the river.

Conservation Authorities

The U.S. Fish and Wildlife Service (Service) has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public. A few of the Service's authorities are: 1) Endangered Species Act of 1973 (ESA), 2) Bald and Golden Eagle Protection Act (Eagle Act), 3) Migratory Bird Treaty Act (MBTA), and 4) the Fish and Wildlife Coordination Act. Below is an explanation of each authority with recommendations to avoid, minimize, or provide compensatory mitigation for adverse effects to fish and wildlife and their habitats to be considered when applying for a permit to conduct the flood clean-up and repair activities. The Service also provides recommendations to the Corps under Section 404, and are used in the Corps' public interest review.

Endangered Species Act

According to section 7 of the Endangered Species Act, every federal agency, in consultation with the Service, is required to determine if any federally listed species and/or critical habitat would be directly and/or indirectly affected by an action it authorizes, funds, or carries out. Since the Corps, a federal agency, issues a permit for work in the river, their federal action requires them to talk to the Service and to minimize negative effects on Endangered or Threatened Species. For the Missouri River flood clean-up and repair, species of concern would be the federally endangered interior least tern (*Sternula antillarum athalassos*), the federally threatened piping plover (*Charadrius melodus*), and the federally endangered pallid sturgeon (*Scaphirhynchus albus*).



Interior least tern chicks

photo by Ben Wheeler

The interior least tern and piping plover are migratory birds that nest on and forage near bare sandbars in the Missouri River. These two species typically show up on the Missouri River in mid-April and begin migration south by mid to late August. In recent years the birds have rarely been encountered on the Missouri River below Sioux City, Iowa. This may change due to the sandbars created by the flooding below Sioux City.



Piping plover adult with young

photo by Courtney McCusker

To avoid impacts to the least terns and piping plovers that may use sandbars to nest on and raise their young, work on or around sandbars should be done before April 15th or after August 15th. If it is not possible to schedule work around these dates, sandbars can be monitored by qualified biologists and work can proceed if the birds are not present.

The pallid sturgeon is a fish known to inhabit the mainstem Missouri and Mississippi rivers and their larger associated tributaries. Specifically, in the Missouri River it is found in the riverine reaches from near Fort Benton, MT downstream to the confluence of the Missouri and Mississippi rivers at St. Louis, MO. Pallid sturgeons typically occupy main- and side-channel habitats associated with sand, gravel, and rock substrates. Egg-laying typically occurs in the spring to early summer and the eggs are deposited in areas of deep water

(deeper than 3 feet) with swift current (faster than 3 feet per second) and typically are laid over or adjacent to gravel, cobble, or rock. Construction activities within the channel or adjacent to gravel, cobble, or rock on stabilized banks along the outside bends have the potential to adversely affect pallid sturgeon if the fish are present during construction. Therefore, work in the channel should be avoided during the egg-laying period (April through June) if possible.



Pallid sturgeon

photo USFWS

Bald and Golden Eagle Protection Act (Eagle Act)

The Bald and Golden Eagle Protection Act provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). The golden eagle is found in western United States and would not typically nest on the Missouri River but often over winters near the river and open water. Bald eagles nest and winter in mature, forested riparian areas near rivers, streams, lakes, and wetlands and occur along the length of the Missouri River. The bald eagle southward migration begins as early as October and the wintering period extends from December-March. In Nebraska and Iowa, the bald eagle breeding season is from mid-February through mid-July but check with the local field office in other states for state specific dates.

Disturbances close to an active eagle nest (within 0.5 mile) or within line-of-sight of the nest could cause adult eagles to discontinue nest building or to abandon eggs or young. For winter roost sites, disturbance can cause undue stress which may cause adults to stop feeding and potentially lead to failure of the eagles to meet winter thermoregulatory requirements. To avoid adversely impacting eagles, construction and clean-up activities should avoid eagle roosting and nesting sites by at least 0.5 mile.

Migratory Bird Treaty Act (MBTA)

The Migratory Bird Treaty Act protects native birds, such as Eastern Bluebird and American goldfinch. European house sparrow, rock pigeon and European starling are introduced species of birds that are not protected under MBTA. Construction activities taking place in grassland, wetland, stream, and woodland habitats, and those that occur on bridges (e.g., which may affect swallow nests on bridge girders) that may take (kill) migratory birds, their eggs, young, and/or active nests should be avoided. The MBTA is applicable year-round, although most migratory bird nesting activity along the Missouri River occurs during the period of April 1 to July 15. There are a few species of migratory birds that will nest outside this primary breeding period. Some raptors such as barred owls will nest in woodland habitats during February 1 through July 15 and sedge wrens will nest in wetland habitats normally from July 15 to September 10. It is recommended that construction activities be scheduled to avoid the primary nesting period of birds. If that is not possible then a nesting survey can be done by qualified biologist before work starts to insure no migratory birds, eggs or chicks are taken (killed).

The Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) provides a basic framework for the consideration of fish and wildlife conservation measures to be incorporated into Federal and Federally permitted or licensed water development projects. Some of the cleanup and repair activities that are necessary due to the damage that was done by the 2011 Missouri River Flood may modify the river in some way. Impacts to fish and wildlife and their habitats that are not covered under the previously mentioned acts should be considered and minimized as much as possible. Ways to minimize impacts can include erosion control during construction and repair, avoiding tree removal when possible, and using pesticides sparingly for vegetation control.

For Additional Information

For additional information about specific species and population range maps go to the web site for each region of the U.S. Fish and Wildlife Service. Information about each of the states can also be found at these web sites.

In Montana, North Dakota, South Dakota, Nebraska and Kansas go to:

<http://www.fws.gov/mountain-prairie/>

In Missouri and Iowa go to:

<http://www.fws.gov/midwest/>