

Biological Opinion on Operation and Maintenance of the 9-Foot Channel Project

St. Paul, Rock Island, and St. Louis Districts

Project Description: The Corps of Engineers Mississippi Valley Division (including St. Paul, Rock Island, and St. Louis Districts) and U.S. Fish and Wildlife Service completed Formal Consultation to assure continued operation and maintenance of the 9-foot Channel Project fully complies with the Endangered Species Act.

The project area includes the entire Illinois Waterway from the confluence with the Mississippi River at Grafton, Illinois to T.J. O'Brien Lock in Chicago and the Mississippi River from the Ohio River to Upper St. Anthony Falls Lock in Minneapolis-St. Paul Minnesota. It also includes the navigable portions of the Kaskaskia, Minnesota, Black and St. Croix Rivers. The year 1998 was used as the base for the evaluation of impacts of continued operation and maintenance of the navigation project on federally threatened or endangered species.

Background: Section 7 of the Endangered Species Act of 1973 established procedural regulations for interagency cooperation. It also authorized Federal agencies to use resources to carry out programs for conservation of protected species. It requires Federal Agencies to insure any action authorized, funded, or carried out is not likely to jeopardize the continued existence of threatened or endangered species or cause destruction or adverse modification of critical habitat. This was a system-wide analysis of the 9-foot Channel Project on endangered species. St. Paul and St. Louis Districts completed Biological Assessments for maintenance activities. This system-wide analysis provided the baseline for analysis of impacts to federally listed species being done in the Biological Assessment in progress for the Navigation Study.

Significant Issues: All aspects of the project were addressed, including channel maintenance and water level regulation, management of Corps lands, as well as interrelated and interdependent effects such as navigation traffic and recreation activities. There are no specific Corps activities directly causing significant adverse effects to species. However the indirect effect of river traffic may contribute to adverse effects for some species. The exotic zebra mussel is a major factor driving the determination for the Higgins' eye pearly mussel. A number of factors including data gaps contribute to the determination for the pallid sturgeon.

Summary of Fish and Wildlife Service Findings

Species	Finding
Higgins' eye pearly mussel (<i>Lampsilis higginsii</i>)	Jeopardy with Incidental Take
Pallid sturgeon (<i>Scaphirhynchus albus</i>)	Jeopardy with Incidental Take
Winged mapleleaf pearly mussel (<i>Quadrula fragosa</i>).	Likely Affect/Incidental take
Interior least tern (<i>Sterna antillarum</i>)	Likely Affect/Incidental take

Bald eagle (<i>Haliaeetus leucocephalus</i>)	Adverse Affect (minor)
Decurrent false aster (<i>Boltonia decurrens</i>)	Adverse Affect (minor)
Indiana bat (<i>Myotis sodalis</i>)	Likely Adverse effect (minor)

Jeopardy Findings: The Fish and Wildlife Service found that the project would jeopardize the continued existence of the Higgins' eye mussel and pallid sturgeon. With this finding, they proposed Reasonable and Prudent Alternatives (RPA) that the Corps may take to prevent Jeopardy. The finding also included Reasonable and Prudent Measures (RPM) to address incidental take.

Under the lead of the St. Louis District, actions include the following for pallid sturgeon:

1. Conduct a pallid sturgeon habitat and demographics study
2. Facilitate development of a pallid sturgeon conservation and restoration plan
3. Implement a long-term program of aquatic habitat restoration on the Middle Mississippi River

The Corps also agreed to implement the RPA's and RPMs for Higgins eye. Led by the St. Paul District, actions being implemented include a monitoring program, artificial propagation efforts, relocation, zebra mussel control, fish passage, and investigation of opportunities to protect essential habitat areas.

Status/Schedule: The Corps Biological Assessment was completed in April 1999. On May 15, 2000, the U.S. Fish and Wildlife Service delivered a Biological Opinion. The Corps concurred with findings and agreed to implement the Reasonable and Prudent Alternatives and Measures on five of the seven species addressed in a letter dated June 12, 2000. Discussion pertaining to pallid sturgeon and least tern has proceeded since that time with a letter from Mississippi Valley Division to the U.S. Fish and Wildlife Service in August 2000 confirming how the Corps intended to implement Reasonable and Prudent Alternatives and Measures for those species.

The Rock Island District's role since 2000 assisted Corps' implementation of Reasonable and Prudent Alternatives and Measures for the Higgins' eye pearlymussel through the interagency Mussel Coordination Team (MCT). In July 2002, the MCT completed the Definite Project Report and Environmental Assessment for Relocation Plan for the Endangered Higgins' eye pearlymussel (*Lampsilis higginsii*) Upper Mississippi River and Tributaries Minnesota, Wisconsin, Iowa and Illinois. Implementation has included annual removal of zebra mussels from adult Higgins' eye, relocation of adults, and the culture, propagation, and stocking of juvenile Higgins' eye. The MCT developed a monitoring schedule for essential and secondary habitat areas that extends through 2009.