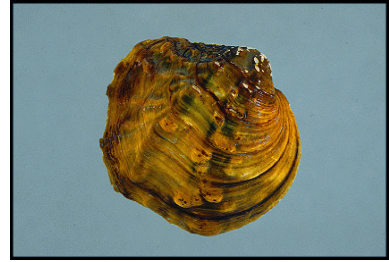




Upper Mississippi River - Operation and Maintenance Section 7 Consultation

Winged Mapleleaf Mussel



Species Information

- The winged mapleleaf was historically found in 34 rivers across 12 states.
- Currently, only one population of winged mapleleaf mussels, which are federally listed as endangered, is found along a 13-mile segment of the St. Croix River, a tributary of the Mississippi River just east of Minneapolis and St. Paul.
- The St. Croix River has its complete complement of native mussel species (a total of 40), including 16 Wisconsin and 19 Minnesota state listed species.

Project Effects

- Potential project effects are associated with the transport of non-native zebra mussels via commercial barge navigation. But for the barge traffic, there would be no continuous, large-scale transport and replenishment of zebra mussels in the Mississippi River.
- Zebra mussels are prolific and can spread quickly, smothering native mussels, changing water chemistry and competing for food. They attach themselves to barges and other vessels and are transported to formerly uninfested waters.
- Dense zebra mussel colonization on native mussels has already severely impacted native mussel communities in the Mississippi River.
- It is reasonably certain that navigation pools and project-dependent commercial barge transportation will perpetuate zebra mussel persistence in the Mississippi River, including the lower 25.4 miles of the St. Croix River. An interagency program is in place to minimize the potential for expansion of the current infestation of the St. Croix by recreational vessels. The National Park Service, upon the recommendation of the St. Croix River Zebra Mussel Task Force, has endorsed closing the St. Croix River, beginning at River Mile 28, to all upstream navigation to assist in this effort.
- The Service has identified several measures and recommendations the Corps can carry out to minimize potential project impacts and to help conserve the winged mapleleaf.

Reasonable and Prudent Measures

- Develop an action plan to monitor and control the abundance and distribution of zebra mussels on the St. Croix River.
- Conduct a winged mapleleaf mussel relocation feasibility analysis and prepare a Winged Mapleleaf Mussel Relocation Plan to address the feasibility of establishing additional populations within its historic range.

Conservation Recommendations

- Implement public outreach efforts, in coordination with the States and the Service and other resource agencies, as a means to disseminate information on life history and distribution of zebra mussels, ecological importance of native mussels including winged mapleleaf, control measures to limit the spread of zebra mussels on the Mississippi River and tributaries, and status of mussel relocation efforts.