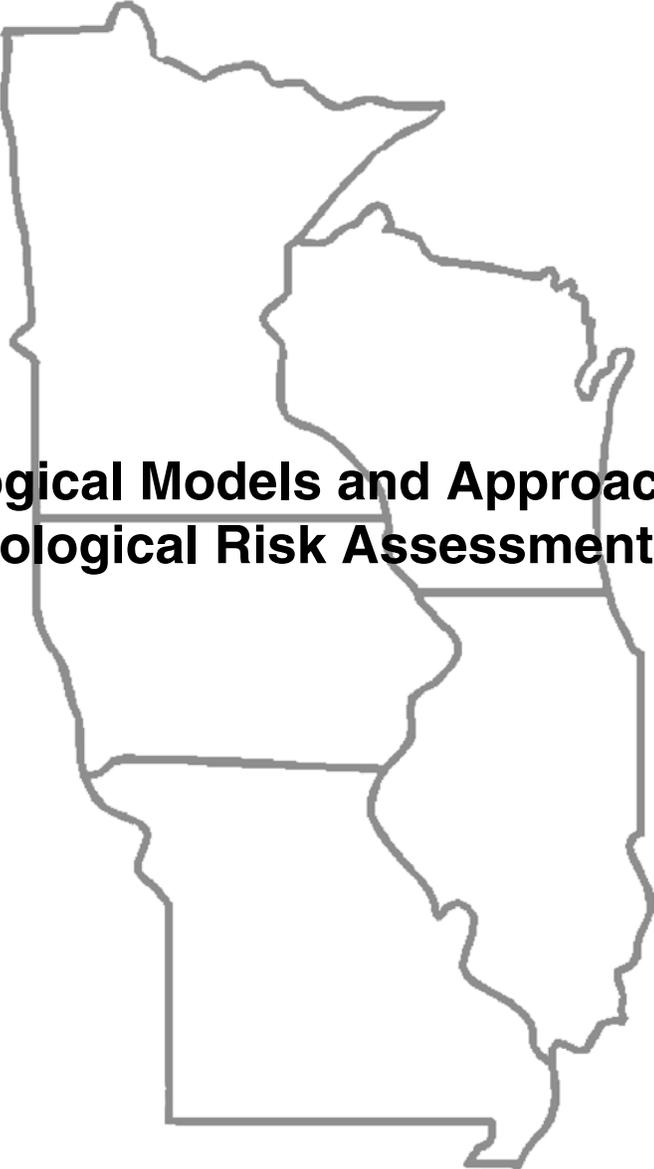
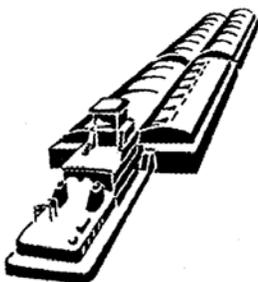


# Interim Report For The Upper Mississippi River — Illinois Waterway System Navigation Study

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**Ecological Models and Approach  
to Ecological Risk Assessments**

The central graphic is a large outline map of the Upper Mississippi River and Illinois Waterway System. The map shows the river's path through Minnesota, Wisconsin, Illinois, and Missouri, with the Illinois Waterway branching off to the south. The text 'Ecological Models and Approach to Ecological Risk Assessments' is centered over the map.

**US Army Corps  
of Engineers®**

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Rock Island District  
St. Louis District  
St. Paul District

**ABSTRACT:** The Navigation Study being performed by the U.S. Army Corps of Engineers is assessing the potential environmental impacts associated with anticipated increases in commercial navigation traffic on the Upper Mississippi River-Illinois Waterway System. Each Navigation Study ecological risk assessment addresses a time period beginning with the present condition (defined as 2000) and continuing through the year 2050, in 10-year increments. Upon completion, the assessments will fulfill a requirement of the National Environmental Policy Act of 1969, and a subsequent Environmental Impact Statement, summarizing the results of each risk assessment, will be prepared. This report describes the overall approach adopted for performing the environmental assessments and presents several ecological models that were instrumental in their completion. The report also briefly outlines several hydraulic and hydrodynamic models necessary for the assessments and discusses their integration with the ecological models to estimate ecological impacts. Specific assessment results for each of the component ecological risk assessments (fish, submerged aquatic plants, and freshwater mussels) for future traffic scenarios are presented in separate reports of the Navigation Study series of technical publications.

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