



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY ENGINEER DIVISION, GREAT LAKES AND OHIO RIVER**  
**CORPS OF ENGINEERS**  
**550 MAIN STREET**  
**CINCINNATI, OH 45202**

CELRD-PD

15 December 2010

MEMORANDUM FOR RECORD

1. Recent questions regarding what types of alternatives USACE will evaluate in GLMRIS have prompted USACE to consider the meaning of the term “prevent” in the GLMRIS study authority. Specifically, members of the public and other stakeholders have asked why USACE plans to assess alternatives that reduce risk when the study authority provides for evaluation of alternatives that will “prevent” spread of nuisance species.
2. USACE plans to evaluate reduction of risk because considering the risk reduction afforded by various alternatives even by hydrologic separation, is inherent in the thorough consideration of alternatives to prevent spread of aquatic nuisance species. In the Water Resources and Development Act of 2007, Congress provided: “The Secretary, in consultation with appropriate Federal, State, local, and nongovernmental entities, shall conduct, at Federal expense, a feasibility study of the range of options and technologies available to prevent the spread of aquatic nuisance species between the Great Lakes and Mississippi River Basins through the Chicago Sanitary and Ship Canal and other aquatic pathways.” Water Resources Development Act of 2007 (2007 Act), Pub. L. No. 110-114, § 3061(d).
3. USACE will evaluate a range of options and technologies to prevent the spread of aquatic nuisance species (ANS) between the Great Lakes and Mississippi River by aquatic pathways. Options and technologies available to prevent the spread of ANS may reduce risk to varying degrees given that an absolute solution that guarantees complete prevention of ANS transfer may not be feasible or even technologically possible. The Corps intends to study hydrologic separation as part of GLMRIS, among other alternatives as required by law and as appropriate to examine this complex problem.
4. Identification of the level of risk reduction provided by possible alternatives is consistent with: (a) the meaning of the word “prevent;” (b) engineering and scientific approaches to problems and solutions; (c) other authorities including those requiring consideration of various alternatives (such as the National Environmental Policy Act); and (d) Congress’ specific direction to evaluate a “range of options and technologies.” Most dictionaries define “prevent” as meaning stopping or hindering an action, with other meanings that include avert and impede – concepts that are consistent with engineering a solution to a problem. This particular challenge, addressing dynamic natural systems subject to many variables and certain unknowns, demands consideration of risk reduction afforded by various options rather than assuming at the outset that any option might provide the 100% solution.
5. Finally, an understanding of the risk reduction afforded by different project approaches is an essential underpinning of the Corps’ planning process. This process entails comparison of alternatives, each of which must be evaluated in accordance with its completeness (does it address the whole problem), effectiveness, efficiency, and acceptability to the public,

stakeholders, and others. Under the applicable authorities, decision makers must be afforded the opportunity to weigh these elements, including the level of risk reduction provided, in order to make a decision that is in the public interest. Prior to going through this study process, the Corps cannot assume what options and technologies might afford the best protection against ANS transfer between the Great Lakes and Mississippi River basins. Rather, the purpose of GLMRIS is to assess an array of alternatives, with the benefits and detriments of each alternative described, so that decision makers can effectively evaluate a solution.