

Record of Decision
Upper Mississippi River and Illinois Waterway System

I have reviewed the final Integrated Feasibility Report and Programmatic Environmental Impact Statement for the Upper Mississippi River-Illinois Waterway (UMR-IWW) System Navigation Feasibility Study dated September 2004, addressing the potential effects resulting from the construction and operation of various navigation efficiency and ecosystem restoration alternatives. I find the plan authorized by Congress in Title VIII of Public Law 110-114, the Water Resources Development Act of 2007, to be technically sound and in the public interest based upon this review and after considering the views of other agencies and the public. I am signing this Record of Decision to complete the procedural requirements of the National Environmental Policy Act and approve the Upper Mississippi River and Illinois Waterway System for construction.

Authorized Project

The authorized project for the UMR-IWW System consists of the following features:

- a.) Construction of small scale and nonstructural measures consisting of mooring facilities at Locks 12, 14, 18, 20, 22, and LaGrange or other alternative locations that are economically and environmentally feasible; providing switchboats at locks 20 through 25; and conducting development and testing of an appointment scheduling system.
- b.) Construction of new 1,200-foot locks at Lock 20, 21, 22, 24, and 25 on the Upper Mississippi River and at LaGrange Lock and Peoria Lock on the Illinois Waterway.
- c.) Mitigation to be undertaken or acquired concurrently with land and interests in lands for the small scale measures and new locks.
- d.) Implementation of ecosystem restoration projects including island building; fish passages; floodplain restoration; water level management; backwater restoration; side channel restoration; wing dam and dike restoration and modification; island and shore protection; topographical diversity; dam point control; use of dredged material for environmental purposes; tributary confluence restoration; spillway, dam, and levees modification to benefit the environment; and land and easement acquisition.
- e.) Monitoring and adaptive management for ecosystem restoration.

Considerations for Selection of the Authorized Project

The navigation efficiency alternatives were evaluated using the system of four primary accounts: National Economic Development, Regional Economic Development, Environmental Quality, and Other Social Effects. Three additional accounts were established for comparison and include Contribution to Planning Objectives (safety, reliability, efficiency, and sustainability), Acceptability, and Adaptability. The ecosystem restoration alternatives were evaluated under seven additional accounts including: National Ecosystem Restoration (NER) Benefits, Environmental Quality, Regional Economic Development, Other Social Effects, Contribution to Planning Objectives, Acceptability, and Adaptability. The authorized plan represents the best combination of measures in the context of cost effectiveness and incremental analysis.

Summary of Alternatives

The combination of seven navigation efficiency alternatives and five ecosystem restoration alternatives are fully described in the Final Integrated Feasibility Report and Programmatic Environmental Impact Statement for the UMR-IWW System Navigation Feasibility Study and incorporated here by reference.

Navigation efficiency alternatives considered included the following:

Alternative 1: No Action.

Alternative 2: Congestion fees implemented through a lockage fee (imposed on commercial traffic).

Alternative 3: Deck winches and excess lockage time charges.

Alternative 4: Moorings (Locks and Dams 12, 14, 18, 20, 22, 24, and La Grange); switchboats at Locks 20-25.

Alternative 5: Moorings (Locks and Dams 12, 14, 18, 24, and La Grange); lock extensions at Locks 20-25; switchboats at Locks 14-18, La Grange, and Peoria.

Alternative 5B: Moorings (Locks and Dams 12, 14, 18, 24, and La Grange); lock extensions at Locks 20 through 25; switchboats at Locks 14 through 18; and new locks at La Grange and Peoria.

Alternative 6: Mooring (Locks and Dams 12, 14, 18, and 24); new locks at 20-25, La Grange, and Peoria; lock extensions at 14-18; and switchboats at Locks 11-13.

The Authorized Project is called a blending of Alternatives 4 and 6 in the Feasibility Report.

Ecosystem restoration alternatives considered included the following:

Alternative A: No action/Without project. Current environmental management activities and rehabilitation efforts continue at historic levels.

Alternative B: No net loss. Protect and maintain existing environmental diversity (current mosaic of habitat types and ecological diversity maintained into the future: no net loss).

Alternative C: Restore the first increment of habitats most directly affected by the navigation project.

Alternative D*: Restoration to an intermediate level which includes management practices and cost effective actions affecting a broad array of habitat types. Alternative D* is Alternative D with slight changes recommended by stakeholders. Measures to lower embankments at lock and dam sites to promote floodplain connectivity and to reduce water level fluctuation on the Illinois River in an effort to improve aquatic habitat were added to the measures identified in Alternative D. The cost of Alternative D* was the same as the cost of Alternative D.

Alternative E: Restoration to a high level, which includes most environmental objectives that could be accomplished in the context of the navigation project.

The Environmentally Preferable Alternative

The environmentally preferable alternative consisted of a combination of Alternative 2 (congestion fees implemented through a lockage fee) and Alternative E (ecosystem restoration to include most environmental objectives that can be accomplished in the context of the navigation project). The environmentally preferable alternative was fully considered but not selected for several reasons. Navigation Efficiency Alternative 2 failed to meet the primary planning objective of ensuring an economically sustainable navigation system since it constrains future growth on the system and shifts traffic from barges to alternative transportation modes, potentially increasing the amount of accidents, noise, and grade crossing delays associated with ground-based transportation. Ecosystem Restoration Alternative E and the authorized plan, Ecosystem Restoration Alternative D*, were very close in their overall ranking, though the authorized plan was recommended primarily because the NER benefits showed it achieved a high degree of completeness and diversity at less cost.

Environmental Impacts of the Authorized Project

It is the Corps' conclusion that the implementation of the authorized project would have significant site-specific and system-wide environmental impacts. These impacts include increases in bank erosion, suspended sediment, and turbidity levels from increased navigation traffic. This conclusion is based upon extensive research, numeric and physical modeling, and field observation and documented in the Final Integrated Feasibility Report and Programmatic Environmental Impact Statement for the UMR-IWW System Navigation Feasibility Study and its supporting documentation.

Minimizing Adverse Environmental Impacts

All practicable means to avoid or minimize environmental harm have been adopted. For those unavoidable impacts, the Corps will implement the adaptive mitigation plan identified in the Final Integrated Feasibility Report and Programmatic Environmental Impact Statement for the UMR-IWW System Navigation Feasibility. The major components include: 1) site-specific mitigation to address the environmental effects from construction of the measures within the authorized project, and 2) system-wide mitigation to address the direct affects of increased traffic. A mitigation plan was not developed for the ecosystem restoration component of the authorized project because of the anticipated overall beneficial environmental effects of ecosystem restoration.

The U.S. Fish and Wildlife Service provided a Biological Opinion (BO) for the Navigation Study to minimize adverse environmental impacts of the authorized project on endangered species. The BO determined that the project will not jeopardize the continued existence of the Indiana bat, decurrent false aster, pallid sturgeon, and Higgins eye pearl mussel, but will result in incidental take. The Corps will comply with all provisions of this BO, including implementation of the Reasonable and Prudent Measures and their implementing terms and conditions, as well as continued implementation of the Reasonable and Prudent Alternatives and Measures from a separate BO developed in 2000 for the continued operation and maintenance of the 9-foot Navigation Project, considered the baseline for the Navigation Study.

To minimize adverse impacts on cultural resources, a *Programmatic Agreement Among the U.S. Army Corps of Engineers Mississippi Valley Division, St. Paul District, Rock Island District, and St. Louis District, U.S. Fish and Wildlife Service, the Illinois, Iowa, Minnesota, Missouri, and Wisconsin State Historic Preservation Officers, and the Advisory Council on Historic Preservation, Regarding Implementation of the Upper Mississippi River-Illinois Waterway System Navigation Feasibility Study* (PA) was executed by the signatories to meet the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations 36 CFR Part 800: "Protection of Historic Properties." The PA is appropriate to address all potential concerns to any significant historic properties.

Institutional Arrangements

An institutional arrangement framework would be used to explore some of the key tradeoffs that are likely to be part of future UMR-IWW management decisions. The existing framework of institutional arrangements needs some modification to facilitate more integrated, science-driven, inclusive, efficient, and cost-effective management. At the system-wide scale, the present Environmental Management Program Coordinating Committee attends to the Environmental Management Program, but not to other aspects of river management including navigation system operation and maintenance, refuge, fish and wildlife, water quality, floodplain, and recreation management. These other major categories of river management activities presently do not have a system-wide coordinating forum. The implementation of the authorized plan will require review and possible restructuring of existing institutional arrangements and will be adaptively developed within the region. An Advisory Panel will be appointed to provide independent guidance in the development of ecosystem restoration projects.

Ecosystem Restoration Preconstruction Engineering and Design

Before initiating the design of any individual ecosystem project within the authorized project, the Corps will establish the baseline for each individual project, establish ecosystem goals, and identify specific performance indicators to measure progress in attaining the ecosystem goals. Restoration design will include a monitoring plan with a timeline to achieve goals and demonstrate project completion.

Consultation and Funding Agreements

In carrying out the environmental sustainability, ecosystem restoration, and monitoring activities of the authorized plan, the Corps will consult the Department of Interior and the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The authorized project includes authority for the Corps to enter into agreements with the Department of the Interior, the Upper Mississippi River Basin Association and natural resource and conservation agencies of the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin to provide for the direct participation of and transfer of funds to such entities for the planning, implementation, and evaluation of projects and programs of the authorized project.

Cost Sharing Plan

One-half of the cost of navigation improvement construction shall be paid from amounts appropriated from the general fund of the U.S. Treasury and one-half of the cost of construction shall be paid from amounts appropriated from the Inland Waterway Trust Fund. The Federal share of the ecosystem restoration projects will be 65 percent. The Federal share of carrying out the ecosystem restoration projects shall be 100 percent if the project is located below the ordinary high water mark or in a connected backwater, modifies the operation of structures for navigation, or is located on federally owned land. A non-Federal sponsor for a cost-shared ecosystem restoration project may include a non-profit entity with the consent of the affected local government.

Implementation Reports

Not later than 30 June 2009, and every 4 years thereafter, the Secretary of the Army acting through the Corps will submit to the Committee on Environment and Public Works of the Senate and Committee on Transportation and Infrastructure of the House of Representatives an implementation report that includes baselines, milestones, goals, and priorities for ecosystem restoration projects and measures the progress in meeting the goals.

Advisory Panel

The Secretary of the Army, acting through the Corps, will appoint and convene an advisory panel to provide independent guidance in the development of the Implementation Reports. Panel members will include one representative each of the state resource agencies of Illinois, Iowa, Minnesota, Missouri, and Wisconsin; one representative from the Departments of Agriculture; one representative from the Department of Transportation; one representative of the United States Geological Survey; one representative of the United States Fish and Wildlife Service; one representative of the Environmental Protection Agency; one representative of affected landowners; two representatives of conservation and environmental advocacy groups; and two representatives of agriculture and industry advocacy groups. A representative of the Secretary of the Army will chair the panel. The Corps, in consultation with the Advisory panel, will develop a system to rank proposed projects, and the ranking system will give greater weight to individual ecosystem restoration projects within the authorized project that restore natural river processes.

Comparable Progress

As the Corps conducts pre-engineering design and construction for the individual projects in the authorized project, appropriate milestones will be selected for each project to assure that the individual projects for navigation and ecosystem restoration are being carried out at comparable rates. The Secretary of the Army, acting through the Corps, will make an annual report to the Congress beginning in Fiscal Year 2009 regarding whether projects are being carried out at a comparable rate. If the Corps or the Congress determines that individual projects for navigation or ecosystem restoration are not moving toward completion at a comparable rate, annual funding requests will be adjusted to ensure that the projects move forward toward completion at a comparable rate in the future.

Benefits

The Upper Mississippi River System is a multi-purpose river system that provides economic and environmental benefits to the Nation. The stakeholders of the UMR-IWW system have expressed their desire to seek a balance among economic, ecological, and social conditions to ensure the waterway system continues to be a nationally treasured ecological and historical resource as well as an efficient national transportation system. The dual-purpose, integrated authorized project will provide better focus and flexibility to adaptively manage the operation and maintenance of the system for both navigation and the environment. The authorized project includes a long-term framework for navigation efficiency improvements to include small-scale structural, construction of new 1,200-foot locks, and nonstructural measures that will provide transportation savings. The authorized project also includes a long-term framework for ecosystem restoration to be accomplished in cooperation with the U.S. Fish and Wildlife Service and other Federal agencies, the five states, and private non-profit groups to improve the natural resources of the river through projects for habitat creation, water level management, fish passage, and floodplain restoration. The authorized dual-purpose, integrated project will provide significant benefits to the Nation and represents a course of action which best serves the overall public interest.

This Record of Decision completes the requirements of the National Environmental Policy Act process and will be sent to all interested parties and placed on the project web site for public access.

6/4/08
Date


STEVEN L. STOCKTON, P.E.
Director of Civil Works