Plan to Transition Work Under the Upper Mississippi River Restoration – Environmental Management Program to the Navigation and Ecosystem Sustainability Program

April 2012

I. INTRODUCTION

Following authorization of the Upper Mississippi River and Illinois Waterway System Navigation and Ecosystem Sustainability Program (NESP) authorized under Title VIII of the Water Resources Development Act (WRDA) 2007 (P.L. 110-114) (Attachment A) Congress directed the Corps of Engineers to complete a plan to transition its highly successful Upper Mississippi River Restoration - Environmental Management Program (UMRR-EMP) for ecosystem restoration on the Upper Mississippi River System, authorized under Section 1103 of WRDA 1986 (P.L. 99-662) and amended by Section 509 of WRDA 1999 (Attachment B), to NESP. The Joint Explanatory Statement of the Omnibus Appropriations Act of 2009 directed the Corps of Engineers to complete a plan to transition the UMRR-EMP to the NESP. Specifically, the explanatory statement includes the following language:

> "Upper Mississippi River Restoration (UMRR-EMP), Illinois, Iowa, Minnesota, Missouri and Wisconsin. The Corps is directed to complete a plan to transition this project to the Navigation and Ecosystem Sustainability Program (NESP) for the Upper Mississippi River System. Funding will be considered for this new project when an adequate plan to complete ongoing projects and transition future projects to the new authority is received by the Committees on Appropriations. In order to facilitate this transition, the Corps is directed not to initiate any new projects under this authority. Funding should be focused on the completion of all existing work to facilitate the initiation of the new authority."[1]

The Senate Appropriations Committee Report (S.Rpt. 111-45) accompanying the Energy and Water Development and Related Agencies Appropriations Act of 2010 (P.L. 111-85) modified provisions of the Omnibus Appropriations Act of 2009 by stating that:

> "The Corps is directed to complete a plan to transition the UMRR-EMP to the Navigation and Ecosystem Sustainability Program (NESP) for the Upper Mississippi River System (UMRS). Funding for the NESP is dependent on a solution to shortfalls in the Inland Waterway Trust Fund; therefore, a transition to the NESP is not anticipated in the immediate future. However, in order to facilitate the eventual transition, while maintaining the Corps' ecosystem restoration capacity on the UMRS, the Corps is directed to limit planning or construction under this authority to projects that can be completed or readily transferred to NESP within 2 years of the NESP receiving sufficient construction funding to support program transition."

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[1] See explanatory statement at 612 (referencing line item included on pages 603 and 751 appropriating $17,713,000 to "Upper Mississippi River Restoration, IL, IA, MN, MO & WI") (both the text and line item were incorporated in law by the last proviso of the paragraph in the Act appropriating funds to the construction account).

No further direction from Congress was provided in either Fiscal Year (FY) 2011 or FY 2012 and during that time Congress appropriated $21,122,000 and $17,787,000 in each of those fiscal years respectively to UMRR-EMP to support ecosystem restoration, monitoring, and research efforts.

II. DESCRIPTION OF PROGRAMS

The UMRS has been identified by the Administration as one of eight Nationally Significant Ecosystems. The region contains 3 of the 15 Ecological Regions in North America, and the UMRS is the only major river system in North America to run directly north and south. This huge longitudinal gradient provides a unique corridor for fish and wildlife. The broad diversity of UMRS habitats provides a home to 140 species of fish (25 percent of the fish species in North America), and 40 percent of the waterfowl and 60 percent of all bird species in North America. However, there is an increasing need for ecosystem restoration, as evidenced by the fact that there are 36 federally-listed or candidate Threatened and Endangered (T&E) species in the basin. Ten of those T&E species are directly connected to the main channel of the UMRS. While the UMRS still has the same assemblage of fish it had 100 years ago, the composition of those fish communities has changed dramatically. Thirty-nine UMRS fish species are on the T&E species list of one or more of the five UMRS states. Thirteen species of non-native fish, such as the Asian Carp, make up ever increasing amounts of fish biomass in certain sections of the river.

The UMRS includes more than 297,000 acres of National Fish and Wildlife Refuge, and many more acres of State and Corps managed lands. Recently, 310,000 acres of the UMRS floodplain were designated as internationally significant wetlands under the Ramsar Convention, representing about 11 percent of the UMRS floodplain. According to the U.S. Fish and Wildlife Service, this area supports more than 3.7 million recreation-related visits each year. Based upon Corps models, this would contribute more than $ 2 billion to the regional economy.

The UMRR-EMP was established in WRDA 1986, making it the first program in the Nation to combine ecosystem restoration with scientific monitoring and research efforts on a large river system. The UMRR-EMP has served the Nation well for 25 years on the UMRS. The program has received and applied a total of $422,925,000 which has supported broad ranging efforts to restore aquatic habitats, acquire systemic data, and monitor and research the UMRS. These efforts have improved the quality of aquatic habitat and associated floodplain habitats, benefiting fish, waterfowl, shorebirds, mammals, amphibians, reptiles, neo-tropical migrant birds, and many species of plants. In addition to providing important benefits on the UMRS, the program serves as a model for other aquatic ecosystem efforts nationally and internationally and remains viable and relevant. It has matured and adapted to changing conditions and new scientific insights and continues to be an efficient and effective means of ensuring that the UMRS remains both a nationally significant ecosystem and nationally significant commercial navigation system.

NESP is a dual-purpose navigation and ecosystem restoration plan for the Upper Mississippi River and Illinois Waterway (UMR-IWW) which was authorized by Title VIII of WRDA 2007. The authorized plan for navigation includes small scale and non-structural measures consisting of mooring facilities at seven locations, switchboats at Locks 20-25 on the Upper Mississippi River, and development and testing of an appointment scheduling system (traffic management) at an authorized cost of $256 million. Large scale navigation measures consist of new 1200-foot lock chambers at Locks 20, 21, 22, 24, and 25 on the Mississippi River and LaGrange Lock and Peoria Lock on the Illinois Waterway at an authorized cost of $1.948 billion including mitigation. The authorized plan calls for operating the UMR-IWW System, consistent with requirements to avoid adverse effects on navigation, to address

cumulative environmental impacts of operation of the system and improve the ecological integrity of the UMR-IWW System. The ecosystem restoration portion of the plan consists of large scale projects for fish passage and dam point control to facilitate water level management at specified locations and a programmatic authorization for various types of ecosystem restoration projects (island building, floodplain restoration, water level management, backwater and side channel restoration, wing dam and dike modification, island and shoreline protection, topographic diversity, dam point control, use of dredged material for environmental purposes, tributary confluence restoration, spillway/dam/levee modification for environmental benefit, and land and easement acquisition) with a single project cost not to exceed $25 million. The total ecosystem restoration authorized cost is $1.717 billion.

The UMRR-EMP has received and applied a total of $285,671,000 for its ecosystem restoration efforts, known as Habitat Rehabilitation and Enhancement Projects (HREPs), since its 1986 authorization. This funding has allowed for completion of 54 projects, benefiting approximately 99,000 acres of UMRS habitat at an average approximate cost of $2,900 per acre. Attachment C provides an example of the restoration success of one UMRR-EMP habitat project by showing a time sequence of progressive island loss followed by the reconstruction of those islands and the resulting vegetative response to the restoration efforts (Pool 8 Islands Phase II).

Many species of plants and animals have benefitted from these projects. For example pre- and post-project monitoring has documented that, before restoration of Pool 8 Phase II, there were virtually no target fish using the area. After construction, there was steady increase in the use of the overwintering areas. During the four to six years following project completion, several recreationally important fish species increased their usage of the project area by 2,070 percent to 58,600 percent. These projects, in combination with monitoring and research, have resulted in the development of numerous models (overwinter, aquatic vegetation, wind fetch) that are used to design other projects. This reduces time and costs of project formulation and increases the overall success of projects.

The UMRR-EMP has also applied $137,254,000 towards monitoring and research through its Long Term Resource Monitoring (LTRM) component. Data from LTRM are informing HREP design and overall management of the UMRS, including work on vital issues such as Asian carp. The program has recently completed a comprehensive topographic map of the floodplain and underwater areas of the UMRS, as well as the systems land use and land cover. These data support systemic evaluation of habitat needs within the UMRS and assist in the identification of critical restoration areas. Once projects are selected, these data are used to formulate specific restoration plans. This helps to standardize plan formulation, supports development of hydrology and hydraulics, habitat and other models, targeting areas for more detailed surveys as necessary thereby reducing planning time and costs.

The geographical area covered by the UMRR-EMP and NESP authorities are identical, both apply to the Upper Mississippi River from Minneapolis, Minnesota to Cairo, Illinois and the commercially navigable portions of its tributaries, including the Illinois Waterway In addition, all of the types of ecosystem restoration activities provided for under the UMRR-EMP are also provided for within the NESP authorization. All restoration projects that are undertaken by the UMRR-EMP can be completed or readily transferred to the NESP within 2 years of the NESP receiving sufficient construction funding to support program transition.

The Corps has led several reach planning and objective setting efforts which have identified restoration needs for the UMRS. Restoration projects that help achieve those objectives are identified

by technical teams of local, state, non-governmental organizations (NGO) and Federal representatives. These are evaluated for merit by multi-agency committees at the reach scale and then evaluated for how they help meet systemic goals and objectives. Both the UMRR-EMP and the NESP utilize this list of identified projects areas for selecting future projects. This shared effort, combined with extensive collaboration and coordination, allows both the UMRR-EMP and the NESP to execute efficiently until such time as construction funds are provided for NESP and a seamless and efficient transition can take place. See Attachment D for a side-by-side comparison of the two programs.

Also of note, the Long Term Resource Monitoring Program (LTRMP) is authorized and funded through the UMRR-EMP per the original WRDA 1986 authorization and WRDA 1999 reauthorization. The NESP's WRDA 2007 authorization explicitly provides for continuation of the LTRMP under NESP if funding is no longer provided under UMRR-EMP. Since the LTRMP authorization is the same under both the UMRR-EMP and the NESP, there should be no issues associated with transitioning between the two programs.

III. KEY PRINCIPLES FOR A SUCCESSFUL TRANSITION

In order to maintain the significant benefits to the nation from this Nationally Significant Ecosystem, transition from the UMRR-EMP to the NESP should be orderly and efficient. The following issues should be addressed prior to, and following, transition:

A. Continue to consider funding for the UMRR-EMP in the Corps' budget until the year of transition, when construction funds are provided for NESP. While NESP was authorized in WRDA 2007, construction funding for NESP has not been provided. Historically, the UMRR-EMP has received annual appropriations of nearly $20,000,000. The program has an authorized annual funding limit of $33,170,000.
B. Maintaining a robust UMRR-EMP is essential for two purposes. It will continue uninterrupted restoration of the Nationally Significant UMRS ecosystem and it will ensure that the regional infrastructure of partnership, technical expertise, scientific monitoring and research, and construction capability will be in place for early success in implementing the ecosystem restoration component in the NESP. Until Congress and the Administration budgets and Congress provides appropriation for construction under NESP, the UMRR-EMP should retain all capabilities as provided for in WRDA 1999 (remain fully functional) continuing to provide significant benefits to the UMRS and the Nation through both the HREP and LTRM components.
C. Coordination and shared planning of current projects in planning/design, and construction phases under the UMRR-EMP will enable a seamless transfer into NESP. Attachment E shows the 54 projects that have been completed under the UMRR-EMP and require post-project monitoring and O&M coordination with the project sponsor. Attachment F shows the status of 36 projects; 5 projects currently in construction, and 31 projects are currently in design. Percent completed on a project changes annually; therefore these tables are only current as of the date of this report. When transition occurs, all projects identified in Attachments E and F will be moved from UMRR-EMP within two years. Projects that are under construction at the time of transition will be completed utilizing UMRR-EMP funding if available. If funding is not available these projects will have the highest funding priority under NESP. UMRR-EMP projects that are in some phase of planning/design will be prioritized based upon a number of factors, including how advanced they are in the planning/design process, cost, NESP funding, and ecosystem restoration objectives in place at the time of transition.

D. Scientific and monitoring efforts currently carried out under UMRR-EMP LTRM will integrate into the NESP when construction funds are provided to NESP.
E. Long term resolution of inland navigation funding issues is needed prior to transition to ensure that comparable progress between the navigation and ecosystem restoration component can be maintained.

The UMRR-EMP has served the Nation well for 26 years on the UMRS, and should be kept fully functional until the NESP is funded at levels that will ensure effective and efficient delivery of its ecosystem and navigation components as well as the LTRM component. The Corps will continue to integrate and align management of the two programs in order to ensure that it is prepared to transition the UMRR-EMP to the NESP, when funded by Congress.

ATTACHMENT A

WATER RESOURCES DEVELOPMENT ACT OF 2007
TITLE VIII—UPPER MISSISSIPPI RIVER AND ILLINOIS WATER-WAY SYSTEM

SEC. 8001. DEFINITIONS.
In this title, the following definitions apply:
(1) PLAN.—The term ‘‘Plan’’ means the project for navigation and ecosystem improvements for the Upper Mississippi River and Illinois Waterway System: Report of the Chief of Engineers, dated December 15, 2004.
(2) UPPER MISSISSIPPI RIVER AND ILLINOIS WATERWAY SYSTEM.—The term ‘‘Upper Mississippi River and Illinois Waterway System’’ means the projects for navigation and ecosystem restoration authorized by Congress for— (A) the segment of the Mississippi River from the confluence with the Ohio River, River Mile 0.0, to Upper St. Anthony Falls Lock in Minneapolis-St. Paul, Minnesota, River Mile 854.0; and (B) the Illinois Waterway from its confluence with the Mississippi River at Grafton, Illinois, River Mile 0.0, to T.J. O’Brien Lock in Chicago, Illinois, River Mile 327.0.

SEC. 8002. NAVIGATION IMPROVEMENTS AND RESTORATION.
Except as modified by this title, the Secretary shall undertake navigation improvements and restoration of the ecosystem for the Upper Mississippi River and Illinois Waterway System substantially in accordance with the Plan and subject to the conditions described therein.

SEC. 8003. AUTHORIZATION OF CONSTRUCTION OF NAVIGATION IMPROVEMENTS.
(a) SMALL SCALE AND NONSTRUCTURAL MEASURES.—
(1) IN GENERAL.—The Secretary shall— (A) construct mooring facilities at Locks 12, 14, 18, 20, 22, 24, and LaGrange Lock or other alternative locations that are economically and environmentally feasible;
(B) provide switchboats at Locks 20 through 25; and
(C) conduct development and testing of an appointment
scheduling system.
(2) AUTHORIZATION OF APPROPRIATIONS.—The total cost of projects authorized under this subsection shall be $256,000,000. Such costs are to be paid half from amounts appropriated from the general fund of the Treasury and half from amounts H. R. 1495—244 appropriated from the Inland Waterways Trust Fund. Such sums shall remain available until expended. (b) NEW LOCKS.—
(1) IN GENERAL.—The Secretary shall construct new 1,200- foot locks at Locks 20, 21, 22, 24, and 25 on the Upper Mississippi River and at LaGrange Lock and Peoria Lock on the Illinois Waterway.
(2) AUTHORIZATION OF APPROPRIATIONS.—The total cost of projects authorized under this subsection shall be $1,948,000,000. Such costs are to be paid half from amounts appropriated from the general fund of the Treasury and half from amounts appropriated from the Inland Waterways Trust Fund. Such sums shall remain available until expended.
(c) CONCURRENCE.—The mitigation required for the projects authorized under subsections (a) and (b), including any acquisition of lands or interests in lands, shall be undertaken or acquired concurrently with lands and interests in lands for the projects authorized under subsections (a) and (b), and physical construction required for the purposes of mitigation shall be undertaken concurrently with the physical construction of such projects.

SEC. 8004. ECOSYSTEM RESTORATION AUTHORIZATION.
(a) OPERATION.—To ensure the environmental sustainability of the existing Upper Mississippi River and Illinois Waterway System, the Secretary shall modify, consistent with requirements to avoid adverse effects on navigation, the operation of the Upper Mississippi River and Illinois Waterway System to address the cumulative environmental impacts of operation of the system and improve the ecological integrity of the Upper Mississippi River and Illinois River.

(b) ECOSYSTEM RESTORATION PROJECTS.—
(1) IN GENERAL.—The Secretary shall carry out, consistent with requirements to avoid adverse effects on navigation, ecosystem restoration projects to attain and maintain the sustainability of the ecosystem of the Upper Mississippi River and Illinois River in accordance with the general framework outlined in the Plan.
(2) PROJECTS INCLUDED.—Ecosystem restoration projects may include—
(A) island building;
(B) construction of fish passages;
(C) floodplain restoration;
(D) water level management (including water drawdown);
(E) backwater restoration;
(F) side channel restoration;
(G) wing dam and dike restoration and modification;
(H) island and shoreline protection;
(I) topographical diversity;
(J) dam point control;
(K) use of dredged material for environmental purposes;
(L) tributary confluence restoration;
(M) spillway, dam, and levee modification to benefit the environment; and
(N) land and easement acquisition.
(3) COST SHARING.—
H. R. 1495—245
(A) IN GENERAL.—Except as provided in subparagraphs
(B) and (C), the Federal share of the cost of carrying out an ecosystem restoration project under this subsection shall be 65 percent.
(B) EXCEPTION FOR CERTAIN RESTORATION PROJECTS.—
In the case of a project under this section for ecosystem restoration, the Federal share of the cost of carrying out the project shall be 100 percent if the project—
(i) is located below the ordinary high water mark or in a connected backwater;
(ii) modifies the operation of structures for navigation; or
(iii) is located on federally owned land.
(C) SAVINGS CLAUSE.—Nothing in this subsection affects the applicability of section 906(e) of the Water Resources Development Act of 1986 (33 U.S.C. 2283(e)).
(D) NONGOVERNMENTAL ORGANIZATIONS.—In accordance with section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b), for any project carried out under this title, a non-Federal sponsor may include a nonprofit entity, with the consent of the affected local government.
(4) LAND ACQUISITION.—The Secretary may acquire land or an interest in land for an ecosystem restoration project from a willing seller through conveyance of—
(A) fee title to the land; or
(B) a flood plain conservation easement.
(c) MONITORING.—The Secretary shall carry out a long term resource monitoring, computerized data inventory and analysis, and applied research program for the Upper Mississippi River and Illinois River to determine trends in ecosystem health, to understand systemic changes, and to help identify restoration needs. The program shall consider and adopt the monitoring program established under section 1103(e)(1)(A)(ii) of the Water Resources Development Act of 1986 (33 U.S.C. 652(e)(1)(A)(ii)).
(d) ECOSYSTEM RESTORATION PRECONSTRUCTION ENGINEERING AND DESIGN.—
(1) RESTORATION DESIGN.—Before initiating the construction of any individual ecosystem restoration project, the Secretary shall—
(A) establish ecosystem restoration goals and identify specific performance measures designed to demonstrate ecosystem restoration;
(B) establish the without-project condition or baseline for each performance indicator; and
(C) for each separable element of the ecosystem restoration, identify specific target goals for each performance indicator.

(2) OUTCOMES.—Performance measures identified under paragraph (1)(A) shall include specific measurable environmental outcomes, such as changes in water quality, hydrology, or the well-being of indicator species the population and distribution of which are representative of the abundance and diversity of ecosystem-dependent aquatic and terrestrial species.
(3) RESTORATION DESIGN.—Restoration design carried out as part of ecosystem restoration shall include a monitoring H. R. 1495—246 plan for the performance measures identified under paragraph (1)(A), including—
(A) a timeline to achieve the identified target goals; and
(B) a timeline for the demonstration of project completion.
(e) CONSULTATION AND FUNDING AGREEMENTS.—
(1) IN GENERAL.—In carrying out the environmental sustainability, ecosystem restoration, and monitoring activities authorized in this section, the Secretary shall consult with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin.
(2) FUNDING AGREEMENTS.—The Secretary is authorized to enter into agreements with the Secretary 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 established by this section.
(f) SPECIFIC PROJECTS AUTHORIZATION.—
(1) IN GENERAL.—There is authorized to be appropriated to carry out this subsection $1,717,000,000, of which not more than $245,000,000 shall be available for projects described in subsection (b)(2)(B) and not more than $48,000,000 shall be available for projects described in subsection (b)(2)(J). Such sums shall remain available until expended.
(2) LIMITATION ON AVAILABLE FUNDS.—Of the amounts made available under paragraph (1), not more than $35,000,000 in any fiscal year may be used for land acquisition under subsection (b)(4).
(3) INDIVIDUAL PROJECT LIMIT.—Other than for projects described in subparagraphs (B) and (J) of subsection (b)(2), the total cost of any single project carried out under this subsection shall not exceed $25,000,000.
(4) MONITORING.—In addition to amounts authorized under paragraph (1), there are authorized $10,420,000 per fiscal year to carry out the monitoring program under subsection (c) if such sums are not appropriated pursuant to section 1103(e)(4) the Water Resources Development Act of 1986 (33 U.S.C. 652(e)(4)).
(g) IMPLEMENTATION REPORTS.—
(1) IN GENERAL.—Not later than June 30, 2009, and every 4 years thereafter, the Secretary shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives an implementation report that—
(A) includes baselines, milestones, goals, and priorities for ecosystem restoration projects; and
(B) measures the progress in meeting the goals.
(2) ADVISORY PANEL.—
(A) IN GENERAL.—The Secretary shall appoint and convene an advisory panel to provide independent guidance in the development of each implementation report under paragraph (1).
(B) PANEL MEMBERS.—Panel members shall include— H. R. 1495—247
(i) one representative of each of the State resource agencies (or a designee of the Governor of the State) from each of the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin;
(ii) one representative of the Department of Agriculture;
(iii) one representative of the Department of Transportation;
(iv) one representative of the United States Geological Survey;
(v) one representative of the United States Fish and Wildlife Service;
(vi) one representative of the Environmental Protection Agency;
(vii) one representative of affected landowners;
(viii) two representatives of conservation and environmental advocacy groups; and
(ix) two representatives of agriculture and industry advocacy groups.
(C) CHAIRPERSON.—The Secretary shall serve as chairperson of the advisory panel.

(D) APPLICATION OF FEDERAL ADVISORY COMMITTEE ACT.—The Advisory Panel and any working group established by the Advisory Panel shall not be considered an advisory committee under the Federal Advisory Committee Act (5 U.S.C. App.).
(h) RANKING SYSTEM.—
(1) IN GENERAL.—The Secretary, in consultation with the Advisory Panel, shall develop a system to rank proposed projects.
(2) PRIORITY.—The ranking system shall give greater weight to projects that restore natural river processes, including those projects listed in subsection (b)(2).

SEC. 8005. COMPARABLE PROGRESS.
(a) IN GENERAL.—As the Secretary conducts pre-engineering, design, and construction for projects authorized under this title, the Secretary shall—
(1) select appropriate milestones;
(2) determine, at the time of such selection, whether the projects are being carried out at comparable rates; and
(3) make an annual report to Congress, beginning in fiscal year 2009, regarding whether the projects are being carried out at a comparable rate.
(b) NO COMPARABLE RATE.—If the Secretary or Congress determines under subsection (a)(2) that projects authorized under this title are not moving toward completion at a comparable rate, annual funding requests for the projects shall be adjusted to ensure that the projects move toward completion at a comparable rate in the future.

ATTACHMENT B

Environmental Management Program Authorization

Section 1103 of the Water Resources Development Act of 1986 (P.L. 99-662) as amended by
Section 405 of the Water Resources Development Act of 1990 (P.L. 101-640),
Section 107 of the Water Resources Development Act of 1992 (P.L. 102-580),
Section 509 of the Water Resources Development Act of 1999 (P.L. 106-53),
Section 2 of the Water Resources Development Technical Corrections of 1999 (P.L. 106-109), and
Section 3177 of the Water Resources Development Act of 2007 (P.L. 110-114).

Additional Cost Sharing Provisions

Section 906(e) of the Water Resources Development Act of 1986 (P.L. 99-662) as amended by Section 221 of the Water Resources Development Act of 1999 (P.L. 106-53).

SEC. 1103. UPPER MISSISSIPPI RIVER PLAN.

(a)(1) This section may be cited as the "Upper Mississippi River Management Act of 1986".
(2) To ensure the coordinated development and enhancement of the Upper Mississippi River system, it is hereby declared to be the intent of Congress to recognize that system as a nationally significant ecosystem and a nationally significant commercial navigation system. Congress further recognizes that the system provides a diversity of opportunities and experiences. The system shall be administered and regulated in recognition of its several purposes.

(b) For purposes of this section --
(1) the terms "Upper Mississippi River system" and "system" mean those river reaches having commercial navigation channels on the Mississippi River main stem north of Cairo, Illinois; the Minnesota River, Minnesota; Black River, Wisconsin; Saint Croix River, Minnesota and Wisconsin; Illinois River and Waterway, Illinois; and Kaskaskia River, Illinois;
(2) the term "Master Plan" means the comprehensive master plan for the management of the Upper Mississippi River system, dated January 1, 1982, prepared by the Upper Mississippi River Basin Commission and submitted to Congress pursuant to Public Law 95-502;
(3) the term "GREAT I, GREAT II, and GRRM studies" means the studies entitled "GREAT Environmental Action Team--GREAT I--A Study of the Upper Mississippi River", dated September 1980, "GREAT River Environmental Action Team--GREAT II--A Study of the Upper Mississippi River", dated December 1980, and "GREAT River Resource Management Study", dated September 1982; and
(4) the term "Upper Mississippi River Basin Association" means an association of the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, formed for the purposes of cooperative effort and united assistance in the comprehensive planning for the use, protection, growth, and development of the Upper Mississippi River System.

(c)(1) Congress hereby approves the Master Plan as a guide for future water policy on the Upper Mississippi River system. Such approval shall not constitute authorization of any recommendation contained in the Master Plan.
(2) Section 101 of Public Law 95-502 is amended by striking out the last two sentences of subsection (b), striking out subsection (i), striking out the final sentence of subsection (j), and redesignating subsection "(j)" as subsection "(i)".

(d)(1) The consent of the Congress is hereby given to the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, or any two or more of such States, to enter into negotiations for agreements, not in conflict with any law of the United States, for cooperative effort and mutual assistance in the comprehensive planning for the use, protection, growth, and development of the

Upper Mississippi River system, and to establish such agencies, joint or otherwise, or designate an existing multi-State entity, as they may deem desirable for making effective such agreements. To the extent required by Article I, section 10 of the Constitution, such agreements shall become final only after ratification by an Act of Congress.
(2) The Secretary is authorized to enter into cooperative agreements with the Upper Mississippi River Basin Association or any other agency established under paragraph (1) of this subsection to promote and facilitate active State government participation in the river system management, development, and protection.
(3) For the purpose of ensuring the coordinated planning and implementation of programs authorized in subsections (e) and (h)(2) of this section, the Secretary shall enter into an interagency agreement with the Secretary of the Interior to provide for the direct participation of, and transfer of funds to, the Fish and Wildlife Service and any other agency or bureau of the Department of the Interior for the planning, design, implementation, and evaluation of such programs.
(4) The Upper Mississippi River Basin Association or any other agency established under paragraph (1) of this subsection is hereby designated by Congress as the caretaker of the master plan. Any changes to the master plan recommended by the Secretary shall be submitted to such association or agency for review. Such association or agency may make such comments with respect to such recommendations and offer other recommended changes to the master plan as such association or agency deems appropriate and shall transmit such comments and other recommended changes to the Secretary. The Secretary shall transmit such recommendations along with the comments and other recommended changes of such association or agency to the Congress for approval within 90 days of the receipt of such comments or recommended changes.

(e) Program Authority

(1) Authority
(A) In general. The Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, may undertake, as identified in the master plan
(i) a program for the planning, construction, and evaluation of measures for fish and wildlife habitat rehabilitation and enhancement; and
(ii) implementation of a long-term resource monitoring, computerized data inventory and analysis, and applied research program, including research on water quality issues affecting the Mississippi River (including elevated nutrient levels) and the development of remediation strategies.
(B) Advisory committee. In carrying out subparagraph (A)(i), the Secretary shall establish an independent technical advisory committee to review projects, monitoring plans, and habitat and natural resource needs assessments.
(2) REPORTS. — Not later than December 31, 2004, and not later than December 31 of every sixth year thereafter, the Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, shall submit to Congress a report that —
(A) contains an evaluation of the programs described in paragraph (1);
(B) describes the accomplishments of each of the programs;
(C) provides updates of a systemic habitat needs assessment; and
(D) identifies any needed adjustments in the authorization of the programs.
(3) For purposes of carrying out paragraph (1)(A)(i) of this subsection, there is authorized to be appropriated to the Secretary $22,750,000 for fiscal year 1999 and each fiscal year thereafter.
(4) For purposes of carrying out paragraph (1)(A)(ii) of this subsection, there is authorized to be appropriated to the Secretary $10,420,000 for fiscal year 1999 and each fiscal year thereafter.
(5) Authorization of appropriations.—There is authorized to be appropriated to carry out paragraph (1)(B) $350,000 for each of fiscal years 1999 through 2009.
(6) Transfer of amounts.—For fiscal year 1999 and each fiscal year thereafter, the Secretary, in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, may transfer not to exceed 20 percent of the amounts appropriated to carry out clause (i) or (ii) of paragraph (1)(A) to the amounts appropriated to carry out the other of those clauses. (7)(A) Notwithstanding the provisions of subsection (a)(2) of this section, the costs of each project carried out pursuant to paragraph (1)(A)(i) of this subsection shall be allocated between the Secretary and the appropriate non-Federal sponsor in accordance with the provisions of section

906(e) of this Act; except that the costs of operation and maintenance of projects located on Federal lands or lands owned or operated by a State or local government shall be borne by the Federal, State, or local agency that is responsible for management activities for fish and wildlife on such lands and, in the case of any project requiring non-Federal cost sharing, the non-Federal share of the cost of the project shall be 35 percent.
(B) Notwithstanding the provisions of subsection (a)(2) of this section, the cost of implementing the activities authorized by paragraph (1)(A)(ii) of this subsection shall be allocated in accordance with the provisions of section 906 of this Act, as if such activity was required to mitigate losses to fish and wildlife.
(8) None of the funds appropriated pursuant to any authorization contained in this subsection shall be considered to be chargeable to navigation.

(f) (1) The Secretary, in consultation with any agency established under subsection (d)(1) of this section, is authorized to implement a program of recreational projects for the system substantially in accordance with the recommendations of the GREAT I, GREAT II, and GRRM studies and the master plan reports. In addition, the Secretary, in consultation with any such agency, shall, at Federal expense, conduct an assessment of the economic benefits generated by recreational activities in the system. The cost of each such project shall be allocated between the Secretary and the appropriate non-Federal sponsor in accordance with title I of this Act.
(2) For purposes of carrying out the program of recreational projects authorized in paragraph (1) of this subsection, there is authorized to be appropriated to the Secretary not to exceed $500,000 per fiscal year for each of the first 15 fiscal years beginning after the effective date of this section.

(g) The Secretary shall, in his budget request, identify those measures developed by the Secretary, in consultation with the Secretary of Transportation and any agency established under subsection (d)(1) of this section, to be undertaken to increase the capacity of specific locks throughout the system by employing nonstructural measures and making minor structural improvements.

(h)(1) The Secretary, in consultation with any agency established under subsection (d)(1) of this section, shall monitor traffic movements on the system for the purpose of verifying lock capacity, updating traffic projections, and refining the economic evaluation so as to verify the need for future capacity expansion of the system.
(2) Determination.
(A) In general. The Secretary in consultation with the Secretary of the Interior and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin, shall determine the need for river rehabilitation and environmental enhancement and protection based on the condition of the environment, project developments, and projected environmental impacts from implementing any proposals resulting from recommendations made under subsection (g) and paragraph (1) of this subsection.
(B) Requirements. The Secretary shall
(i) complete the ongoing habitat needs assessment conducted under this paragraph not later than September 30, 2000; and
(ii) include in each report under subsection (e)(2) the most recent habitat needs assessment conducted under this paragraph.
(3) There is authorized to be appropriated to the Secretary such sums as may be necessary to carry out this subsection.

(i) (1) The Secretary shall, as he determines feasible, dispose of dredged material from the system pursuant to the recommendations of the GREAT I, GREAT II, and GRRM studies.
(2) The Secretary shall establish and request appropriate Federal funding for a program to facilitate productive uses of dredged material. The Secretary shall work with the States which have, within their boundaries, any part of the system to identify potential users of dredged material.

(j) The Secretary is authorized to provide for the engineering, design, and construction of a second lock at locks and dam 26, Mississippi River, Alton, Illinois and Missouri, at a total cost of $220,000,000, with a first Federal cost of $220,000,000. Such second lock shall be constructed at or in the vicinity of the location of the replacement lock authorized by section 102 of Public Law 95-502. Section 102 of this Act shall apply to the project authorized by this subsection.

SEC. 906(e). COST SHARING.

(e) In those cases when the Secretary, as part of any report to Congress, recommends activities to enhance fish and wildlife resources, the first costs of such enhancement shall be a Federal cost when--

(1) such enhancement provides benefits that are determined to be national, including benefits to species that are identified by the National Marine Fisheries Service as of national economic importance, species that are subject to treaties or international convention to which the United States is a party, and anadromous fish;

(2) such enhancement is designed to benefit species that have been listed as threatened or endangered by the Secretary of the Interior under the terms of the Endangered Species Act, as amended (16 U.S.C. 1531, et seq.), or

(3) such activities are located on lands managed as a national wildlife refuge.

When benefits of enhancement do not qualify under the preceding sentence, 25 percent of such first costs of enhancement shall be provided by non-Federal interests under a schedule of reimbursement determined by the Secretary. Not more than 80 percent of the non-Federal share of such first costs may be satisfied through in-kind contributions, including facilities, supplies, and services that are necessary to carry out the enhancement project. The non-Federal share of operation, maintenance, and rehabilitation of activities to enhance fish and wildlife resources shall be 25 percent.

ATTACHMENT C

UMRR-EMP Pool 8 Islands HREP Phase II, near Stoddard, Wisconsin

October 1961 **August 1994** **August 2000**

- The 1961 condition of this project area – key things to look for are the islands and beds of aquatic vegetation.
- The 1994 condition shows that the islands have been eroded and the beds of aquatic vegetation lost.
- The 2000 condition shows that aquatic vegetation and islands have been restored in the project area.

Other data show that bass and bluegill have responded dramatically to the project, increasing 2,070 percent and 58,600 percent respectively, from pre-project conditions. Now, anglers drive up to several hundred miles to fish the area.

ATTACHMENT D

Comparison of the Key Components of the UMRR-EMP and the NESP Programs

Key Component	UMRR-EMP	NESP
Study Area or Extent	Commercial navigation channel and associated floodplain of the mainstem of the UMRS north of Cairo, IL; Minnesota River, Black River, St. Croix River, Illinois River and Waterway, and Kaskaskia River. Area covered 4,300 sq. mi.	Same as UMRR-EMP
Population	15 million people	Same as UMRR-EMP
States/Corps Districts	5 states (IL, IA, MN, MO, WI) / 3 dist. (MVR, MVS, MVP)	Same as UMRR-EMP
Funding Source (I or C)	Construction	Investigations
Recommended Plan Cost	$1.7 b (authorized annual funding of $33.17 m for 50 yrs.)	Ecosystem $$1.717b and Navigation $2.206b
FY11 Appropriation	$17,787 m	$0
FY12 Budget	$17,880 m	$0
# Projects Completed	Completed 54 projects, impacting 99,000 ac.	0 (pending Construction funding)
# Projects Authorized	90 projects are currently approved. Projects are not specifically authorized because the program is a continuing authority as provided by Congress.	Approx. 225 ecosystem projects plus 7 locks and small scale navigation improvements
Origin	1982 Master Plan prepared by the UMR Basin Commission	USACE 2004 Navigation Feasibility Study
Authorization	1986 WRDA (original); 1999 WRDA (reauthorization)	WRDA 2007 Navigation Efficiency improvements and Dual purpose management for Navigation and environment. Section 216 study review of completed 9' Channel Nav. Project
Authorization Period / Funding	No time limits / $33.17 m per year	Recommended Plan and First Increment are the same. - No established time limit. Ecosystem authorized at $1.717b and Navigation authorized at $2.206b.
Reports to Congress	3 completed - Dec 31, 1998, 2004, 2010; every 6 years thereafter	June 30, 2009 and every 4 years thereafter
Sponsor- Cost Sharing Status	100% Federal on national refuge lands 65% / 35% on other lands	100% Federal on Federal lands and in areas below the ordinary high water mark. 65% / 35% on other lands
NGOs as non-Federal Sponsors	YES	YES

Key Component	UMRR-EMP	NESP
Delegation/Approval	$1,000,000 District Approval $5,000,000 Division Approval	$5,000,000 District Approval $25,000,000 Division Approval
LTRMP Status and Trend Monitoring	Includes LTRMP - 6 biological field stations in 5 states. Approx 31.4% of the UMRR-EMP annual budget is used for long term resource monitoring to support management and understanding of the UMRS.	Authorized to continue under NESP if transition occurs.
Monitoring and Adaptive Management Components	The program has used adaptive management to learn and improve planning, engineering, design, and evaluation criteria since inception. This has become more formal in the past three years.	Recommends 10% of restoration program for adaptive management. Also includes a Science Panel
Partnerships	Extensive partnership network that engages both technical and policy staff from five states, five Federal agencies, local units of government, NGOs, and the public.	Similar to UMRR-EMP. However, it creates an Advisory Panel that formally includes NGOs and is Federal Advisory Committee Act -exempt.
Type of Authorization - Purpose	Single Purpose ecosystem rehabilitation and enhancement. Authorizing language declared the UMRS as both a nationally significant ecosystem and commercial navigation system. Further Congress expressed its desire for "the coordinated development and enhancement of the UMRS".	Formal Dual purpose: Ecosystem rehabilitation and enhancement and improve the navigation system through large and small scale measures.
Unique Aspects	First large river ecosystem restoration and monitoring program in the nation.	Explicit adaptive management. Dual purpose. Systems-based

Attachment E

UMRR-EMP HREP Completed Projects (F), as of April 2012, by District St. Paul (MVP), Rock Island (MVR), or St. Louis (MVS)

Project Name	USACE District	Status	Percent Complete	Acres Affected	Backwater Dredging	Water Level Mgmt	Islands	Bank Stabilization	Side Channel Restoration	Aeration	Other*
Ambrough Slough, WI	MVP	F	100	2,920	X			X	X	X	
Blackhawk Park, WI	MVP	F	100	150					X	X	
Bussey Lake, IA	MVP	F	100	1,680	X	X	X			X	
Clear Lake (Finger Lake) Dredging, MN	MVP	F	100	20	X						
Cold Springs, WI	MVP	F	100	30	X					X	
East Channel, WI, MN	MVP	F	100	320				X			
Finger Lakes, MN	MVP	F	100	530		X				X	X
Guttenberg Waterfowl Ponds, IA	MVP	F	100	80	X	X					
Indian Slough, WI	MVP	F	100	1000	X			X	X		X
Island 42, MN	MVP	F	100	420	X				X	X	
Lake Onalaska, WI	MVP	F	100	2,750	X		X	X		X	
Lansing Big Lake, IA	MVP	F	100	6,420					X	X	
Long Lake, WI	MVP	F	100	40				X		X	
Long Meadow Lake, MN	MVP	F	100	2,340		X					X
Mississippi Bank Stabilization, IA, MN, WI	MVP	F	100	1,300				X			
Peterson Lake, MN	MVP	F	100	990			X	X	X		
Polander Lake, MN	MVP	F	100	790	X		X	X			
Pool 8 Islands Phase I, WI	MVP	F	100	1000	X		X	X			
Pool 8 Islands Phase II,WI	MVP	F	100	600	X		X	X			X
Pool 8 Islands Phase III, WI	MVP	F	100	3,320	X		X	X	X		X
Pool 9 Islands, WI	MVP	F	100	410			X				
Pool Slough, IA, MN	MVP	F	100	620		X					
Rice Lake - MN	MVP	F	100	810	X	X					X
Small Scale Drawdown, WI	MVP	F	100	90		X					X
Spring Lake Islands, WI	MVP	F	100	520	X		X	X	X	X	X
Spring Lake Peninsula, WI	MVP	F	100	30	X		X	X	X		

Project Name	USACE District	Status	Percent Complete	Acres Affected	Backwater Dredging	Water Level Mgmt	Islands	Bank Stabilization	Side Channel Restoration	Aeration	Other*
Trempeleau, WI	MVP	F	100	5,900		X		X			
Andalusia Refuge, IL	MVR	F	100	320	X	X	X			X	
Banner Marsh, IL	MVR	F	100	4,290		X					X
Bay Island, MO	MVR	F	100	750		X					X
Bertom McCartney Lakes, WI	MVR	F	100	2,340	X		X	X	X		X
Big Timber, IA	MVR	F	100	1,240	X						X
Brown's Lake, IA	MVR	F	100	1,120	X					X	X
Chautauqua Refuge, IL	MVR	F	100	3,940		X					
Cottonwood Island, MO	MVR	F	100	990	X						X
Lake Odessa, IA	MVR	F	99**	6,320	X	X		X	X		X
Gardner (Long Island) Division, IL	MVR	F	100	6,090	X			X			X
Monkey Chute, MO	MVR	F	100	110	X						
Peoria Lake, IL	MVR	F	100	2,500		X	X				X
Pleasant Creek, IA	MVR	F	100	680		X					
Pool 11 Islands-Mud Lake, IL, WI	MVR	F	100	4,550	X		X	X	X	X	X
Pool 11 Islands-Sunfish Lake, IL, WI	MVR	F	100	4,000	X		X	X	X	X	X
Potters Marsh, IL	MVR	F	100	1,200	X	X				X	X
Princeton Refuge, IA	MVR	F	100	1,080		X					X
Spring Lake, IL	MVR	F	100	3,610		X					X
Batchtown, IL	MVS	F	99**	3,280		X					X
Calhoun Point, IL	MVS	F	99**	2,140	X	X					
Clarksville Refuge, MO	MVS	F	100	310		X					
Cuivre Island, MO	MVS	F	100	2,180		X			X		X
Dresser Island, MO	MVS	F	100	1,030	X	X					
Pharrs Island, MO	MVS	F	100	670							X
Stag and Keaton Islands, MO	MVS	F	100	470					X		
Stump Lake, IL	MVS	F	100	3,170		X					
Swan Lake, IL	MVS	F	99**	4,920	X	X					
Completed Projects (54)				**98,380**							

*** This category includes floodplain and tributary restoration and other newer and complementary restoration techniques.**
****Projects do not require additional construction funding to complete.**

ATTACHMENT F

Status of UMRR-EMP HREPs in Design (D)* and Construction (C), as of April 2012 by District St. Paul (MVP), Rock Island (MVR), or St. Louis (MVS) and Percent of Project Completed

Project Name	USACE District	Status	Percent Complete	Acres Affected	Backwater Dredging	Water Level Mgmt	Islands	Bank Stabilization	Side Channel Restoration	Aeration	Other
Capoli Slough, WI	MVP	C	35	820	X		X	X	X		X
Clear Lake Area Habitat Restoration, MN	MVP	D	1	185	X		X				
Lock & Dam 3 Fish Passage, WI	MVP	D	15	660							X
Lake Winneshiek, WI	MVP	D	8	5,170	X		X	X	X		X
Harpers Slough, IA, WI	MVP	D	10	1,880	X		X	X	X		
Conway Lake, IA	MVP	D	2	1,110	X	X	X	X	X	X	X
Bass Ponds, Marsh, and Wetland, MN	MVP	D	1	390	X	X			X		X
Lower Pool 10 Island and Backwater	MVP	D	1	2,000	X		X				X
McGregor, WI	MVP	D	1	1,000	X		X				X
North and Sturgeon Lakes, MN	MVP	D	1	4,600	X	X	X				X
Weaver Bottoms, MN	MVP	D	1	4,880	X		X				X
Fox Island, MO	MVR	C	60	2,030		X					X
Rice Lake-IL	MVR	C	50	6,350		X					X
Pool 12 Overwintering, IA, IL	MVR	D	25	7,990	X						X
Huron Island, IA	MVR	D	18	2,670	X	X					X
Beaver Island, IA	MVR	D	3	1,750	X					X	X
Boston Bay, IL	MVR	D	1	900	X	X				X	X
Delair Division, IL	MVR	D	1	2,080		X				X	X
Keithsburg Division, IL	MVR	D	1	1,390		X			X		X
Snyder Slough Backwater Complex, WI	MVR	D	1	4,280	X		X				X
Steamboat Island, IA	MVR	D	1	1,280	X		X				X
Turkey River Bottoms Delta and Backwater, IA, WI	MVR	D	1	3,150	X	X		X			X
Pool 25 and 26 Islands, MO	MVS	C	35	4,020	X		X	X			
Ted Shanks, MO	MVS	C	15	3,330		X					X
Ft Chartres Side Channel, MO	MVS	D	7	60					X		

Project Name	USACE District	Status	Percent Complete	Acres Affected	Backwater Dredging	Water Level Mgmt	Islands	Bank Stabilization	Side Channel Restoration	Aeration	Other
Rip Rap Landing, IL	MVS	D	6	1,810		X			X		
Clarence Cannon, MO	MVS	D	5	3,590		X			X		X
Glades Wetland Complex, IL	MVS	D	1	320	X	X					X
Godar Refuge, IL	MVS	D	1	250		X			X		X
Harlow Island, MO	MVS	D	1	1,300					X		X
Piasa And Eagles Nest Islands, IL	MVS	D	1	390	X		X				X
Pool 24 Islands, MO	MVS	D	1	3,150	X					X	X
Red's Landing Wetlands, IL	MVS	D	1	1,620		X			X	X	X
Schenimann, MO	MVS	D	15	705	X				X		
West Alton Tract, MO	MVS	D	1	610	X		X		X		X
Wilkinson Island, IL	MVS	D	5	700	X		X		X		X
Projects Under Construction (5)				16,550							
Projects in Design (31)				61,870							
Total (36)				**78,420**							

*In UMRR-EMP projects are considered in design from when a project fact sheet is approved until approval of the Definite Project Report (DPR),which incorporates both reconnaissance and feasibility level planning with periodic review and approval by the Major Subordinate Command.