

Upper Mississippi River System Environmental Design Handbook Chapter 2

For the past few years, the Corps has been working on what is known as the Restructured Upper Mississippi River-Illinois Waterway Feasibility Study, the heart of which is a multibillion-dollar proposal to double the length of up to a dozen locks on the river. The Research Council first reviewed the feasibility study in 2001 during controversies over the accuracy of models being used by the Corps to justify lock expansion based on increased demand for barge transportation. More than 100 million tons of cargo--half of it grain destined for international markets, the other half goods such as construction materials, coal, and chemicals--are shipped along the navigation system each year. The locks, which along with dams allow barges to traverse uneven river depths, were originally designed for "tows" of barges up to 600 feet long, but the length of a typical tow has increased, forcing the Corps to look for ways to relieve congestion. The book finds the U.S. Army Corps of Engineers has made good progress in broadening its proposed plan for navigation improvements on the Upper Mississippi River-Illinois Waterway system to give greater consideration to ecological restoration. However, the plan still does not provide sufficient economic justification for expanding locks on the rivers because of flaws in the models the Corps used to predict demand for barge transportation. Little attention is paid to inexpensive, nonstructural navigation improvements that could help better manage existing levels of barge traffic. The revised plan has been usefully expanded to include many creative and potentially useful ecosystem restoration measures. These measures, however, should be more firmly grounded in river science principles and more broadly consider ways the river's ecology might affect or be affected by navigation, recreation and other uses.

Definite Project Report with Integrated Environmental Assessment (R-13F) : Pool 11 Islands Habitat Rehabilitation and Enhancement : Pool 11, Mississippi River Miles 583.3 Through 593.0, Dubuque County, Iowa, and Grant County, Wisconsin

Long Lake Habitat Rehabilitation and Enhancement Project

Second Report

Crs Report for Congress

Fifth annual addendum

Big Timber Refuge Rehabilitation and Enhancement, Upper Mississippi River System Environmental Management Program, Louisa County, Definite Project Report and Integrated EA.

The overall objectives of this report are to assess the impacts, both positive and negative, of the Corps of Engineers' activities on Pool 1 of the Upper Mississippi River. An analysis of natural and socioeconomic systems is included. The natural systems include terrestrial and aquatic plant and animal life as well as the nature of the land and water quality. Socioeconomic systems include industrial and recreational activities, and cultural considerations. (Author).

Definite Project Report with Integrated Environmental Assessment (R-12D) Spring Lake Rehabilitation and Enhancement, Pool 13, Mississippi Rivers Mile 532 Through 536, Carroll County, Illinois

Environmental Impact Statement

Post-construction Performance Evaluation Report Supplement (PERS1) : Monkey Chute Habitat Rehabilitation and Enhancement Project : Pool 21, River Mile 325, Marion County, Missouri

Upper Mississippi River System Environmental Management Program, Definite Project Report (R-7F) with Integrated Environmental Assessment, Lake Chautauqua Rehabilitation and Enhancement, La Grange Pool, Illinois Waterway Mason County, Illinois

Upper Mississippi River System Environmental Management Program : Pool 7, Upper Mississippi River, Trempealeau and La Crosse Counties, Wisconsin

Upper Mississippi River System Environmental Management Program : Fourth Annual Addendum

Recent proposals to expand the Upper Mississippi River-Illinois Waterway (UMR-IWW) -- a major transportation route for products moving to and from Illinois, Iowa, Minnesota, Missouri, and Wisconsin -- have met with significant controversy. Some of this controversy centers on the cumulative environmental effects of the current navigation system and the proposed expansion. The Upper Mississippi River System (UMRS) -- which includes the navigation channel and surrounding floodplain -- supports an unusually large number of species for a temperate river. The UMR-IWW navigation system alters UMRS habitat and contributes to a decline in the abundance of some species. For example, locks, dams, and other channel structures inhibit the movement of fish between and within river segments; fill side channels, backwaters, and wetlands with sediment; and suppress plant growth by reducing water clarity. In 2001, in response to criticism that draft navigation feasibility studies did not look at navigation's cumulative environmental effects, the Corps restructured its feasibility study to include an ecosystem restoration component. In late September 2004, the Corps released a final feasibility report recommending that Congress approve a 50-year framework for combined ecosystem restoration and navigation improvements. The ecosystem restoration component is aimed at maintaining and restoring a broad array ...

GREAT II, Great River Environmental Action Team II, Upper Mississippi River, Guttenberg, Iowa to Saverton, Missouri, Dredged Material Uses Work Group, Appendix

Upper Mississippi River System Environmental Management Program : Pool 9, Upper Mississippi River, Houston County, Minnesota and Allamakee County, Iowa

Definite Project Report (DPR) with Integrated Environmental Assessment Stage II, Appendix F, Fox Island Division Habitat Rehabilitation and Enhancement Project Hazardous, Toxic, and Radioactive Waste Documentation Report, Mississippi River Pool 20, River Miles 358.5-353.6, Clark County, Missouri

Dresser Island Wetland Habitat Rehabilitation

Environmental Work Team Technical Report

Environmental Science Panel Report

Lake Chautauqua is a 3,250-acre floodplain lake and wetland complex located in Mason County, Illinois, within the LaGrange pool of the Illinois Waterway between river miles 124 and 128 (see plate 1). The lake is formed by a 9-mile perimeter levee and is divided into an upper and lower lake by a cross dike. The area is presently managed by migratory waterfowl as part of the Chautauqua National Wildlife Refuge. The goals for this project are the enhancement of waterfowl and fishery habitats. In order to accomplish these goals, the following design objectives were identified: (1) Increase submergent and emergent vegetation (2) create flowing side channel and deepwater side alternatives were considered to meet the stated objectives: (A) no Federal action, (B) improve water control, (C) construct barrier islands, (D) excavate flowing side channel, and (E) raise levee elevations.

Guide for Preparation of Reports for the Upper Mississippi River System Long Term Resource Monitoring Program

Upper Mississippi River System Environmental Management Program : Definite Project Report, Environmental Documentation (SP-3)

Summary Resource Description, Upper Mississippi River System: Water quantity and quality

Pool 9 Island Construction Habitat Rehabilitation and Enhancement Project

Lake Onalaska Dredge Cut & Island Creation Habitat Rehabilitation and Enhancement Project

Establishing System-wide Goals and Objectives for the Upper Mississippi River System

Upper Mississippi River System Environmental Management Program: AppendixesUpper Mississippi River System Environmental Management Program: Fourth Annual AddendumBig Timber Refuge Rehabilitation and Enhancement. Upper Mississippi River System Environmental Management Program, Louisa County, Definite Project Report and Integrated EA.

Mississippi River System Environmental Management ProgramDefinite Project Report (SL-9) with Integrated Environmental Assessment, Stag Island Habitat Rehabilitation and Enhancement Project, Pool 25, Mississippi River, Lincoln County, MissouriUpper Mississippi River System Environmental Management ProgramFifth annual addendumUpper Mississippi River System Environmental Management Program Definite Project ReportDrury Island Habitat Rehabilitation and Enhancement Project : Pool 4 Upper Mississippi River, Wabasha County, MinnesotaUpper Mississippi River System Environmental Management ProgramDefinite Project Report with Integrated Environmental Assessment (R-8), Bay Island

Rehabilitation and Enhancement Pool 22, Mississippi River Miles 311 Through 312 Marion County, MissouriLong Lake HREP Flood Damage RepairUpper Mississippi River System Environmental Management Program : Pool 7, Upper Mississippi River, Trempealeau [i.e. Trempealeau] County, WisconsinUpper Mississippi River System Environmental Management ProgramDefinite Project Report with Integrated Environmental Assessment (R-9F) : Potters Marsh Rehabilitation and Enhancement : Pool 13, Mississippi River Miles 522.5 Through 526.0, Carroll and Whiteside Counties, IllinoisUpper Mississippi River System Environmental Management Program (EMP)Definite Project Report (DPR) with Integrated Environmental Assessment Stage II, Appendix F, Fox Island Division Habitat Rehabilitation and Enhancement Project Hazardous, Toxic, and Radioactive Waste Documentation Report, Mississippi River Pool 20, River Miles 358.5-353.6, Clark County, MissouriComprehensive Master Plan for the Management of the Upper Mississippi River BasinEnvironmental Impact StatementLong Lake Habitat Rehabilitation and Enhancement ProjectUpper Mississippi River System Environmental Management Program : Pool 7, Upper Mississippi River, Trempealeau and La Crosse Counties, WisconsinUpper Mississippi River System Environmental Management ProgramDefinite Project Report with Integrated Environmental Assessment (R-12D) Spring Lake Rehabilitation and Enhancement, Pool 13, Mississippi Rivers

536, Carroll County, IllinoisUpper Mississippi River System Environmental Management Program Definite Project ReportPolander Lake Habitat Rehabilitation and Enhancement Project : Pool 5A Upper Mississippi River, Winona County, MinnesotaSeven Year (YR) Post-construction Performance Evaluation Report for Potters Marsh Habitat Rehabilitation and Enhancement ProjectSummary Resource Description, Upper Mississippi River System: Water quantity and qualityUpper Mississippi River System Environmental Management Program (EMP)Definite Project Report (DPR) with Integrated Environmental Assessment Stage II, Appendix F, Fox Island Division Habitat Rehabilitation and Enhancement Project Hazardous, Toxic, and Radioactive Waste Documentation Report, Mississippi River Pool 20, River Miles 358.5-353.6, Clark County, MissouriUpper Mississippi River System Environmental Management ProgramPost-construction Performance Evaluation Report (PERS1) : Monkey Chute Habitat Rehabilitation and Enhancement Project : Pool 21, River Mile 325, Marion County, MissouriComprehensive Master Plan for the Management of the Upper Mississippi River System Environmental Management ProgramPost-construction Initial Performance Evaluation Report (IPER4F) : Bay Island Habitat Rehabilitation and Enhancement Project : Pool 22, Mississippi River Miles 311-312, Marion County, MissouriUpper Mississippi River System Environmental Management ProgramDefinite Project Report (R-7F) with Integrated Environmental Assessment, Lake Chautauqua Rehabilitation and Enhancement, La Grange Pool, Illinois Waterway Mason County, Illinois

Seven Year (YR) Post-construction Performance Evaluation Report for Potters Marsh Habitat Rehabilitation and Enhancement Project

Upper Mississippi River System

Drury Island Habitat Rehabilitation and Enhancement Project : Pool 4 Upper Mississippi River, Wabasha County, Minnesota

Review of the U.S. Army Corps of Engineers Restructured Upper Mississippi River-Illinois Waterway Feasibility Study

Proceedings of the Engineering, Design, and Construction Workshop

Polander Lake Habitat Rehabilitation and Enhancement Project : Pool 5A Upper Mississippi River, Winona County, Minnesota

The Mississippi is the greatest river in North America, gathering run-off from 22 states draining 1.2 million square miles. It is the third largest watershed in the world, flowing 2,348 miles to the Gulf of Mexico. Millions of people live on its banks and draw life from its waters. Over five hundred kinds of animals live among the diverse plant communities that thrive in and along the river. Man, in his progress, has put the river to many varied and sometimes conflicting uses. The pressures of man's use of the river are feared to be degrading the environmental qualities of the river. More information is needed on the complex interactions of the river's resources and these resource reactions to mans activities on the river. When this information is obtained, it can then be used to determine where problems exist and the alternatives available to man to solve these problems and coordinate river uses to minimize conflicts. In response to increasing public concern for the environmental quality of the river, the Great River Study was authorized by Congress in the Water Resources Development Act of 1976 (PL94-587). This legislation authorizes the U.S. Army Corps of Engineers ... to investigate and study, in cooperation with interested states and Federal agencies, through the Upper Mississippi River Basin Commission, the development of a river system management plan

Upper Mississippi River System Environmental Management Program: Pool 9, Upper Mississippi River, Houston County, Minnesota and Allamakee County, Iowa

Upper Mississippi River System Environmental Management Program Definite Project Report with Integrated Environmental Assessment : Pool 26, Mississippi River, St. Charles County, Missouri

Environmental Impacts of Navigational Maintenance on the Upper Mississippi River System

The Corps, the Environment, and the Upper Mississippi River Basin

Upper Mississippi River System Environmental Management Program

Eleven Year (YR) Post-construction Addendum to the 10-yr Post-construction Performance Evaluation Report Dated May 2002 for Bertom and McCartney Lakes Habitat Rehabilitation and Enhancement Project

Definite Project Report with Integrated Environmental Assessment (R-9F) : Potters Marsh Rehabilitation and Enhancement : Pool 13, Mississippi River Miles 522.5 Through 526.0, Carroll and Whiteside Counties, Illinois