



Long Term Resource Monitoring Program

Program Report

95-P002

Long Term Resource Monitoring Program Procedures

July 1995

Long Term Resource Monitoring Program Procedures

by

National Biological Service
Environmental Management Technical Center
575 Lester Avenue
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July 1995

The Environmental Management Technical Center issues LTRMP Program Reports to provide Long Term Resource Monitoring Program partners with programmatic documentation, procedures manuals, training manuals, and geospatial applications.

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Preface

The Long Term Resource Monitoring Program (LTRMP) was authorized under the Water Resources Development Act of 1986 (Public Law 99-662) as an element of the U.S. Army Corps of Engineers' (Corps) Environmental Management Program. The original authorization for the LTRMP was for 10 years, starting in 1987. Authorization has since been extended for an additional 5 years (to 2002) by Section 405 of the Water Resources Act of 1990 (Public Law 101-640).

The LTRMP is being implemented by the Environmental Management Technical Center, a National Biological Service Science Center, in cooperation with the five Upper Mississippi River System (UMRS) States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The Corps provides guidance and has overall Program responsibility. The mode of operation and respective roles of the agencies are outlined in a 1988 Memorandum of Agreement.

The UMRS encompasses the commercially navigable reaches of the Upper Mississippi River, as well as the Illinois River and navigable portions of the Kaskaskia, Black, St. Croix, and Minnesota Rivers. Congress has declared the UMRS to be both a nationally significant ecosystem and a nationally significant commercial navigation system. The mission of the LTRMP is to provide decision makers with information to maintain the Upper Mississippi River System as a sustainable large river ecosystem given its multiple-use character. The long-term goals of the Program are to understand the system, determine resource trends and impacts, develop management alternatives, manage information and develop useful products.

Goal 2 of the LTRMP Operating Plan¹ is simply stated: *Monitor Resource Change*. Strategies for monitoring resource components are listed under this goal. Standardized procedures for monitoring each resource component are contained in the individual sections of this Procedures Manual.

Although the LTRMP began in 1986, monitoring of the various resource components has been initiated as Program funds have gradually increased. Monitoring procedures for different components have been tested and elaborated over time. Procedures for some components, especially those that have been monitored for only one or two years, are considered in the development phase. As a result, we will update this Procedures Manual as necessary and have provided the manual to LTRMP staff in loose-leaf format to facilitate future updates. This report was developed with funding provided by the Long Term Resource Monitoring Program.

This report should be cited as:

National Biological Service. 1995. Long Term Resource Monitoring Program Procedures. National Biological Service, Environmental Management Technical Center, Onalaska, Wisconsin, July 1995. LTRMP 95-P002.

¹U.S. Fish and Wildlife Service. 1992. Operating Plan for the Upper Mississippi River System Long Term Resource Monitoring Program. Environmental Management Technical Center, Onalaska, Wisconsin, Revised September 1993. EMTC 91-P002. 179 pp. (NTIS #PB94-160199)

Contents

	<u>Page</u>
Fish Monitoring	95-P002-1
Macroinvertebrate Monitoring	95-P002-2
Vegetation Monitoring	95-P002-3
Water Surface Elevation and Discharge	95-P002-4
Water Quality Monitoring	95-P002-5
Terrestrial Vegetation Monitoring	95-P002-6

The Long Term Resource Monitoring Program (LTRMP) for the Upper Mississippi River System was authorized under the Water Resources Development Act of 1986 as an element of the Environmental Management Program. The mission of the LTRMP is to provide river managers with information to maintain the Upper Mississippi River System as a sustainable large river ecosystem given its multiple-use character. The LTRMP is a cooperative effort by the National Biological Service, the U.S. Army Corps of Engineers, and the States of Illinois, Iowa, Minnesota, Missouri, and Wisconsin.

