

The ecological basis for river management

edited by David M. Harper and Alastair J.D. Ferguson, published by John Wiley and Sons, Baffins Lane, Chichester, West Sussex PO19 1UD, England, in 1994, ISBN 0-471-95151-X.

Review by Christopher G. Kendall

This book contains some 40 papers which are the product of an international conference, with the same name as the book, held at the University of Leicester in 1993 to mark the first four years of the National Rivers Authority in England and Wales. The objective of the conference was to discuss the recent results of research into the ecological basis of river management. The book is divided into several sections. First section involving 10 papers focused on water resources, next are 7 papers on water quality, 8 papers on the natural river environment, 6 chapters on the management of fish stocks, 4 papers on the management of people and their relationship to rivers, and finally 5 papers on the effects of catchment management.

This extremely comprehensive text is aimed at all those professionals involved with river management, whether from a biological, chemical, ecological, mammal, fish, or human point of view. This book is extremely practical, containing numerous tables, diagrams, maps, or sketches showing examples of applications of different techniques for controlling the morphology of rivers, the prevention of erosion in unnecessary erosion areas, changing rivers from being ecologically unsound to becoming ecologically reasonable for people, fish, mammals, vegetation, etc. With a heavy emphasis on the United Kingdom, the papers present examples from all over the world including Spain, Italy, Bulgaria, Australia, South Africa, Holland, and Germany. Surprisingly, there are no papers which deal with USA but instead there is a very European slant to the subject matter. This may reflect the higher population densities of Europe and their overall closer connection with river systems but it is surprising that there are no papers from the United States, a country where management of rivers, particularly from an engineering standpoint, has been pre-eminent. However, this book presents a fresh look at river management and should be of interest to US river managers, since some of the solutions offered have applications in the United States. Certainly river management is not new to Europe, particularly when concerned with the river Po which the Venetians moved in the 1500's. Similarly just prior to the first world war an incredible river management system was built around the Po which became tied to the development of present political character of Italy. This riverine scheme resulted in the displacement of large segments of the population hired from all over Italy and abroad to develop this flood control system. Later the workers brought in to redirect the rivers were laid off. While this book does not provide this kind of historical perspective to river management in Europe it does focus on present problems and should be of great interest to those of you who have an interest in this topic. This is an incredibly timely text and should you in any way be involved with river management, this book should be on your shelves. It is packed with information and modern references, and is one of the few texts on this topic.