River Restoration: Managing the Uncertainty in Restoring Physical Habitat

This book provides a systematic overview of the issues involved in minimizing and coping with uncertainty in river restoration projects. River restoration projects are designed to recreate functional characteristics within a context of physical stability. They tend to focus on the development and application of geomorphic principles for river restoration design. Due to different models obtaining different results on the same problem, incomplete or absent data, and climatic/social/cultural changes, the designers and managers of such projects frequently face high levels of uncertainty.

A series of thematic sections are used to define the various sources of uncertainty in restoration projects and how these show at different points in the life cycle (design, construction and post-construction phases) of restoration projects. The structure of the book offers a rational theoretical analysis of the problem while providing practical guidance in managing the different sources of uncertainty. A wide range of case studies are included from Europe, North America and Australasia.