

Computational Methods in the Management of Hydro-Environmental Systems

This book provides concise, up-to-date and easy-to-follow information on an increasingly important area of hydro-environmental analysis and management. It covers important aspects of both surface and subsurface water quality management, as they are inseparable components of aquifers and the flow in physical domains occur in combination with the other. However, the main emphasis of the book is on the practical development and application of computer based algorithms, via appropriate schemes, to realistic problems.

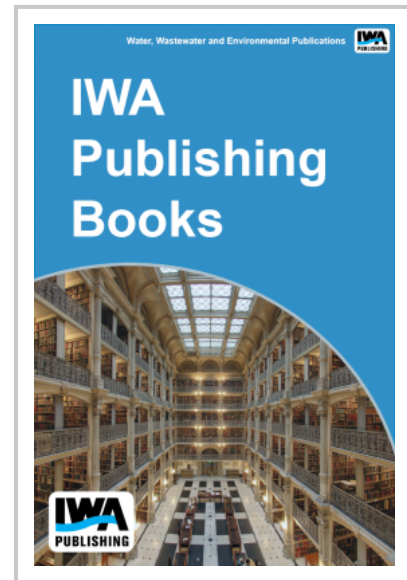
Mathematical theories are not discussed as they can be found in many expert books. All sections of the book include detailed descriptions of practical examples. It also, uniquely, gives explanations regarding the formulation of practical management schedules and tools for hydro-environmental systems.

There is a lack of books dealing with the practical aspects of the application of computer modelling techniques to complex hydrodynamical phenomena, and this book has been written for professionals and researchers, especially those who are not trained mathematicians who, nevertheless, need to make managerial decisions.

Computational Methods in the Management of Hydro-Environmental Systems will be an invaluable source of information for post-graduate level researchers and decision-makers who need to apply numerical modelling techniques to investigate hydrodynamic phenomena and pollutants dispersion in natural aquatic systems. Professionals and engineers, who now need to gain insights about the working of computer techniques for choosing appropriate schemes and applying them to realistic problems, will also value this work. Masters? level and final-year graduate students are also expected to benefit from the book.

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