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Theory, Modelling, Application

by

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Theory, Methodology, Application

by
István Zsuffa and Antal Gálai

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PREFACE

The writers express their thanks to all individuals who helped with the work leading to this book during the last 11 years. The models in this book were mainly developed at the Computer Department of the District Water Authority in Baja, Hungary. We thank the Director of Water Authority, Dr. János Szenti, for making it possible for us to carry out all the necessary research work, alongside our regular day-to-day duties.

The Water Management College of Baja and the Water Management Institute of Budapest were involved with the applications and successive adjustments of the models along with some other institutions. We also thank Dr. Pál Rózsa, Professor of Mathematics at the Technical University of Budapest, for his valuable help with the thorough study of structure and behavior of the models developed. The engeneers Ágota Csanaky and László Goda Jr. provided indispensable help in testing and successful applications of computer programs, and in preparing this publication.

We trust that enclosed versions of computer programs, which are still under further development, will provide help to readers responsible for finding solutions to water storage and related hydroelectric power problems.

FOREWORD BY THE PUBLISHER

The solutions of water storage related problems by using the Moran's theory based on transition probabilities between states of stored volume of water in reservoirs have eluded significant applications Because the text of this book represents an important effort in that direction, with many examples of application to various problems, WATER RESOURCES PUBLICATIONS, as the publisher, have found attractive to present to water resources specialists the results of the efforts made in Hungary in that direction. WRP trusts that the readers will find these highly specialized topics of interests for the further application of transition probabilities in practice.

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Part I

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