VOLUME 13

Application of New Technologies in Water Resources Management

CONTENTS

Introduction
M. Abu-Zeid and A. Hamdy

Decision Support Tools in Environmentally Based Water Resources Planning and Management: an Overview
A. Hamdy and M. Todorovic

Data Base Issues and New Technologies for Data Acquisition.
A. Hamdy and C. Lacirignola

Modern Technology Tools for Water Management
Khaled M. Abu-Zeid

Introduction to GIS and Spatial Modeling
A. Hamdy and C. Lacirignola

The Role of GIS in the Decision Support System ODESSEI (Open Architecture Decision Support System for Environmental Impact Assessment)
E. Todini

Expert Systems: a Step-up from Decision Support to Decision Making Systems
Khaled M. Abu-Zeid

Information Systems for Water Resources Planning and Management: Application to Irrigation
L. S. Pereira

Modeling for Crop Response to Water physiological Aspects
P. Steduto

Bio-Economic Models for integrating agronomic, environmental and economic Issues with Agricultural Use of Water
G. Flichman

Role of Decision Support Systems and New Technologies in Water Saving
M. Tawfik and H. Fahmy
A Proposal for integrating environmental Impact Assessment, Cost Benefit Analysis and Multicriteria Analysis in Decision Making
A. Nardini

Information and Communication Technology
L. Sisto

Prospects of Irrigation Modernization in the Mediterranean
A. Hamdy, N. Lamaddalena and G. Trisorio-Liuetti

Modeling and New Technologies: Tools to be combined for improving Irrigation Systems Management
N. Lamaddalena