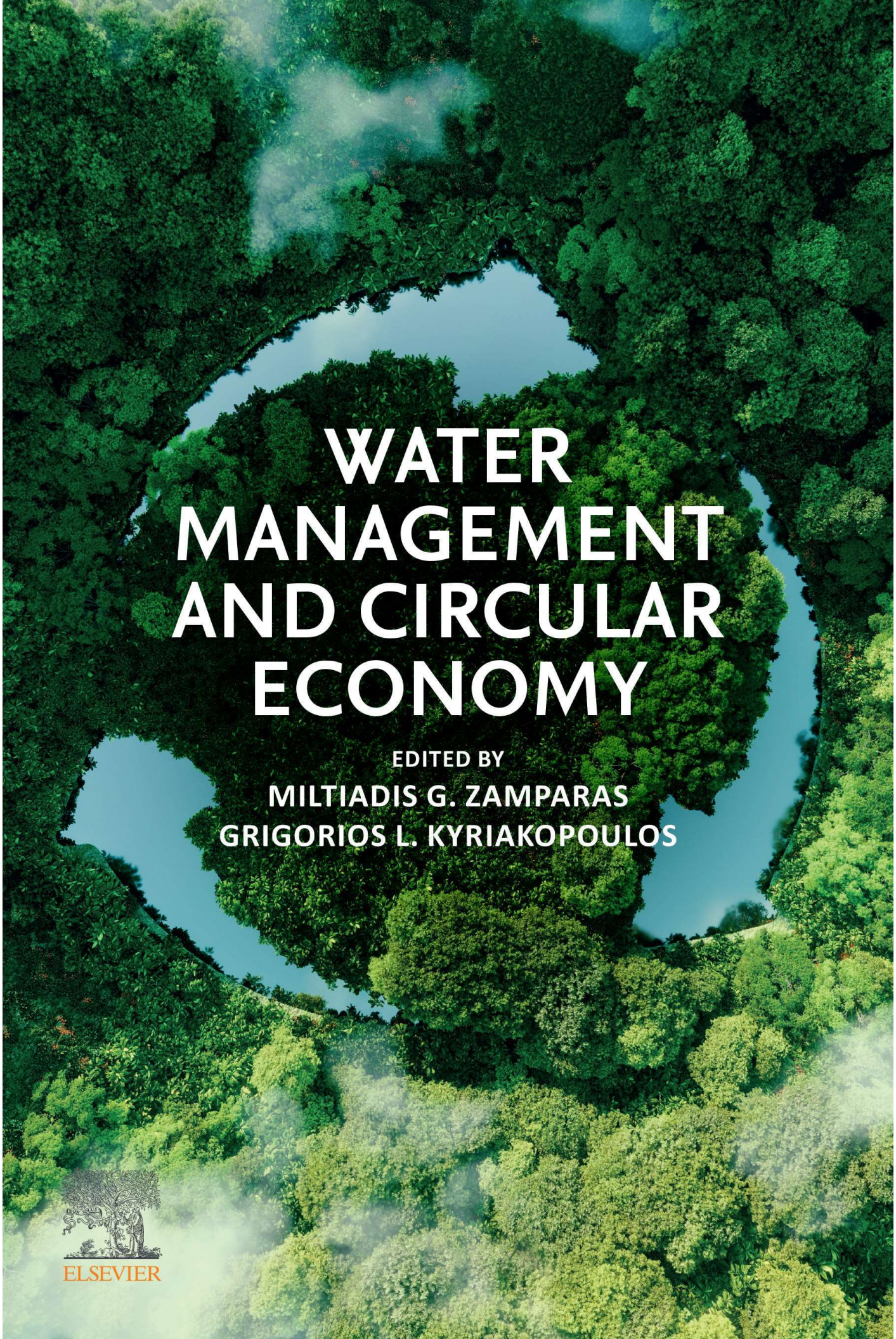
WATER
MANAGEMENT
AND CIRCULAR
ECONOMY
EDITED BY
MILTIADIS G. ZAMPARAS
GRIGORIOS L. KYRIAKOPOULOS
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Water Management and Circular Economy

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Edited by

Miltiadis G. Zamparas
School of Science and Technology, Hellenic Open University, Patras, Greece

Grigorios L. Kyriakopoulos
School of Electrical and Computer Engineering, National Technical University of Athens, Zografou, Greece

ELSEVIER

About the editors

Miltiadis G. Zamparas

School of Science and Technology, Hellenic Open University, Patras, Greece

Dr. Miltiadis Zamparas (PhD) serves as a Teaching and Research Associate at the School of Science and Technology, Hellenic Open University, Greece. He holds Bachelor's and Master's degrees in environmental engineering from the University of Ioannina and University of Patras, Greece. He received his PhD in environmental engineering in 2015 from University of Patras, School of Engineering, Department of Environmental and Natural Resources Management. Dr. Zamparas has published his research in peer-reviewed scientific journals and international conferences and has reviewed a number of scientific papers. His primary research activities focus on environmental analytical chemistry, environmental monitoring, materials science, characterization, as well as novel functional materials for water treatment. He has served at edited books and special issues.

Grigorios L. Kyriakopoulos

School of Electrical and Computer Engineering, National Technical University of Athens, Zografou, Greece

Dr. Grigorios L. Kyriakopoulos (PhD) serves as a Teaching and Research Associate at the School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Greece. He holds a wide educational background, including 2 PhDs, in Low Carbon Economy (DUTH, Greece) and in Chemical Engineering (NTUA, Greece), Chemical Engineering (MEng, MSc in Technical-Economic Systems, PhD, PostDoc), Environment (BSc, 2MSc in Environmental Design of: a) large infrastructure works and b) cities/buildings, PhD), Business Administration (BA and MA), Hellenic Civilization (BA and MA), Energy (MSc), Education (PGCE), Psychology (CertHE, HND, PGCert), Human Resource Management (CertHE). Dr. Kyriakopoulos (co)authored more than 100 papers in 50 journals, 20 invited book chapters, and 30 papers at conferences, all received more than 3000 citations. He is the reviewer of more than 5000 manuscripts in 360 journals. His research interests are engineering, environmental systems and remediation, energy, and renewable energy sources. He is recorded in the top 2% of scientists in the world released by Stanford University (years 2020 and 2021).

Preface

The "*Water Management and Circular Economy*" book covers a wide range of technological, environmental, socio-economic, ecological, regulatory, and public health dimensions that are related to contemporary water management advancements. Based on the circular economy (CE) principles the book covers the decisive role of recycling and reusing the otherwise lost sources of waste, gray, or untapped water sources towards a second round of utility. This book also enhances our knowledge and comprehensive understanding of how water inflows in nature can meet a wide spectrum of potential applications in humanity. Therefore, the book sections have been focused on the direct and the indirect utilities of water management not limited to the aqueous outflows, but they have been also extended to include a variety of water, energy, products, and services to urban, suburban, rural, and insular contexts of analysis. Another interesting feature of the book is the geographical dispersion of water management applications and planning, covering the prevailing technological, legislative, regulatory, financial, and marketable perspectives of water management worldwide, especially concerning its circularity prospects and potential. As such, "*Water Management and Circular Economy*" is a timely important book and interesting reading for graduate and postgraduate students, university researchers and lecturers, water managers, scientists in the fields of civil- (especially the section of water engineering), hydro-, chemical-, environmental-, ecological-, rural-, and surveying-engineering, as well as for public health and environmental law readers.

The editors
Miltiadis G. Zamparas and Grigorios L. Kyriakopoulos

WATER MANAGEMENT AND CIRCULAR ECONOMY

Edited by **Miltiadis G. Zamparas and Grigorios L. Kyriakopoulos**

A comprehensive presentation of all knowledge related to water management, in alignment with the circular economy

Water Management and Circular Economy covers the role of water in the dimensions of society, economy, environment/ecology, and technology among both developed and fast-emerging economies. Along with the under-conceptualization of Circular Economy (CE), this book covers the fields of recycling and reusing towards a second round of utility, otherwise (in linear economy terms), lost sources of waste, gray, or untapped water.

This book bridges the gap between the water inflows in nature, with the whole wide spectrum of its potential applications in humanity. It covers the water inflows, the direct and the indirect entities that are conceptualized as "outflows" including water (in a tapped and controlled manner), energy, products, and services to urban, suburban, rural, and insular contexts of analysis. It is an important reading for water scientists, water managers, civil engineers, and university students and teachers.

Key features:

- Includes real-world applications and case studies to show how these policies can be adopted
- Presents global coverage, with a diverse list of contributors—all of whom are experts in the field
- Showcases a multidisciplinary approach with editors from broad environmental and managerial backgrounds – helping to cross the bridge between social and science

About the editors:

Miltiadis G. Zamparas, PhD, is a Teaching and Research Associate at the School of Science and Technology, Hellenic Open University, Patra, Greece. Dr. Zamparas' primary research focuses on environmental analytical chemistry, environmental monitoring, materials science, characterization, as well as novel functional materials for water treatment.

Grigorios L. Kyriakopoulos, 2 PhDs, is a Teaching and Research Associate at the School of Electrical and Computer Engineering, National Technical University of Athens (NTUA), Athens, Greece. Dr. Kyriakopoulos' research interests are in engineering, environmental systems, energy, remediation of polluted areas through aqueous or gaseous media, renewable energy sources, business administration, education, development economics, circular economy, and behavioral ecology.

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