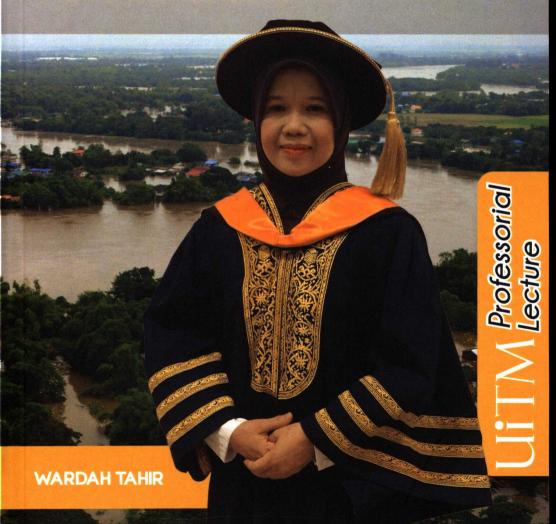


# FORECASTING THE IMPENDING FLOOD DISASTERS



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## UiTM Press is a member of MALAYSIAN SCHOLARLY PUBLISHING COUNCIL



Cataloguing-in-Publication Data

Perpustakaan Negara Malaysia

A catalogue record for this book is available from the National Library of Malaysia

ISBN 978-629-496-025-1

Cover Design : Nurhunaina Mohd Bani Typesetting : Nurhunaina Mohd Bani

Printed in Malaysia by: UiTM Printing Centre

College of Creative Arts Universiti Teknologi MARA

40450 Shah Alam

Selangor

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### **PREFACE**

Floods are the most common natural disasters with serious consequences for Malaysia and many other regions across the globe. Some parts of Malaysia have been enduring annual monsoon floods for years. Although floods are often unavoidable, numerous mitigation and management strategies can be implemented to reduce their destructive effects. This book offers a comprehensive overview of floods, including the history, causes, and mitigation strategies. Different types of floods will require different management and mitigation measures.

While localised urban flash floods may occur just within hours as opposed to the widespread monsoon floods which may last for days, the damages incurred can be greater to the denser populated urban areas. The causes for urban flash floods are primarily due to man-made faults, such as poorly maintained, inadequate, or improperly designed channel flow capacity, especially for areas under new development. The issue of annual widespread monsoonal floods may require drastic mitigation measures like building large reservoirs.

This book focuses on one non-structural flood mitigation measure, namely the flood forecasting and warning system (FFWS). It describes available FFWS strategies provided by the Department

## **ACKNOWLEDGEMENT**

All praises be to Allah SWT The Almighty for the guidance, strength, and blessings; only with His will that the book can be completed.

Firstly, I would like to express my sincere gratitude to Prof. Dr. Hamidah Mohd Saman, Assistant Vice Chancellor of the College of Engineering, and Prof. Ir. Ts. Dr. Che Khairil Izam Che Ibrahim, Head of the School of Civil Engineering, for ensuring the completion of the book and effectively monitoring the professorial lecture. I would also like to extend my appreciation to Prof. Datin Dr. Suzana Sulaiman, Deputy Vice-Chancellor of Academic & International, for her support and motivation in completing this journey.

Special thanks to the Ministry of Science, Technology, and Innovation (MOSTI), Ministry of Higher Education (MOHE), Ministry of Natural Resources, Lembaga Urus Air Selangor (LUAS), and Construction Industry and Development Board (CIDB) for funding most of the research that contributed to the contents of this book. My appreciation is extended to the Department of Irrigation and Drainage and the Malaysian Meteorological Department for all the data and assistance provided, as well as to ZHL Engineers Sdn. Bhd., Angkasa Consulting Services Sdn. Bhd., Serviseda Sdn. Bhd., and RBM Engineering Consultant for the excellent teamwork and cooperation in completing the projects that contribute to the book's contents.