

---

## Download Free Sustainable Surface Water Management

---

When people should go to the ebook stores, search establishment by shop, shelf by shelf, it is in fact problematic. This is why we allow the ebook compilations in this website. It will agreed ease you to see guide **Sustainable Surface Water Management** as you such as.

By searching the title, publisher, or authors of guide you in fact want, you can discover them rapidly. In the house, workplace, or perhaps in your method can be every best place within net connections. If you plan to download and install the Sustainable Surface Water Management, it is certainly simple then, since currently we extend the connect to buy and make bargains to download and install Sustainable Surface Water Management therefore simple!

**KEY=WATER - MCNEIL KENNEDI**

---

### Sustainable Surface Water Management

#### A Handbook for SUDS

**John Wiley & Sons Sustainable Surface Water Management: a handbook for SUDS** addresses issues as diverse as flooding, water quality, amenity and biodiversity but also mitigation of, and adaptation to, global climate change, human health benefits and reduction in energy use. Chapters are included to cover issues from around the world, but they also address particular designs associated with the implementation of SUDS in tropical areas, problems with retrofitting SUDS devices, SUDS modelling, water harvesting in drought-stricken countries using SUDS and the inclusion of SUDS in the climate change strategies of such cities as Tokyo, New York and Strasbourg.

### Sustainable Surface Water Management

#### A Handbook for SUDS

**John Wiley & Sons Sustainable Surface Water Management: a handbook for SUDS** addresses issues as diverse as flooding, water quality, amenity and biodiversity but also mitigation of, and adaptation to, global climate change, human health benefits and reduction in energy use. Chapters are included to cover issues from around the world, but they also address particular designs associated with the implementation of SUDS in tropical areas, problems with retrofitting SUDS devices, SUDS modelling, water harvesting in drought-stricken countries using SUDS and the inclusion of SUDS in the climate change strategies of such cities as Tokyo, New York and Strasbourg.

### Sustainable Surface Water Management

Surface water flooding has become more common due to the increased area of land which is hard surfaced for example new housing or business developments and block paved or tarmacked front gardens. Water planner can achieve a better management through basin- wide strategies that include integrated utilization of surface and groundwater to raises the overall productivity of irrigation systems, extends the area effectively commanded, helps in preventing water logging and can reduce drainage needs. Surface water management plans aims to investigate local flooding issues such as flooding from sewers, drains, groundwater, and runoff from land, small watercourses and ditches that occurs as a result of heavy rainfall. Sustainable Surface Water Management covers on water quality protection for the community by implementing programs to reduce pollution in our rivers, streams and wetlands caused by urban storm water runoff. It includes interaction between surface water and groundwater through groundwater recharge, hydrological cycle, water balance components etc. Water quality trading is a sustainable framework for surface water quality management. It uses discharge permits to reduce the total treatment costs. Chapters are included to cover surface water status, practical considerations for reducing public health risk, conjunctive use of surface water and groundwater for sustainable water management, a macro approach to analyzing water resource issues under changing situations, and more. An assortment of diverse topics in the field of water quality modeling, statistical evaluation and guidelines pertaining to the best management practices in different locations around the world is given. The contributions from outstanding scientists and experts provide detailed information about different topics and give a general overview of the current issues in water management. The book covers a wide range of current concerns, reflecting on current problems and signifying the intricacy of water management.

### A Review of Current Options for Sustainable Urban Surface Water Management

#### A Comparison Between the UK Sustainable Urban Drainage Systems (SUDS) and the Chinese Sponge City Initiatives

#### Sustainable Drainage Systems

MDPI This book is a printed edition of the Special Issue "Sustainable Drainage Systems" that was published in Water

### Nature-Based Solutions to Climate Change Adaptation in Urban Areas

#### Linkages between Science, Policy and Practice

**Springer** This open access book brings together research findings and experiences from science, policy and practice to highlight and debate the importance of nature-based solutions to climate change adaptation in urban areas. Emphasis is given to the potential of nature-based approaches to create multiple-benefits for society. The expert contributions present recommendations for creating synergies between ongoing policy processes, scientific programmes and practical implementation of climate change and nature conservation measures in global urban areas. Except where otherwise noted, this book is licensed under a Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>

#### The SUDS Manual

This guidance document is aimed at providing comprehensive advice on the implementation of SUDS in the UK. It provides information for all aspects of the life cycle of SUDS, from initial planning, design through to construction and their management in the context of the current regulatory framework.

### Water Governance for Sustainable Development

#### Approaches and Lessons from Developing and Transitional Countries

**Routledge** Good management of water resources - universally identified as a key aspect of poverty reduction, agriculture and food security - has proven, in practice, as difficult to achieve as it is eagerly sought. This book, edited and authored by leading authorities on water resource management, examines the recent changes in governance, institutions, economics and policies of water, covering developing, transitional and developed countries, with special emphasis on southern African case studies. The book examines how water policies, institutions and governance have shifted in recent years from supply-driven, quantitative, centrally controlled management to more demand-sensitive, decentralized, participatory approaches. Such a move often also implies cost recovery principles, resource allocation among competing sectors, and privatization. The case studies demonstrate that the new policies and legal frameworks have been difficult to implement and often fall short of initial expectations. Using an accessible multidisciplinary approach that integrates economics, sociology, geography and policy analysis, the book untangles the issues and presents best practices for policy- and decision-makers, governments and regulators, NGOs and user groups, service providers, and researchers. The overall aim is to show how good water governance structures can be developed and implemented for the benefit of all.

### Reconnecting People and Water

## Public Engagement and Sustainable Urban Water Management

Taylor & Francis Water management in industrialised western countries has long been seen as a technical process associated with pipes, drains and bureaucracies. This technical model of water management is now being questioned. This book examines the nature of contemporary water management and the prospects for and barriers to different forms of engagement with the public. In particular, it shows how historical and social scientific understandings develop and question current water management norms in relation to water in the landscape, water in the home and the hidden management of water beneath our streets and behind our walls. It is shown that the four-fold challenges of climate change, urbanisation, changing environmental standards and fiscal accountability mean that we can no longer rely on unseen technical fixes to erase the threats of pollution, water shortages and floods. Such concerns offer two prompts for public engagement and participation. First, on a purely instrumental level, public engagement can complement, or offer an obvious alternative to, technical fixes. Second, public engagement may provide a route to find new ways of addressing water and related challenges. The author offers a unique social science perspective on many of the socio-technical issues facing the management of water in urban settings in developed countries, where urban is interpreted broadly to include all areas served by piped water. Drawing on historical context and an extensive review of the published literature, as well as the author's own empirical studies, the work prompts broader discussions about how we manage water in contemporary society. It is invaluable for students and professionals in water resource management and planning.

## Advances in Water Resources Management for Sustainable Use

Springer Nature This book presents the innovative ideas and technical expertise for the sustainable solution in the field of water resources. It covers various topics on sustainable water resources management under climate change where researchers and professionals have shared their experience, innovative ideas, issues, recent trends and future directions in field of water resources engineering, science and technology. This book culminates the importance of achieving the ways towards water security and espouse targets and measures that will allow the end-user to meet this challenge in conjunction. It is a compendium of research articles pertaining to the mitigation of water crisis, surface and groundwater management, watershed management and modelling, case studies related to wetland vulnerability, water pollution, water quality, extreme climate hazards and others issues and its sustainable diminution through ingenious ideas and technologies that will incur valuable information to the stakeholders in the society. Given its scope, this book will be useful for the researchers and professionals.

## Surface water flooding : sustainable drainage to the ground

In: Energy and environmental management Vol. 46 (2010) 1 p

## Drainage Systems

BoD - Books on Demand The subject of 'drainage: draining the water off' is as important as 'irrigation: application of water', if not more. 'Drainage' has a deep impact on food security, agricultural activity, hygiene and sanitation, municipal usage, land reclamation and usage, flood and debris flow control, hydrological disaster management, ecological and environmental balance, and water resource management. 'Drainage Systems' provides the reader with a tri-dimensional expose of drainage in terms of sustainable systems, surface drainage and subsurface drainage. Ten eminent authors and their colleagues with varied technical backgrounds and experiences from around the world have dealt with extensive range of issues concerning the drainage phenomenon. Field engineers, hydrologists, academics and graduate students will find this book equally benefitting.

## The Water Sensitive City

John Wiley & Sons "This book advocates a more thoughtful approach to urban water management, including for example, exponents of the Water Sensitive Urban Design (WSUD) approach in Australia and Low Impact Development in the US. This new approach involves reducing water consumption, harvesting rainwater, recycling rainwater and adopting Sustainable Drainage Systems (SuDS) where surface water is not sent straight to drains but is intercepted by features like green roofs, rain gardens, swales and ponds. This water sensitive approach conserves water, reduces flooding, cleans water (and therefore streams, rivers and seas). It is compatible with the greener city and green infrastructure agendas, whereby policy makers want to make cities more liveable. This subject matters because the current use of water by cities is unsustainable. Cities in particular need to change the existing linear model of water consumption and use to a more circular one in order to survive. Aquifers all over the world, including some that have taken millions of years to form, are predicted to dry up in the coming decades. Reservoirs, eg Lake Mead near Las Vegas once believed to have permanently solved water supply problems, are falling to dangerously low levels. This book is needed in order to bring together the various specialised technical discussions that have been continuing for some time into a volume that is more accessible to designers (engineers and architects), urban planners and managers, and policymakers. People need to understand that urban water management should increasingly become their concerns rather than a technical matter to be addressed by specialists alone"--

## Dialogue Between Scales

## Implementating Sustainable Surface Water Management

## Sustainable Drainage Systems

## Hydraulic, Structural and Water Quality Advice

A sustainable drainage system aims to mimic as closely as possible the natural drainage of a site to minimise the impact of urban development on the flooding and pollution of waterways. Techniques use vegetation features to treat pollution and slow down or reduce flows, as well as to enhance the landscape and provide improved wildlife habitats. This technical report summarises current knowledge on the best approaches to design and construction of sustainable drainage systems. Readers of this book will improve their understanding of the hydrological, hydraulic, structural, water quality and ecological aspects of the various SUDS features available in the UK and overseas.

## Sustainable Water Management in Smallholder Farming

## Theory and Practice

CABI Water is critical to all human activities, but access to this crucial resource is increasingly limited by competition and the effects of climate change. In agriculture, water management is key to ensuring good and sustained crop yields, maintaining soil health, and safeguarding the long-term viability of the land. Water management is especially challenging on smallholder farms in resource-poor areas, which tend to be primarily rainfed and thus highly dependent on unreliable rainfall patterns. Sustainable practices can help farmers promote the development of soils, plants and field surfaces to allow maximum retention of water between rains, and encourage the efficient use of each drop of water applied as irrigation. Especially useful for farmers' groups, agricultural extension workers, NGOs, students and researchers working with farmers in dryland areas, this comprehensive yet concise book is a practical and accessible resource for anyone interested in sustainable water management.

## Sustainable Drainage Systems and the Flood and Water Management Act

## Wetland Systems

## Storm Water Management Control

Springer Science & Business Media Wetland Systems covers broad water and environmental engineering aspects relevant for the drainage and treatment of storm water and wastewater. It provides a descriptive overview of complex 'black box' treatment systems and the general design issues involved. Standard and novel design recommendations for predominantly constructed wetlands and related sustainable drainage systems are given to take into account the interests of professional engineers and environmental scientists. Wetland Systems deals comprehensively with not only the design, operation, maintenance and water quality monitoring of traditional and novel wetland systems, but also covers: • Analysis of asset performance • Modelling of treatment processes • Performances of existing infrastructure • Sustainability and economic issues Solutions to pressing water quality problems associated with constructed treatment wetlands, integrated constructed wetlands, farm constructed wetlands and storm water ponds, and other sustainable biological filtration and treatment technologies linked to public health engineering are explained. Case study topics are diverse: natural wetlands and constructed treatment wetlands; sustainable water management; and specific applications, such as wetlands treating hydrocarbons. The research projects discussed are multi-disciplinary, holistic, experimental and

modelling-orientated. *Wetland Systems* is a useful reference for the design and operation of wetland systems by engineers and scientists working for the water industry, non-governmental organisations, local authorities and governmental bodies. It is also a valuable text for undergraduate and postgraduate students, lecturers and researchers in civil and environmental engineering fields.

## Integrated Groundwater Management Concepts, Approaches and Challenges

**Springer** The aim of this book is to document for the first time the dimensions and requirements of effective integrated groundwater management (IGM). Groundwater management is a formidable challenge, one that remains one of humanity's foremost priorities. It has become a largely non-renewable resource that is overexploited in many parts of the world. In the 21st century, the issue moves from how to simply obtain the water we need to how we manage it sustainably for future generations, future economies, and future ecosystems. The focus then becomes one of understanding the drivers and current state of the groundwater resource, and restoring equilibrium to at-risk aquifers. Many interrelated dimensions, however, come to bear when trying to manage groundwater effectively. An integrated approach to groundwater necessarily involves many factors beyond the aquifer itself, such as surface water, water use, water quality, and ecohydrology. Moreover, the science by itself can only define the fundamental bounds of what is possible; effective IGM must also engage the wider community of stakeholders to develop and support policy and other socioeconomic tools needed to realize effective IGM. In order to demonstrate IGM, this book covers theory and principles, embracing: 1) an overview of the dimensions and requirements of groundwater management from an international perspective; 2) the scale of groundwater issues internationally and its links with other sectors, principally energy and climate change; 3) groundwater governance with regard to principles, instruments and institutions available for IGM; 4) biophysical constraints and the capacity and role of hydroecological and hydrogeological science including water quality concerns; and 5) necessary tools including models, data infrastructures, decision support systems and the management of uncertainty. Examples of effective, and failed, IGM are given. Throughout, the importance of the socioeconomic context that connects all effective IGM is emphasized. Taken as a whole, this work relates the many facets of effective IGM, from the catchment to global perspective.

## Water Management and Sustainability in Asia

**Emerald Group Publishing** *Water Management and Sustainability in Asia* covers topics related to water resources management, including multi- and interdisciplinary research on flood, soil infiltration, contaminants, sediment, water quality, hydrological modelling, and water resources systems.

## Sustainable Water Treatment

### Engineering Solutions for a Variable Climate

**Elsevier** *Sustainable Water Treatment: Engineering Solutions for a Variable Climate* covers sustainable water and environmental engineering aspects relevant for the drainage and treatment of storm water and wastewater. The book explains the fundamental science and engineering principles for the student and professional market. Standard and novel design recommendations for sustainable technologies, such as constructed wetlands, sustainable drainage systems and sustainable flood retention basins are provided to account for the interests of professional engineers and environmental scientists. The book presents the latest research findings in wastewater treatment and runoff control that are ideal for academics and senior consultants. The book offers a challenging, diverse, holistic, multidisciplinary, experimental and modelling-orientated case study, covering topics such as natural wetlands, constructed treatment wetlands for pollution control, sustainable drainage systems managing diffuse pollution, specific applications, such as wetlands treating dye wastewater and ecological sanitation systems recycling treated waters for the irrigation of crops. Explains the fundamental science and engineering principles behind each topic Provides an easy-to-understand, descriptive overview of complex 'black box' drainage and treatment systems and general design issues involved Includes a comprehensive analysis of asset performance, modelling of treatment processes, and an assessment of sustainability and economics

## Groundwater Management in the East of the European Union

### Transboundary Strategies for Sustainable Use and Protection of Resources

**Springer** This volume is the result of work carried out under the NATO SPS Study Pilot Project "Sustainable Use and Protection of Groundwater Resources - Transboundary Water Management." It contains basic information on hydrogeological conditions, groundwater management and monitoring in areas of the Belarus, Lithuanian, Polish and Ukrainian borders, simultaneously borders of the European Union with its eastern partners. In view of the importance of the rational utilization of groundwater reserves, which is essential for our future existence, the book presents recommendations for a united methodology of an integrated groundwater monitoring system in this transnational area. The contributions also cover environmental and surface water issues that have direct effects on groundwater resources. The financial dimension of resource mobilization for environmental projects in Eastern Europe also features as part of a complex project solution.

## Sustainable Water Engineering

**Elsevier** *Sustainable Water Engineering* introduces the latest thinking from academic, stakeholder and practitioner perspectives who address challenges around flooding, water quality issues, water supply, environmental quality and the future for sustainable water engineering. In addition, the book addresses historical legacies, strategies at multiple scales, governance and policy. Offers well-structured content that is strategic in its approach Covers up-to-date issues and examples from both developed and developing nations Include the latest research in the field that is ideal for undergraduates and post-graduate researchers Presents real world applications, showing how engineers, environmental consultancies and international institutions can use the concepts and strategies

## New Trends in Urban Drainage Modelling

### UDM 2018

**Springer** This book addresses the latest research advances, innovations, and applications in the field of urban drainage and water management as presented by leading researchers, scientists and practitioners from around the world at the 11th International Conference on Urban Drainage Modelling (UDM), held in Palermo, Italy from 23 to 26 September, 2018. The conference was promoted and organized by the University of Palermo, Italy and the International Working Group on Data and Models, with the support of four of the world's leading organizations in the water sector: the International Water Association (IWA), International Association for Hydro-Environment Engineering and Research (IAHR), Environmental & Water Resources Institute (EWRI) - ASCE, and the International Environmental Modelling and Software Society (iEMSs). The topics covered are highly diverse and include drainage and impact mitigation, water quality, rainfall in urban areas, urban hydrologic and hydraulic processes, tools, techniques and analysis in urban drainage modelling, modelling interactions and integrated systems, transport and sewer processes (incl. micropollutants and pathogens), and water management and climate change. The conference's primary goal is to offer a forum for promoting discussions amongst scientists and professionals on the interrelationships between the entire water cycle, environment and society.

## Groundwater for Sustainable Development

### Problems, Perspectives and Challenges

**CRC Press** Groundwater is the most important source of domestic, industrial, and agricultural water and also a finite resource. Population growth has created an unprecedented demand for water, with the situation most critical in the developing world, where several million people depend on contaminated groundwater for drinking purposes. Geogenic contaminants,

## Sustainable Management of Urban Water Resources

**MDPI** It is well known that 55% of the world's population currently lives in urban areas, and this figure is predicted to grow to 68% by 2050, adding more than 2.5 billion people to urban populations. It is also projected that there will be 43 megacities worldwide by 2030, with populations of more than 10 million inhabitants. The United Nations World Water Development Report, 2018, warned that by 2030, the global demand for fresh water is likely to exceed supply by 40%. Added to population growth, climate change has the potential to lead to changes in rainfall regimes, with the potential of increased flooding and drought. Currently, 1.2 billion people are at risk from flooding, but this is predicted to increase to about 1.6 billion, i.e., nearly 20% of the total world population, by 2050. In line with this, replacing deteriorating water management infrastructure that can no longer cope is economically unfeasible, impracticable from a construction point of view, and likely to fail in the long term. To address these issues, approaches are needed that are flexible and have multiple benefits. In its World Water Development Report, 2018, the UN promotes the use of nature-based solutions to some of these problems, with the focus of Sustainable

Development Goal 6 (making sure that everyone has access to a safe and affordable supply of potable water and sanitation by 2030) requiring investment in suitable infrastructure across the world. This Special Issue covers the challenges faced in managing urban water in all its forms, from potable supplies to reuse and harvesting, as well as resilient and sustainable approaches developed to address flooding and drought.

## Thunder Bay Stormwater Management Plan for Sustainable Surface Water Management

## International Law, Sustainable Development and Water Management

Eburon Uitgeverij B.V. Water covers about three-fourths of the earth's surface. Still, over one billion people do not have access to clean drinking water—a problem that many governments across the globe seem unable to redress. International Law, Sustainable Development and Water Management explores the political issues inherent in global water management, analysing water as a social, economic, and ecological good, and then applying the principles of international law to resource development policies. Antoinette Hilderling's proposed framework for change, "Guardianship Over Water," offers policymakers practical guidelines for water management at a local, national, and international level.

## Investigating the Potential of Using Simple SuDS in Informal Settlements in Lagos, Nigeria to Transition to a Sustainable Surface Water Management System

## Water and the City

## Risk, Resilience and Planning for a Sustainable Future

Routledge As a vital human need, water has been absolutely critical to decisions as to where cities originate, how much they grow and the standard of living of the inhabitants. The relationship is complex however; we need both continual availability and protection from its potential impacts. Over recent decades flooding and scarcity episodes have become commonplace in even the most advanced countries - and these events cannot be disassociated from the socio-economic context within which they occur; being directly related to how we live, where we live and how we govern. This book draws together information on a host of connected subjects from population growth to water scarcity to the relationship between humanity and nature, then demonstrates how utilizing notions of risk and resilience could help improve the relationship between the city and its most precious resource. Combining discussions of risk, water and spatial planning it provides an invaluable text for planning, geography and urban studies students on how to address urban water problems within a rapidly changing world.

## Water Resources in the Built Environment

## Management Issues and Solutions

John Wiley & Sons Water management is a key environmental issue in controlling offloods and reducing droughts. This book provides analysis of the main issues, offering solutions and describing good practice. Water Resources for the Built Environment: management issues and solutions develops an appreciation of the diverse, complex and current themes of the water resources debate across the built environment, urban development and management continuum. The integration of physical and environmental sciences, combined with social, economic and political sciences, provide a unique resource, useful to policy experts, scientists, engineers and subject enthusiasts. By taking an interdisciplinary approach, water resources issues and impacts on the built environment are presented in the inventive and strategic setting of considering the constraints of delivering potable water to an ever-demanding society who, at the same time, are increasingly aware of living in an urban landscape where excessive surface water creates a flood threatened environment - hence, the need to portray a balance between 'too little vs. too much'. This unique approach to the water resources debate presents a multifaceted collection of chapters that address the contemporary concomitant issues of water shortage and urban flooding and proffers solutions specifically for the built environment. The book is structured into three parts: the first part (Sections 2, 3 and 4) addresses management issues and solutions to minimise water shortages and provide water security for society; whilst the second part of the book (Sections 5 and 6) addresses management issues and solutions to control excessive rainfall and minimise flooding impacts. The third part (Section 7) contextualises the issues of the earlier sections within international case studies from the developing world.

## Conjunctive Use of Surface Water and Groundwater for Sustainable Water Management

Conjunctive Use of Surface Water and Groundwater for Sustainable Water Management.

## Urban Water Sustainability

## Constructing Infrastructure for Cities and Nature

Routledge The provision of a safe and reliable water supply is a major challenge for the world's growing urban populations. This book investigates the implications of different developments in water technology and infrastructure for urban sustainability and the relationship between cities and nature. The book begins by outlining five frameworks for analysing water technologies and systems - sustainable development, ecological modernisation, socio-technical systems, political ecology and radical ecology. It then analyses in detail what the sustainability implications are of different technical developments in water systems, specifically: demand management, sanitation, urban drainage, water reuse and desalination. The main purpose of the book is to draw out the social, political and ethical implications of technical changes that are occurring in urban water systems around the world, with positive and negative impacts on sustainability. Distinguished from existing social science analysis due to its attention to the engineering details of the technology, this book will be of use to a wide audience, including students on water management courses, engineering students and researchers, urban geographers and planners interested in sustainability, infrastructure and critical ecology.

## Urban Stormwater and Flood Management

## Enhancing the Liveability of Cities

Springer This book brings together the experiences of engineers and scientists from Australia and the United Kingdom providing the current status on the management of stormwater and flooding in urban areas and suggesting ways forward. It forms a basis for the development of a framework for the implementation of integrated and optimised storm water management strategies and aims to mitigate the adverse impacts of the expanding urban water footprint. Among other topics it also features management styles of stormwater and flooding and describes biodiversity and ecosystem services in relation to the management of stormwater and the mitigation of floods. Furthermore, it places an emphasis on sustainable storm water management measures. Population growth, urbanisation and climate change will pose significant challenges to engineers, scientists, medical practitioners, policy makers and practitioners of several other disciplines. If we consider environmental and water engineers, they will have to face challenges in designing smart and efficient water systems which are robust and resilient to overcome shrinking green spaces, increased urban heat islands, damages to natural waterways due to flooding caused by increased stormwater flow. This work provides valuable information for practitioners and students at both senior undergraduate and postgraduate levels.

## Sustainable water management in the tropics and subtropics - and case studies in Brazil. VI. 3

unipampa

## Sustainable Water Resources Management

Sustainable Water Resources Management presents the most current thinking on the environmental, social, and political dimensions of sustainably managing the water supply at local, regional, or basin levels.

## Conjunctive Water Management

## A powerful contribution to achieving the Sustainable Development Goals

UNESCO Publishing

## Sustainable Watershed Management

CRC Press This proceedings volume contains papers and extended abstracts presented at the International Conference on Sustainable Watershed Management (SuWaMa 2014). The Conference was the second in a series of Sustainable Watershed Management Conferences. The objective of the Conference Series was to present and discuss advanced environmental models and contemporary decision support tools for the sustainable use and development of watersheds. Contributions cover the following topics: sound watershed management practices (case studies and examples from various countries including lessons learned from implementation of both successful and deficient management scenarios), decision support tools (such as monitoring, GIS, ecological economics, cost/benefit analysis and decision making models), integrated environmental model applications for management (including watershed, air-shed, coastal, and living resource models), trans-boundary environmental issues (air pollution, climate change, coastal oceans at regional, continental, and global scales) and global watershed sustainability. This multidisciplinary volume will benefit natural and social scientists, engineers, managers and other professionals as well as stakeholders with an interest in water resources and their management.

## Green Stormwater Infrastructure for Sustainable Urban and Rural Development

MDPI "Green Stormwater Infrastructure for Sustainable Urban and Rural Development" offers some of the latest international scientific and practitioner findings around the adaptation of urban, rural and transportation infrastructures to climate change by sustainable water management. This book addresses the main gaps in the up-to-date literature and provides the reader with a holistic view, ranging from a strategic and multiscale planning, implementation and decision-making angle down to the engineering details for the design, construction, operation and maintenance of green stormwater techniques such as sustainable drainage systems (SuDS) and stormwater control measures (SCMs). This book is particularly recommended for a wide audience of readers, such as academics/researchers and students in the fields of architecture and landscaping, engineering, environmental and natural sciences, social and physical geography and urban and territorial planning. This book is also a resource for practitioners and professionals developing their work in architecture studios, engineering companies, local and regional authorities, water and environmental industries, infrastructure maintenance, regulators, planners, developers and legislators.

## Draft Flood and Water Management Bill

The Stationery Office This publication contains a consultation paper, draft Bill, explanatory notes and an impact assessment. The proposals in the draft Bill aim to give effect to: the Government's response to Sir Michael Pitt's review "Learning lessons from the 2007 floods" ([http://archive.cabinetoffice.gov.uk/pittreview/thepittreview/final\\_report.html](http://archive.cabinetoffice.gov.uk/pittreview/thepittreview/final_report.html) and <http://www.defra.gov.uk/enviro/fcd/floods07/Govtresptopitt.pdf>); "Future water - the Government's water strategy for England (2008, Cm. 7319, ISBN 9780101731928); and to the flood and water aspects of the Welsh Assembly Government's "Environment strategy" and "Strategic policy position statement on water" (<http://wales.gov.uk/topics/environmentcountryside>). The proposals cover flood and coastal erosion risk management, including a strategic overview role for the Environment Agency and provision for a new local authority leadership role in local flood risk management. Other policies cover main river mapping, co-operation and sharing of information, sustainable drainage systems, Regional Flood Defence Committees, implementation of the EU Floods Directive and the Water Framework Directive, reservoir safety, surface water management plans and hosepipe bans. Two major independent reviews are also awaited: Martin Cave's review of competition and innovation in water markets and Anna Walker's review of charging and metering for household water and sewerage services. Their recommendations will have to be considered and could lead to further legislative proposals in this area.