

1. Record Nr.	UNINA9910780965603321
Titolo	The adaptive water resource management handbook // edited by Jaroslav Mysiak. [and others]
Pubbl/distr/stampa	London ; ; Sterling, Va. : , : Earthscan, , 2010
ISBN	1-134-03957-3 1-134-03950-6 1-315-06598-3 1-282-50618-8 9786612506185 1-84977-019-0 1-84977-459-5
Descrizione fisica	1 online resource (216 p.)
Altri autori (Persone)	MysiakJaroslav
Disciplina	628.1
Soggetti	Water - Distribution - Planning Water-supply engineering Adaptive natural resource management Water resources development - Government policy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Half Title; Title Page; Copyright Page; Table of Contents; List of Figures and Tables; Contributor Affiliations; List of Acronyms and Abbreviations; 1 Introduction - Making a Strong Case for AWM; 1.1 Challenges of river basin management; 1.2 Integrated Water Resources Management (IWRM); 1.3 Adaptive Water Management in terms of development and application within IWRM; 1.4 Tools for adaptive management; 1.5 AWM concept in terms of training and capacity building; 2 Working Towards AWM; 2.1 Key outcomes and benefits of AWM 2.2 Summary of outcomes from NeWater case river basins (outputs and benefits)2.3 Experiences and identification of lessons learned from piloting AWM; 3 Tools and Instruments for Adaptive Management; 3.1 Management of participatory processes; 3.2 Participatory Modelling; 3.3 Uncertainty and policy making; 3.4 Indicators and monitoring to

support AWM; 3.5 An introduction to analysing dynamic vulnerability; 3.6 Integrated assessment tools and decision support systems; 3.7 Climate change impacts on water resources and adaptation options; 3.8 Management and Transition Framework
3.9 Internet portals and services for knowledge transfer
4 Capacity Building and Knowledge Transfer; 4.1 Introduction; 4.2 Aims of the training courses; 4.3 Target audience for training; 4.4 Obstacles encountered; 4.5 The 'broker concept'; 4.6 Train-the-trainer workshops; 4.7 Train-the-practitioner workshops; 4.8 AWM in academic education; 4.9 Lessons learned in academic education; 4.10 Involvement of organizations outside the project consortium; 5 Case Study: Elbe; 5.1 Background; 5.2 Selected themes; 5.3 Research and tools applied in the Elbe case study; 5.4 Outlook and policy summary
6 Case Study: Guadiana
6.1 Background; 6.2 Selected themes; 6.3 Groundwater modelling and management scenarios; 6.4 WEAP model; 6.5 The vulnerability analysis (CART analysis); 6.6 Bayesian Belief Networks; 6.7 Water Footprint; 6.8 The Future; 7 Case Study: Rhine; 7.1 Introduction; 7.2 The Lower Rhine; 7.3 Kromme Rijn; 7.4 Wupper; 7.5 Comparison between the Wupper and Kromme Rijn regimes; 7.6 Conclusions; 8 Tisza River Basin; 8.1 Background; 8.2 Major problems; 8.3 Lessons learnt and the future; 8.4 How can AWRM help and what tools are still needed?; 9 Case Study: Amudarya; 9.1 Background
9.2 Selected Themes addressed in the Amudarya Case Study
9.3 Tools developed and applied in the Amudarya case study; 9.4 The future; 10 Case Study: Nile; 10.1 Background; 10.2 Selected themes in the NeWater project; 10.3 Tools applied in NeWater; 10.4 Future of the Nile Basin; 11 Case Study: Orange; 11.1 Background; 11.2 Addressing issues of concern; 11.3 The institutional context in the Orange basin; 11.4 Tools and approaches applied in the Orange-Senqu case study; 11.5 Theme 1: A focus on ecosystem goods and services; 11.6 Theme 2 Investigating alternative possible futures through scenarios
11.7 Conclusion

Sommario/riassunto

The complexity of current water resource management poses many challenges. Water managers need to solve a range of interrelated water dilemmas, such as balancing water quantity and quality, flooding, drought, maintaining biodiversity and ecological functions and services, in a context where human beliefs, actions and values play a central role. Furthermore, the growing uncertainties of global climate change and the long term implications of management actions make the problems even more difficult. This book explains the benefits, outcomes and lessons learned from adaptive water manag
