

Risk-Informed Management of European River Basins

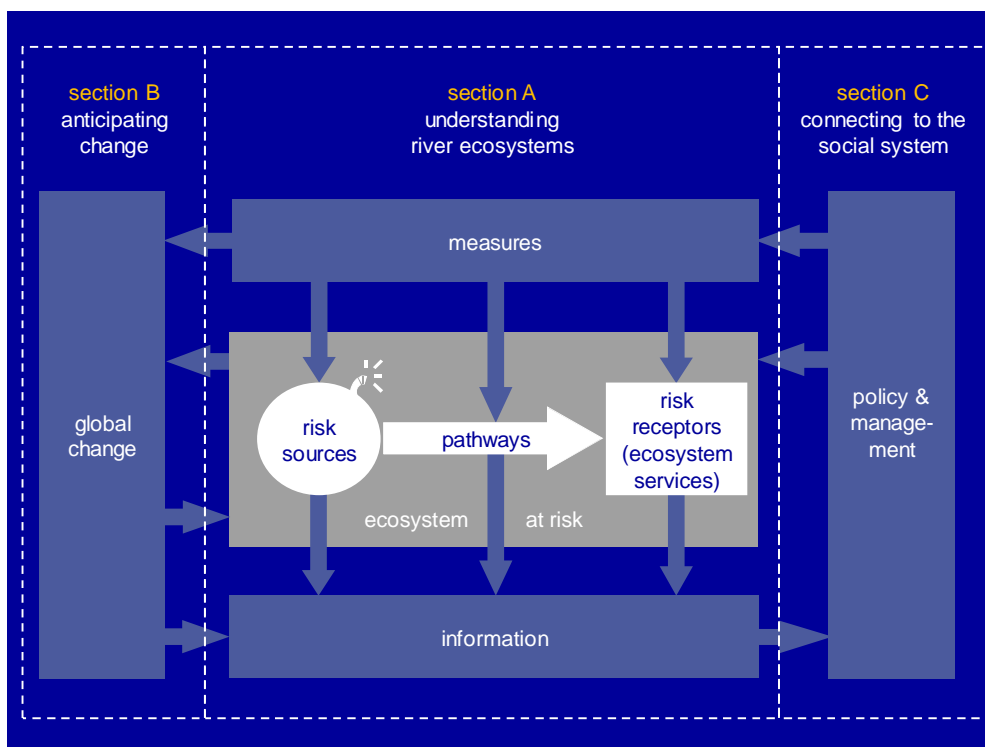
Jos Brils, Werner Brack, Dietmar Müller-Grabherr, Philippe Négrel, Jan E. Vermaat *Editors*
 2014, XIV, 395 p. 63 illus., 47 illus. in color., Hardcover, ISBN: 978-3-642-38597-1

The Handbook of Environmental Chemistry 29 *Series Editors*: Damià Barceló, Andrey G. Kostianoy
<http://www.springer.com/978-3-642-38597-1>

Structure:

The book is structured in three main (A-B, see Fig.) and one concluding section (D):

- Section A – Understanding River Ecosystems (three Chapters);
- Section B – Anticipating Change (four Chapters);
- Section C – Connecting to the Social System (five Chapters);
- Section D – Synthesis and Recommendations (one Chapter).



Contents:

Foreword

Christos Fragakis

Introduction: The Need for Risk-Informed River Basin Management

Jos Brils, Damià Barceló, Winfried Blum, Werner Brack, Bob Harris, Dietmar Müller-Grabherr, Philippe Négrel, Vala Ragnarsdottir, Wim Salomons, Adriaan Slob, Thomas Track, Joop Vegter, and Jan E. Vermaat

Section A Understanding River Ecosystems

Soil–Sediment–River Connections: Catchment Processes Delivering Pressures to River Catchments

Philippe Négrel, Corine Merly, Laurence Gourcy, Olivier Cerdan, Emmanuelle Petelet-Giraud, Martin Kralik, Gerard Klaver, Geert van Wirdum, and Joop Vegter

Status and Causal Pathway Assessments Supporting River Basin Management

Peter C. von der Ohe, Sabine E. Apitz, Kestutis Arbaciauskas, Mikhail A. Beketov, Dietrich Borchardt, Dick de Zwart, Willem Goedkoop, Michaela Hein, Seppo Hellsten, Daniel Hering, Ben J. Kefford, Vadim E. Panov, Ralf B. Schäfer, Helmut Segner, Jos van Gils, Joop J. Vegter, Markus A. Wetzel, and Werner Brack

Monitoring Programmes, Multiple Stress Analysis and Decision Support for River Basin Management

Peter C. von der Ohe, Dick de Zwart, Elena Semenzin, Sabine E. Apitz, Stefania Gottardo, Bob Harris, Michaela Hein, Antonio Marcomini, Leo Posthuma, Ralf B. Schäfer, Helmut Segner, and Werner Brack

Section B Anticipating Change

Downscaling Scenarios as an Exploratory Tool for River Basin Management: An Introduction

Jan E. Vermaat, Wim Salomons, Alison J. Gilbert, and Fritz A. Hellmann

Informing River Basin Management on Flood and Drought Risks Taking Future Uncertainties into Account

Aline te Linde, Hans de Moel, and Jeroen Aerts

Future Land Use Patterns in European River Basins: Scenario Trends in Urbanization, Agriculture and Land Use

Fritz A. Hellmann and Hans de Moel

Framing the Uncertain Future: Articulating IPCC-SRES Scenarios for European River Basins

Jan E. Vermaat, Sabine E. Apitz, Winfried Blum, Bob Harris, Fritz A. Hellmann, Wim Salomons, and Tijs van Maasakkers

Section C Connecting to the Social System

Integrated River Basin Management and Risk Governance

Dietmar Müller-Grabherr, Marie Valentin Florin, Bob Harris, Damian Crilly, Goran Gugic, Joop Vegter, Adriaan Slob, Ilke Borowski, and Jos Brils

Ecosystem Services and River Basin Management

Kate A. Brauman, Suzanne van der Meulen, and Jos Brils

Participatory Approaches and the Role of Facilitative Leadership

Mattijs van Maasakkers, Michael Duijn, and Britta Kastens

How Spatial Planning Can Connect to River Basin Management

Geiske Bouma and Adriaan Slob

Improving the Connection Between Science and Policy for River Basin Management

Adriaan Slob and Michael Duijn

Section D Synthesis and Recommendations

Synthesis and Recommendations Towards Risk-Informed River Basin Management

Jos Brils, Bob Harris, Damià Barceló, Winfried Blum, Werner Brack, Dietmar Müller-Grabherr, Philippe Négrel, Vala Ragnarsdottir, Wim Salomons, Adriaan Slob, Thomas Track, Joop Vegter, and Jan E. Vermaat