

Preface

Erosion, sedimentation processes and management in catchments, river systems and reservoirs have reached global importance. Sediment transport is a vital component of natural hydromorphological regimes. Contaminated sediments can have adverse effects on people, environment and economy. Sediment is a fundamentally important component of aquatic ecosystems. Where human activities interfere with sediment quantity or quality, sediment management becomes necessary. Sediment processes and their socio-economic and environmental impacts are many and varied, making it almost impossible to treat them all in the framework of a single book. Rather, the purpose of this book is to provide exemplary insights into the relevant aspects related to sediment and sediment management as they were presented and discussed during the 6th International Conference on Water Resources and Environment Research in Koblenz, Germany in June 2013. The research findings included in the individual chapters of this publication will allow readers to gain an overview of the relevant boundary conditions, drivers, processes and consequences of erosion, sediment transport and sedimentation at different scales. The inter-linkages of sediment dynamics and sediment quality with bio-geochemistry, ecology and human activities and their consequences for an effective sediment management are shown exemplarily in the various chapters of this book and allow to put individual questions and issues into a broader sediment perspective.

Our main acknowledgement goes to all authors of individual chapters. We also acknowledge the help of the reviewers, the lector and all who have provided the necessary support for this publication. We thank very much Mrs. B. Noll and Mrs. A.M. Conde Corral for their tireless patience and technical support during the writing and publishing of this book.

Koblenz, 2015

Peter Heininger
Johannes Cullmann

Sediment Matters

Heininger, P.; Cullmann, J. (Eds.)

2015, VIII, 247 p. 99 illus., 53 illus. in color., Hardcover

ISBN: 978-3-319-14695-9