1. Record Nr. UNINA9910458678403321

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| Titolo | Sediment management at the river basin scale [[electronic resource] /] / edited by Philip N. Owens |
| Pubbl/distr/stampa | Amsterdam ; ; Boston, : Elsevier, c2008 |
| ISBN | 1-281-05514-X<br>9786611055141<br>0-08-055326-5 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (281 p.) |
| Collana | Sustainable management of sediment resources ; ; 4 |
| Altri autori (Persone) | OwensPhilip N <1966-> (Philip Neil) |
| Disciplina | 333.73<br>363.72/84 |
| Soggetti | Dredging spoil - Environmental aspects<br>Sediments (Geology) - Analysis<br>Soil remediation<br>Contaminated sediments<br>Electronic books. |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | The results of four workshops organized by the working group on quality and impact assessment of the SedNet (the European Sediment Research Network) EU funded project. The four workshops were: "Chemical Analysis and Risk Assessment of Emerging Contaminants in Sediments and Dredged Materials" held in Barcelona, on 28-30 November 2002; "Impact, Bioavailability and Assessment of Pollutants in Sediments and Dredged Materials Under Extreme Hydrological Conditions" held in Berlin on 3-5 April 2003; "Monitoring Sediment Quality at River Basin Scale, Understanding the Behaviour and Fate of Pollutants" held in Lisbon on 29-31 January, 2004; and "Towards Harmonization of Impact Assessment Tools for Sediment and Dredged Materials", held in San Sebastian, Spain on 10-11 June 2004. |
| Nota di bibliografia | Includes bibliographical references and indexes. |
| Nota di contenuto | Cover; Table of Contents; Introductory comments by UNESCO IHP; Preface; Chapter 1: Sediment Behaviour, Functions and Management in River Basins; 1. Introduction; 2. What is sediment?; 3. Sediment movement and behaviour; 4. Sediment fluxes and storage; 5. Sediment functions and anthropogenic impacts on these; 6. Managing sediment |

in river basins; 7. Why manage sediment at the river basin scale?; 8. What information do we need to manage sediment at the river basin scale?; Acknowledgements; References
Chapter 2: Conceptual and Strategic Frameworks for Sediment Management at the River Basin Scale1. Sediment management today; 2. Understanding process: the need for a conceptual model; 3. Sediment management at the river basin scale; 4. Risk management in river basins; 5. Frameworks for sediment management in Europe; 6. An example of a basin-wide sediment management strategy: the Norfolk Broads, England; 7. Conclusions; References; Chapter 3: Regulatory Frameworks for Sediment Management; 1. Introduction; 2. The regulatory perspective; 3. International marine and freshwater management
4. Initiatives and non-legislative drivers: a UK perspective5. Sediment management; 6. Summary and conclusions; Acknowledgements; References; Chapter 4: Sediment and Contaminant Sources and Transfers in River Basins; 1. Introduction; 2. Sources and pathways of sediment to river channels; 3. Sources and pathways of contaminants and nutrients to sediments; 4. Sediment-contaminant transport and transfer processes in rivers; 5. Perturbations to sediment and contaminant sources and transfers; 6. Conclusion; References; Chapter 5: Decision Support Tools for Sediment Management; 1. Introduction
2. Mapping and monitoring3. Sediment tracing and fingerprinting; 4. Mathematical models; 5. Summary and conclusions; References; Chapter 6: Costs and Benefits of Sediment Management; 1. Introduction; 2. Societal Cost-Benefit Analysis; 3. Sediment management and Societal Cost-Benefit Analysis; 4. Example 1: CBA of dredging in the Netherlands; 5. Example 2: Economic analysis and river basin management in relation to the EU Water Framework Directive; 6. Environmental liability and sediments; 7. Conclusions; References; Chapter 7: Sediment Management and Stakeholder Involvement; 1. Introduction
2. Stakeholders3. Why stakeholders should be involved; 4. Stakeholder analysis; 5. Stakeholder perspectives; 6. How to involve stakeholders?; 7. Tools, processes and instruments; 8. Risks and pitfalls; 9. Conclusions; References; Chapter 8: Towards Sustainable Sediment Management at the River Basin Scale; 1. Introduction; 2. The use of science in sediment management at a river basin scale; 3. Towards sustainable management of sediment; 4. An adaptive framework for river basin management
5. Case studies linking environmental policy developments, social and physical sciences, and river basin management

Sommario/riassunto

Sediments are a natural part of aquatic systems and they are essential for the hydrological, geomorphological and ecological functioning of those systems. For society they are important and represent an important resource. However, due to the ever increasing use of river catchments, sediments need to be managed in a balanced and sustainable way.  Sediment Management at the River Basin Scale reviews some of the key requirements and challenges facing scientists, river basin managers, and policy makers for sustainable sediment management at the river basin scale, and puts forward important