Record Nr.	UNINA9910136351503321
Titolo	River science : research and management for the 21st century / / edited by David J. Gilvear, [and three others]
Pubbl/distr/stampa	Chichester, [England] : , : Wiley-Blackwell, , 2016 ©2016
ISBN	1-118-64351-8 111864350X
Descrizione fisica	1 online resource (553 p.)
Disciplina Soggetti	551.483 Rivers Stream conservation Cursos d'aigua Conservació dels recursos naturals Llibres electrònics
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 at the end of each chapters and index.
Nota di contenuto	Title Page; Copyright; Dedication; Table of Contents; List of contributors; Preface; A foundation; Research development and impacts; Recognition; References and bibliography; Chapter 1: An introduction to river science: research and applications; Introduction; The development of the discipline of river science; The domain of river science; Chapters in this volume and book structure; References; Part 1: Fundamental principles of river science; Chapter 2: An ecosystem framework for river science and management; Introduction A brief history of models that have contributed to our understanding river ecosystemsUnderlying concepts for the use of frameworks in River Science; The use and abuse of an interdisciplinary approach in the research and management of riverine landscapes; Summary; References; Chapter 3: Fine sediment transport and management; Background and context; Key concepts; Tools for meeting new information needs; Management and policy; Case studies; Summary and the way forward; References

1.

Chapter 4: Linking the past to the present: the use of palaeoenvironmental data for establishing reference conditions for the Water Framework Directive:Introduction: The fluvial landscape: floodplains, palaeochannels and connectivity; Floodplains as archives of change; Lake sediment-based archives; The evidence base for establishing reference conditions; Discussion and conclusion; Acknowledgements; References; Chapter 5: Achieving the aquatic ecosystem perspective: integrating interdisciplinary approaches to describe instream ecohydraulic processes: Introduction Empiricism, classification and the scale principleCausality principle at small and large scales; Discussion; Acknowledgements; References; Chapter 6: Measuring spatial patterns in floodplains: A step towards understanding the complexity of floodplain ecosystems; Introduction; A history of spatial pattern in floodplain research; A new approach for measuring spatial pattern in floodplains; Synopsis and future directions: Acknowledgements: References: Chapter 7: Trees, wood and river morphodynamics: results from 15 years research on the Tagliamento River, Italy: Introduction The Tagliamento RiverGrowth of riparian trees in disturbed riparian environments; Flow disturbance and vegetation cover; Vegetation and fine sediment retention; Changing the controlling factors; Acknowledgements; References; Chapter 8: The Milner and Petts () conceptual model of community structure within glacier-fed rivers: 20 years on: Introduction: Overview of the conceptual model; AASER and the validation of the original model; Further relevance of the model; Glacial Index and ARISE classification system; Summary and future directions: Acknowledgements: References Chapter 9: Remote sensing: mapping natural and managed river corridors from the micro to the network scale