Record Nr. UNINA9910299453803321 Engineering Geology for Society and Territory - Volume 3 [[electronic **Titolo** resource]]: River Basins, Reservoir Sedimentation and Water Resources // edited by Giorgio Lollino, Massimo Arattano, Massimo Rinaldi, Orazio Giustolisi, Jean-Christophe Marechal, Gordon E. Grant Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-09054-2 Edizione [1st ed. 2015.] 1 online resource (618 p.) Descrizione fisica Disciplina 363.728 Soggetti Geotechnical engineering Hydrology Engineering geology Engineering—Geology **Foundations** Hydraulics Sedimentology Geotechnical Engineering & Applied Earth Sciences Hydrology/Water Resources Geoengineering, Foundations, Hydraulics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapter and Nota di bibliografia index. Part I Dams, Geomorphic Processes and Water Resources Management Nota di contenuto -- Part II Debris-Flow Monitoring and Warning -- Part III Dynamics of Large Wood in River Basins: Recruitment, Transport and Related Hazard -- Part V Groundwater Modelling -- Part VI Sediment Dynamics and River Management -- Part VII Modeling of Alluvial Aguifer Systems --Part VIII Remediation of Polluted Aguifers and Subsoils -- Part IX River Basin Management and Floods: Theories and Good Practices in Engineering and Geology -- Part X Sediment, Morphodynamics and

Flood Risk -- Part XI Water Basins Management in Semi-Arid Regions -- Part XII Water Resource Assessment in Karst and Fractured Aquifers

Sommario/riassunto

-- Part XIII What is Expected from the Emerging Monitoring Technologies for the Surface Hydrological Processes Analysis at Catchment Scale.

This book is one out of 8 IAEG XII Congress volumes, and deals with river basins, which are the focus of many hydraulic engineering and hydrogeological studies worldwide. Such studies examine river systems as both a resource of the fluvial environment, and also explore riverrelated hazards and risks. The contributions of researchers from different disciplines focus on: surface-groundwater exchanges, stream flow, stream erosion, river morphology and management, sediment transport regimes, debris flows, evaluation of water resources, dam operation and hydropower generation, flood risks and flood control, stream pollution, and water quality management. The contributions include case studies for advancing field monitoring techniques, improving modeling and assessment of rivers, and studies contributing to better management plans and policies for the river environment and water resources. The Engineering Geology for Society and Territory volumes of the IAEG XII Congress held in Torino from September 15-19, 2014, analyze the dynamic role of engineering geology in our changing world and build on the four main themes of the congress: environment, processes, issues, and approaches. The congress topics and subject areas of the 8 IAEG XII Congress volumes are: Climate Change and Engineering Geology Landslide Processes River Basins. Reservoir Sedimentation and Water Resources Marine and Coastal Processes Urban Geology, Sustainable Planning and Landscape Exploitation Applied Geology for Major Engineering Projects Education, Professional Ethics and Public Recognition of Engineering Geology Preservation of Cultural Heritage.