Record Nr. UNINA9910298363903321 The Global Water System in the Anthropocene: Challenges for Science **Titolo** and Governance / / edited by Anik Bhaduri, Janos Bogardi, Jan Leentvaar, Sina Marx Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-319-07548-9 Edizione [1st ed. 2014.] 1 online resource (436 p.) Descrizione fisica Springer Water, , 2364-6934 Collana 363.61 Disciplina Soggetti Physical geography **Environmental management** Hydrology Climate change Earth System Sciences Water Policy/Water Governance/Water Management Hydrology/Water Resources Climate Change/Climate Change Impacts Climate Change Management and Policy 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. Nota di contenuto Foreword -- Preface: The Global Water System in the Anthropocene --Part I - Global Water System: Current State and Future Perspectives --Part II - Dimensions of Change in River Basins and Regions -- Part III -Ecosystem Perspectives in Water Resources Management -- Governing Water in the Anthropocene. Sommario/riassunto The Global Water System in the Anthropocene provides the platform to present global and regional perspectives of world-wide experiences on the responses of water management to global change in order to address issues such as variability in supply, increasing demands for water, environmental flows, and land use change. It helps to build links between science and policy and practice in the area of water resources management and governance, relates institutional and technological

innovations, and identifies in which ways research can assist policy and

practice in the field of sustainable freshwater management. Until the industrial revolution, human beings and their activities played an insignificant role influencing the dynamics of the Earth system, the sum of our planet's interacting physical, chemical, and biological processes. Today, humankind even exceeds nature in terms of changing the biosphere and affecting all other facets of Earth system functioning. A growing number of scientists argue that humanity has entered a new geological epoch that needs a corresponding name: the Anthropocene. Human activities impact the global water system as part of the Earth system, and change the way water moves around the globe like never before. Thus, managing freshwater use wisely in the planetary water cycle has become a key challenge to reach global environmental sustainability.