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Titolo	Flood Risk in the Upper Vistula Basin / / edited by Zbigniew W. Kundzewicz, Markus Stoffel, Tadeusz Niedwied, Bartomiej Wyga
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Descrizione fisica	1 online resource (422 p.)
Collana	GeoPlanet: Earth and Planetary Sciences, , 2190-5193
Disciplina	551.489011
Soggetti	Geophysics Hydrogeology Natural disasters Geology—Statistical methods Environmental management Climatic changes Geophysics/Geodesy Natural Hazards Quantitative Geology Water Policy/Water Governance/Water Management 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	Tatra Mountains and their northern foothills – a guided tour -- Floods in mountainous basins -- Flood risk in various spatial scales -- Flood generation mechanisms and changes in principal drivers -- Methods to assess large wood-related flood risk in Polish Carpathian watercourses of different size -- Results of the modelling of wood transport phenomena in the Czarny Dunajec -- Modelling hydraulic parameters of flood flows for a Polish Carpathian River subjected to variable human impacts -- Climatic track. Changes in temperature and precipitation -- Change in circulation patterns -- Changes in streamflow -- Deciphering information from tree data -- Floods in Upper Vistula Basin from palaeoperspective -- Projections in climate (temperature and precipitation) and river discharge -- Downscaling and bias

correction for the region -- Flood risk management in the Upper Vistula Basin in perspective: traditional versus alternative measures -- Flood risk management and flood risk governance arrangements -- Human dimension of flood management in the Upper Vistula Basin.

Sommario/riassunto

This pioneering book addresses the entirety of river flooding issues in the Upper Vistula Basin, where considerable flood generation potential exists. It analyses the factors influencing flood risk, investigates variations in observation records and discusses projections for the future and adaptation to changing risk. It serves the general interest in understanding the floods that cause massive destruction in Europe, with dozens of fatalities and tremendous material damages. This interdisciplinary book, which covers aspects of climatology, geomorphology, hydrology, and water and flood risk management, unveils the complexity of the current situation. Access to reliable and accurate information can help solve important practical problems related to flood risk reduction strategies, and is at the core of the EU Floods Directive. As such, the book offers a valuable resource for scientists, educators and practitioners involved in water management, natural disaster reduction and adaptation to climate change.