Record Nr. UNINA9910483502403321 Hydrological extremes: river hydraulics and irrigation water **Titolo** management / / Ashish Pandey [and four others] (editors) Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2021] ©2021 3-030-59148-4 **ISBN** Edizione [1st ed. 2021.] 1 online resource (XII, 446 p. 262 illus., 230 illus. in color.) Descrizione fisica Water science and technology library;; Volume 97 Collana Disciplina 627.12 Soggetti River engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Intelligent Irrigation Water Management -- River Hydraulics --Nota di contenuto Assessment and Monitoring of Hydrological Extremes -- Future Scenarios. This book presents quality technical papers representing the recent Sommario/riassunto developments in the field of hydrological modeling, water management and water governance including practical applications. The content covers multifarious aspects of hydrology and water resources. It includes an application of the Hydrologic Modelling System (HEC-HMS) which has been successfully demonstrated for assessment of floods. The authors suggest an approach for the mitigation of cyclone disaster through a case study of the Phailin cyclone, whilst considering mitigating pluvial flooding, developing suitable management strategies. The book includes chapters discussing the detrended fluctuation analysis which is carried out for multifractal description of droughts. Drought characteristics are analyzed, and drought indices evolved for drought preparedness/management. The use of science in community planning under changing climate is also studied and discussed. The authors present and experimental study wherein hydraulic coefficients are calibrated by using vertical orifice. A cross flow hybrid hydrokinetic turbine is also evaluated for performance, and high head regulating radial gate designed and studied its sensitivity. This book will appeal to researchers, field practitioners, NGO and other Governmental as well as

private water practitioners.