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Sommario/riassunto	This book characterizes palaeochannels and their hydrological properties in the Western Bengal Delta (Damodar Fan Delta) to help understand palaeochannel development, with the goal of better informing sustainable water resource management in the world's largest delta. It not only demonstrates the link between palaeochannels and water resource management, but also explains how anthropogenic activities in the region have deteriorated water resource both in quantity and quality affecting human and ecological populations. The authors use remote sensing, GIS and machine learning techniques to examine the geophysical history and characteristics of palaeochannels up to the present day to determine how they have been impacted by

anthropogenic activity and climate change, and what needs to be done to better manage them for the purpose of improving water availability and quality . The book will cater to the needs of students at the undergraduate and graduate level in earth sciences, geography, geospatial sciences and environmental sciences, and will also help regional planners and decision-makers in comprehending the complexity of the Bengal Delta.