

The interactions between tectonic uplift, river erosion and alluvial deposition are fundamental processes which have acted to shape the landscape we see today. These processes are of course ongoing, and are important not only in geomorphology, sedimentology and structural geology, but also hydrology and river engineering.

Stan Schumm, Jean Dumont and John Holbrook have combined their respective specialities to provide an overview of the effect of active tectonics on river morphology, behavior and sedimentology. Their book brings together evidence and a variety of examples from both field and experimental studies to demonstrate how alluvial rivers are responding to uplift, subsidence and lateral tilting. Such recognition of the nature of river response yields criteria for the identification of active tectonics elsewhere, especially in areas without a history of seismic activity, or in the stratigraphic record. Using river characteristics such as sinuosity, gradient, and behavior to identify areas of active deformation can be of value in elucidating subsurface structure and in determining the cause of local flooding and problems of river stability of some of the world's great rivers, such as the Mississippi, Nile and Indus.

This volume will be of interest to graduate students, consultants and academic researchers in geomorphology, sedimentology and stratigraphy, structural geology, hydrology, geophysics, and geography.

Praise for the hardback edition of this book

'... an important new contribution to tectonic geomorphology and fluvial geomorphology. The authors have done an excellent job of bringing together theory of river processes, field observation, experiment study, and synthesis to better understand the connections between active tectonics and river processes. The book will be of interest to a variety of people, including civil engineers, physical geographers, hydrologists, geologists, and ecologists ... it is a really good read.' Homer Le Grand, *EOS*

'... the content is excellent and the range of examples used to illustrate key points is a major selling point. It is an extremely useful resource for teaching at university level, for researchers in the sciences and engineering, or just as a general reference for geoscientists interested in alluvial rivers.' Martin Stokes, *Geoscientist*

'This book brings together a large amount of literature and will be useful as a primer for engineers and earth scientists.' John Bridge, *Sedimentology*

Cover photo: Wallace Creek offset by San Andreas fault.

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