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Book review

FUTURE FLOODING AND COASTAL EROSION RISKS
C. R. Thorne, E. P. Evans and E. C. Penning-Rowsell (eds).
Thomas Telford Publishing, 2007. ISBN 978-0-7277-3449-5, £94, 528 pp.

Future Flooding and Coastal Erosion Risks is a collection of the various scientific works completed to inform the Foresight Future Flooding project, which offers advice on strategic future planning to ultimately reduce the cost of flood risk in the UK. The introduction offers four future scenarios, which are broadly equivalent to the four emissions scenarios (high; medium-high; medium-low; low) with which many of those working in flood risk management are familiar. The impact on the various drivers to flood risk, mechanisms of flooding and responses to flooding are examined and compared in each of the scenarios.

This methodology strongly reinforces the element of uncertainty that we deal with in flood prediction, and in each of the many elements that make up the complex subject of flooding.

The book is written by a large number of contributors across a range of disciplines and effectively shows the very wide range of drivers to the flooding issues, from the usual suspects such as climate change to the perhaps less obvious influences of human behaviour and urban change. The technical descriptions in the book cover all the disciplines and are consistently accessible and comprehensive. The book is worthwhile in terms of the collation of the technical descriptions of the various drivers, for example river and coastal processes, and also in social and urban change and their place in the flooding picture, which are accessible to engineers, environmental scientists, policymakers and students alike.

The mechanisms discussed for assessing risk are relatively innovative and always with a backdrop of uncertainty. The uncertainty however, never precludes progress. Throughout the text, gaps in the scientific knowledge and opportunities for future research are abundant.

The responses to flood risk discussed are comprehensive, again from the usual structural flood defence measures to longer term more sustainable strategic preventative planning, and although the outcomes are not clear for some of these response strategies, the evaluation is thorough in considering all of cost effectiveness, environmental quality and social justice. The idea of the difference between 'perceived' flood risk management and actual benefit also recurs throughout the book.

The UK is split into its various regions in the assessment of the drivers' impacts. This is appropriate to the data available and political history, which has shaped the current status of the drivers. This comparison in itself is interesting.

The key contributions of this book are the comprehensive description of the issues related to flooding and the application of the various methodologies discussed to move the subject forward and demonstrate the value of sustainable and preventative responses to allow strategic future planning for flooding. The topics discussed are certainly thought-provoking for those who may have a blinkered approach to future flooding as simply climate change which must be defended against, and the message is clear that the future cost of flooding is significant. The extent to which we can affect the cost is similarly so.

C. Thomson
EnviroCentre Ltd, UK