effects in monetary terms are output graphically over 100 years in 5 year steps.

The authors of the policy analysis section, G. Baarse and F. R. Rijsberman, go to great lengths to stress the need for cautious interpretation of model output, which is intended as a tool that decision-makers can use interactively. They are very right to urge caution, the pilot model contains some extremely simplistic elements, especially in the spatial context where the 'average' gradient of the coast is used. The larger ISOS model, which could be developed given time and money, will remain a first-order model. It cannot take account of the complex interactions between physical, chemical and biological factors until these are understood in the area that is being modelled (they appear to be relatively well understood in the Mississippi Delta after 30 years of research as described by Day). Nevertheless, the model is an exciting, multidisciplinary approach to a management problem which, I became convinced after reading, could become a valuable management tool if used in conjunction with other qualitative information.

One shortcoming of the book is its uneven geographical coverage. The workshop apparently chose 3 case-study nations, the Netherlands, Bangladesh and the Maldives in which to study impacts and to model effects. These are very appropriate countries to choose. However, aside from a few pages of rather general description, Bangladesh and the Maldives receive scant treatment.

This book is not a research or a teaching textbook; there are several recent books which cover the subject far more thoroughly. However, I believe that it will be very useful for those involved in management of areas prone to inundation by sea-level rise. The multidisciplinary approach that the book embodies and the model it describes provide a basis for planners who are in a position to make decisions about coastal management, or who pass on recommendations to decision-makers.

There is no doubt that we all have a lot to learn from the Dutch experience of living with (relative) sea-level rise. It is particularly pertinent to conclude with two comments from the book: firstly that the Netherlands has for several years spent 0.1% of its GNP on coastal defence, and to question whether the rest of the world is prepared to make such an investment, and secondly to reflect that, even in the Netherlands, it has taken a disaster involving loss of life and property, to convince decision-makers to take adequate coastal protective measures.

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Tidal Power, Proceedings of a symposium organised by the Institute of Civil Engineers in London in 1986. Thomas Telford, London. 379p. £37.50, ISBN 0-7277-0390-0.

One day, some day, somebody, somewhere is going to build a large tidal power barrage. Meantime the pre-construction bandwagon rolls on, with yet another book discussing the likely effects of yet another series of speculative proposals. (I often think it would be rewarding—at least in terms of my CV—to invent a totally imaginary project and instigate a series of publications based on it. Anybody interested in tunnelling under the Atlantic or attending a symposium on Black Holes and Coast Erosion?) However such lightheartedness must be set aside in consideration of this serious, almost earnest, volume.

The title itself is slightly misleading as the main focus of this book is the "Severn Barrage" across the Bristol Channel, a macrotidal estuary in SW Britain, and not as one might think "Tidal Power" in a global sense.

Plans to throw a barrage across the Bristol Channel have been put forward for at least 80 years. Geological and economically the project looks very attractive, as an estuary barrage could provide power, improved transportation and better ship berthing facilities. The present proposals have been gathering momentum since the early 1970s, with the prize being 5% of the British electric generating capacity. At a time when the UK energy industry is advancing towards privtisation, then the development of the barrage, through private financing, could be an important element in energy policy for the twenty-first century. However, as becomes apparent while reading this book, many of the experts have doubts, which when brought together, lead to a conclusion that the barrage will not be built in the foreseeable future.

The book consists of 17 chapters most of

which examine aspects of the Severn Barrage, although there are also chapters on the proposed Mersey Barrage (perhaps a pilot project for the Severn itself) and the Annapolis Royal strata-flo turbine, which is actually in operation. The book covers a wide range of issues, in no apparent order. These include the civil engineering, planning and design, the economics, the environment and the infrastructural changes that might be anticipated. As with any feasibility (or even *pre* feasibility study as some authors prefer), the text is full of caution. This caution is even more apparent in the discussion which accompanies each set of papers. It is clear that opinions, and in places fact, still differ greatly, and that a concensus will only be reached when the barrage is actually built and in operation. The sheer range of options, in for example, alignment, power-generation and transmission, make it very difficult for the casual reader to assess the scheme fully. The greatest doubts appear in the economic and environmental chapters, where it is clear that "the experts" simply do not know exactly what is going to happen. Even past experience, although limited, is now considered of little use, as Shaw points out on page 236. Among the great unknowns is the likely behaviour of the estuary sediment—dominated by mud—which could create expensive, and time-consuming, difficulties.

As the closing address says "A scheme is emerging." Yet far more work is needed. It is clear that the engineering costs, using traditional methods are too high, and the environmental impact too unknown. The great fear is that the scheme will go ahead too quickly, and eventually end in financial and environmental disaster. It is clear that both economy and the environment of southern Britain is at stake. This book is a sobering reflection on the problems to be faced, and as such must be recommended to all those interested in tidal power.

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