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Book review

COASTAL ENGINEERING GUIDELINES—FOR WORKING WITH THE AUSTRALIAN COAST IN AN ECOLOGICALLY SUSTAINABLE WAY

M. Gourlay, B. Harper, R. Cox, P. Stone and T. Webb. EA Books, Crows Nest, Australia, 2004, Aus $27·00, ISBN 0 8582 5819 6, 128 pp.

These guidelines are a well-structured reference book to coastal engineering but with a wider perspective of the coastal zone and a significant emphasis placed upon the importance of the natural environment and practitioners' responsibilities. It consists of seven chapters, providing an overview of all the necessary topics one would expect from engineering guidelines and all contained within a handy-sized book. Interesting features include a collection of supplements at the back, providing more detail on certain topics covered within the main text and boxed checklists at the end of most chapters. The boxed checklists, which cover key points and issues raised in each chapter, would appeal to the speed reader or practising engineer who requires a quick and useful reference or summary.

The first three chapters provide a good introduction to the book and cover the roles and responsibilities of professionals practising in the coastal environment and an overview of the coastal zone policies that are in place for the Australian coast. Further information on details of the coastal zone policies for different states and territories around the Australian coast and their associated publications are contained within Appendix 1. The importance of understanding the coastal processes involved when undertaking an engineering project by the coast is brought to the reader's attention in the introductory chapters.

Chapter 4, which describes the coastal environment, is however somewhat disjointed and provides only a brief and sketchy description of the processes involved. Reference to more technical documents would be a useful addition, as would the inclusion of some figures. Chapter 5 covers coastal development, providing a general overview and stressing the importance of ecological sustainability. It also outlines various types of development and refers to the supplements for several of the topics. The detailed supplement on outfalls further highlights the importance given to environmental issues of coastal engineering in Australia. However, it is unclear from the photograph on beach replenishment what measures are in place for the safety of the general public.

The largest chapter of the book, on coastal engineering methodology, is logically arranged, covering topics from design philosophy to investigative work, construction, maintenance and removal. Unfortunately the publication prefers to list and identify the necessary requirements at each stage of a coastal engineering project rather than provide any details, which would be more useful.

Overall, these guidelines provide a potentially useful summary of coastal engineering, particularly the issues that need to be considered when undertaking a coastal project in Australia. However, there is some lack of detail in places for the practising engineer and it would benefit from the inclusion of figures, particularly of coastal processes around the Australian coastline, and from the photos being linked to specific sections of the text. This publication will most probably appeal to and be useful to professionals who are inexperienced in working with the complexities of the coastal environment and provides an insight into Australian engineering practices.

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