

Preface

During the past century many of the world's beaches have been depleted by erosion. Some beaches, particularly in the United States, Western Europe and Australia, have been renourished by dumping sand or gravel on the shore—the aim being to restore and maintain a beach that will protect the coast from erosion by storm damage and prevent flooding of the hinterland, while providing an improved area for seaside recreation and habitat for wildlife.

Some of the first documented *Beach Renourishment* projects were undertaken in the early 1900s on the east coast of the United States. Several countries have since renourished beaches, particularly during the past few decades. These are reviewed, and experience from various beach renourishment projects from around the world used to discuss principles and practices.

Beach Renourishment will be most effective when those concerned understand how the beach is changing and why. Accordingly, sources of beach sediment and the causes and typical responses to beach erosion are discussed. *Beach Renourishment Principles* dealt with include the need for preliminary investigations, sources of sediment for beach renourishment, methods of beach renourishment, design considerations, techniques for monitoring changes, assessment of performance and modelling and planning considerations.

The text provides researchers, students, engineers, planners and managers with an overview of key guiding principles of beach renourishment. The coverage is necessarily selective and somewhat personal to the authors' respective geographical backgrounds.

A list of references provide a guide to more detailed information, including many technical guides and manuals, along with further details on the specific examples used.

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Beach Renourishment

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