Record Nr.	UNINA9910779922503321
Autore	Dean Robert G (Robert George), <1930-2015, >
Titolo	Coastal processes : with engineering applications / / Robert G. Dean, Robert A. Dalrymple
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2002
ISBN	1-107-11265-6
	0-511-15549-2
	0-511-17524-8
	1-60119-736-5
	9786610416912
	0-511-75450-7
	1-280-41691-2
	0-511-05315-0
	0-521-60275-0
Descrizione fisica	1 online resource (x, 475 pages) : illustrations, maps; digital, PDF file(s)
Disciplina	627/ 58
Sogotti	
Lingua di pubblicazione	
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Cover; Half-title; Title; Copyright; Contents; Preface; Acknowledgments; PART ONE INTRODUCTION TO COASTAL PROCESSES; PART TWO HYDRODYNAMICS OF THE COASTAL ZONE; PART THREE COASTAL RESPONSE; PART FOUR SHORELINE MODIFICATION AND ANALYSIS; Author Index; Subject Index
Sommario/riassunto	The world's coastlines, dividing land from sea, are geological environments that are unique in their composition and the physical processes affecting them. At the dynamically active intersection of land and the oceans, humans have been building structures throughout history. Initially used for naval and commercial purposes, more recently recreation and tourism have increased activity in the coastal zone dramatically. Shoreline development is now causing a significant conflict with natural coastal processes. This text on coastal engineering

1.

will help the reader understand these coastal processes and develop strategies to cope effectively with shoreline erosion. The book is organized in four parts: (1) an overview of coastal engineering, using case studies to illustrate problems; (2) hydrodynamics of the coastal zone, reviewing storm surges, water waves, and low frequency motions within the nearshore and surf zone; (3) coastal responses including equilibrium beach profiles and sediment transport; (4) applications such as erosion mitigation, beach nourishment, coastal armoring, tidal inlets, and shoreline management.