

tion on beach morphologies and change (p. 145), there is a beach-change model by Sunamura (1985) that looks much like the conceptual model proposed by Wright, Short, and others from the Australian school (with only indirect mention of the latter work). Fortunately, the bibliography is extensive; however, a significant number of the citations are available in Japanese only. Hence, as a primary reference source for English-speaking countries, the text is deficient. As a supplement, the text fares well.

Horikawa has accomplished an immense task by compiling the results of field and numerical investigations undertaken under the auspices of NERC and related Japanese studies, and he has served English-speaking coastal researchers well by making this information easily accessible. However, because of the book's strong engineering orientation, fraught with theoretical and empirical relationships but lacking analysis and insight, my inclination will be to pull Horikawa off the shelf only after Komar is already on my desk.

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**Cities on the Beach: Management Issues of Developed Coastal Barriers** edited by Rutherford H. Platt, Sheila G. Pelczarski & Barbara K. R. Burbank, The University of Chicago, Department of Geography, Research Paper No. 224, 1987, 324 p., US\$10, ISBN 0-89065-128-0 (paperback).

(Available from the publisher at 5828 S. University Avenue, Chicago, Illinois 60637-1583, U.S.A.)

In January 1985 at Virginia Beach, Virginia, a conference with the same title as this volume was attended by researchers, government officials, citizen activists and students. From some 75 papers, the editors have refined and edited 27 papers for this volume. They regretted that space did not permit the inclusion of several more good ones. In a way, this volume would therefore represent the very best or essential from that conference.

The obvious target for this volume would be those involved in the management of coastal barriers in the United States. The term 'coastal barrier' is used broadly in this volume to include the series of islands, spits and tombolos

fringing the lowlying coastal plains along 2,700 miles of the Atlantic and Gulf coasts from southern Maine to Texas. The barriers totalled 1.6 million acres and more than 63 million Americans live within 50 miles of them.

An introductory overview of the developed barriers is given by the senior editor. This is followed immediately by a paper on the 1982 Coastal Barrier Resources Act (CBRA) explaining the new federal policy stance in not subsidizing future development on hazardous, undeveloped coastal barriers, which still account for 18 percent of the total barriers. This paper provides an essential background to understanding CBRA-related issues in the other papers.

The rest of the volume is organized around seven themes or sections, of which the first three sections account for more than half of the volume or 15 of the 27 papers.

Of the four papers under the theme of geographical characteristics of coastal barriers, three have a wide geographic coverage dealing with the classification of coastal barriers for management, the effects of political fragmentation on local management of developed coastal barriers, and the population changes from 1960-80. The fourth paper is on shoreline changes with reference to the New Jersey barrier coast.

In the section on planning and growth management, there is a key paper on growth management on developed barriers. This is followed by papers on barrier management at the local level (Collier County, Florida), a preliminary management model based on 'regional multiple use, local single use' and suggested as an alternative to the CBRA, the management experience of the National Parks Service, the 'campground towns' of South Carolina Grand Strand, and the issues in estimating the economic aspects of beach recreation.

Three of the five papers in the section on shoreline management deal with dunes: the Dune Management District concept (example from Fire Island, New York), a successful dune restoration program (example from Mantoloking, New Jersey) and dune management recommendations (New Jersey). The other two papers are on approaches to hazard analysis (example from Ocean City, Maryland), and attitudes towards coastal erosion (example from Carolina Beach, North Carolina).

The four papers in a shorter section on hazard management are exclusively on hurricanes, reducing the impact before and after their occurrence. The papers are on evacuation dur-

ing a hurricane threat, the procedure for evaluating hurricane shelters, the experience of Galveston after Hurricane Alicia, and reducing the psychosocial trauma of hurricanes (also the example of Galveston after being struck by Hurricane Alicia).

There is an equally short section of three informative papers dealing with legal issues. The papers are on constitutional issues on post-hurricane reconstruction planning, the National Flood Insurance Program (NFIP) and coastal high hazard areas (including an appendix on NFIP regulations for such areas), and financing coastal barrier infrastructure (with various examples).

The much shorter section on management alternatives contains four interesting papers: a scientist's perspective of an orderly strategic retreat from the shoreline, the implementation problems of a 'retreat alternative' (example from The Kill Devil Hills, North Carolina), some aspects and considerations in establishing a state acquisition program of storm-damaged properties (with example from Scituate, Massachusetts), and issues relating to transferable land rights on developed barriers.

The appendices in the volume include a

reprint of the CBRA for those who wish to consult this document, biographical sketches of the authors and editors and a useful and selective, but not comprehensive, bibliography on coastal barriers culled from books, journal articles, conference proceedings, reports and monographs.

The editors are to be congratulated in their selection of the conference papers and making them available to a wider audience. The papers represent a good balance of the issues to be considered in the management of developed barriers in the United States. With few exceptions, the papers themselves are well written, organized, have proper references and very readable. At \$10, this volume would be a 'must' investment for those involved in the management of coastal barriers and is highly recommended for those in coastal management. Many of the methodologies, concepts and examples in the papers deserve a wider exposure to all interested or involved in coastal management.

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