

Book Review

Journal of Planning Education and Research
1–2

© The Author(s) 2017

Reprints and permissions:

sagepub.com/journalsPermissions.nav

jper.sagepub.com



Portman, Michelle E. 2016. *Environmental Planning for Oceans and Coasts: Methods, Tools, and Technologies*. Basel, Switzerland: Springer. 237 pp. \$139.00 (e-book). ISBN 978-3-319-26971-9

Reviewed by: Yael Teff-Seker, *University of Haifa*

DOI: 10.1177/0739456X17711517

Alongside policy and management, planning is one of the most essential and practical tools for developing responsible and long-term protection of the coastal and marine environment. The first step in that direction is understanding that the common, seemingly dichotomous, distinction between coast and sea is not only inaccurate but also potentially damaging to the ecologically sustainable development and protection of these areas. In *Environmental Planning for Oceans and Coasts: Methods, Tools, and Technologies*, Michelle E. Portman calls for integrative ecosystem-based coastal and marine planning and gives the reader a thorough science-based overview of the most essential concepts, principles, methods, and technological tools currently available and necessary for the efficient implementation of the approach mentioned above.

The book is modeled, as the author professes, after a graduate course she teaches to planning students, and it is indeed structured as an introductory course, at least at its beginning. It is easy to understand even for those exposed to the subject for the first time, and also includes helpful abstracts, key words, and summaries for each of its 12 chapters, each of which could stand alone as a separate article. However, it also goes deeper and wider into the various tools, methods, and technologies currently available, offering solutions that take the readers from what “is” to what “can be.” It thus accompanies the reader through the various stages of environmental learning: providing knowledge and data, cultivating awareness, encouraging change in environmental behavior, and lastly—giving readers the means to implement the desired change (Tbilisi Intergovernmental Conference on Environmental Education 1978; Hungerford and Volk 1990).

Reading through it, it is impossible to ignore Portman’s sense of urgency and genuine concern for the marine and coastal environment and its deteriorating condition. In her vision, this book can and should be used as a tool by planners, policy makers, and others to stop or even reverse the human-led detrimental process of ocean and coastal pollution and degradation. As Portman states, “No matter how overwhelming these problems seem, there is no need to go from the recognition of huge problems to complete despair. These problems call for stewardship, and environmental

planners are in luck in that they can make a difference” (221). This quote seems to summarize the book’s attitude well: while it emphasizes the damage done to the marine and coastal environment, it does not only call on planners and policy makers to change the situation, but also suggests the best ways for altering it.

The methods described in the book include ecosystem-based management (EBM), ecosystem services (ES), and the precautionary principle, alongside the call to use integrated coastal zone management (ICZM). The principal tools discussed are Marine Protected Areas (MPAs) and pollution prevention methods and policies. It also includes an overview of some of the technologies aimed at improving communication and decision making regarding the coastal and marine environment.

The book is divided into three parts. The first includes a useful explanation of principal concepts in marine and coastal planning, and explains the connection between management and planning in this area. In the second part, Portman discusses the different methodologies and approaches pertaining to marine and coastal planning, emphasizing the usefulness of the integrative approach. She also reviews essential and relevant environmental issues such as marine and coastal ecosystem services and pollution. This part also includes specific considerations relevant to marine spatial planning, including several case studies. Additionally, chapter 11, “Current Issues: Coastal Adaptation to Climate Change,” touches on the subject of climate change (including issues such as sea level rise, ocean acidification, and the rising temperatures of the oceans), another issue that is highly relevant to this type of planning, although the author chose to place it in the third part, perhaps because of the description of the available mitigation methods for climate change included in the chapter.

The first two parts of the manuscript read like a regular overview of environmental considerations in marine and coastal planning. It is necessary for this type of book, as it provides the foundations and the rationale for the third part, which is where, in my opinion, the book’s true strength lies. In this third part, Portman offers several examples of what she calls “Tools and Technologies” that are meant to create the necessary change in marine and coastal policy and

planning. She discusses methods for planning sustainable Marine Protected Areas (MPAs) and communicating marine- and coastal-related information and data between stakeholders, the government and scientists, as well as the public. In this discussion, she emphasizes the role of tools such as narration and visualization tools, as well as decision support tools (DSTs), including advanced, state-of-the-art solutions such as Marxan, Zonation, and GIS.

The book's largest contribution lies in the fact that unlike other scientific literature on the subject, it specifically focuses on planning and provides planners (and others) the tools to make a change in an area that desperately needs one. In summary, Portman has created the definitive guide for coastal and marine planners who are interested in responsible and sustainable environmental planning. Researchers and students wishing to improve their knowledge and make sense of the "sea" of information that surrounds coastal and marine

policy, managing and planning, would also find the book to be very useful. Also, although it is easy to read and understand even for those who come in contact with the subject matter for the first time, it is still written as an academic manuscript and provides more profound scientific knowledge than that which is available in texts meant for the general public and thus can be highly useful for researchers.

References

- Hungerford, H. R., and T. L. Volk. 1990. "Changing Learner Behavior through Environmental Education." *The Journal of Environmental Education* 21 (3): 8-21.
- Tbilisi Intergovernmental Conference on Environmental Education. 1978. "Toward an Action Plan: A Report on the Tbilisi Conference on Environmental Education." A paper developed by the FICE Subcommittee on Environmental Education. Washington, DC: U.S. Government Printing Office