Maritime Spatial Planning: Past, Present, Future: A Book Review



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ncreasing global demands for ocean-based resources and conflicting uses of marine areas have spurred many planning initiatives in an effort to manage numerous competing interests effectively. To achieve this management outcome, Marine Spatial Planning (MSP), in particular, is being widely deployed around the world (Ehler, 2020; Morf et al., 2021; Türkmen et al., 2021). According to the Intergovernmental Oceanographic Commission of UNESCO, "as of 2021, over forty-five countries worldwide are either implementing or approving marine spatial plans – and dozens more laying the foundation" (UNESCO, 2021). Some initiatives are at early stages, whereas others are well-advanced, i.e., existing plans have already been revised and adapted. The growth of MSP has also prompted an abundance of research by scholars seeking to understand the various components and scope of quite complex processes. An overview of this literature is needed to inform novices and to serve as a guide for experienced practitioners. *Maritime Spatial Planning: Past, Present, Future* is such a volume (Zaucha & Gee, 2019). This

book discusses critical questions about MSP that have emerged from several disciplines over the past two decades as well as supplying an overview of research and practice. For example, questions such as, what is the relationship between MSP and ecosystem approaches to marine management?, is MSP contributing to the sustainable development of the ocean?, and how inclusive are MSP processes in practice?, are considered in some detail. Authors from various disciplines in both natural and social sciences contributed to the volume to address the questions and discuss the roles, outcomes, and uncertainties surrounding MSP.

A fully open access text (both as individual chapters or the entire book), *Maritime Spatial Planning* was edited by Jacek Zaucha, Professor of Economics, University of Gdańsk, and researcher at the Institute for Development and Maritime Institute in Gdańsk, Poland, and by Kira Gee, a Marine Spatial Planning scholar in the Human Dimensions of Coastal Areas Department, Helmholtz Zentrum Hereon GmbH, Schleswig-Holstein, Germany. This book was published at a pivotal time. The United Nations Decade of Ocean Science for Sustainable Development was launched in 2021. Countries in the European Union (EU) were required to develop maritime spatial plans by 2021, and Canada has begun an agenda to complete plans in five marine bioregions by 2024. Other countries are making similar commitments. While this book focuses mainly on planning activities in Europe, it provides valuable and accessible information for readers in other contexts who are beginning to learn about MSP as well as practitioners and researchers already familiar with the benefits, challenges, and limitations of MSP.

The book consists of 19 chapters, each covering distinct topics. The first two provide an overview and history of MSP and offer a general background for readers. The next 15 chapters are grouped into sections on ecological, economic, socio-cultural, practical, and governance perspectives. The future of MSP is laid out in the final two chapters. Ecological perspectives are covered in chapters 3 and 4, including ecosystem-based management and systematic conservation planning. Chapters 5 and 6 provide an economic assessment, encompassing both classic location theory and present-day Blue Economy topics. Socio-cultural perspectives are presented in chapters 7 to 10, including discussion about social sustainability, equitable distribution, social cohesion, democratic decision-making, values and knowledge, engagement with politics and power, citizen science, boundary objects, public participation, power-sharing, and MSP in transboundary regions. Chapters 11 through 14 focus on practical applications with regard to land-sea interactions, implementation of MSP in Mediterranean areas, and links between MSP and Integrated Coastal Zone Management (ICZM). They also discuss stakeholder processes, participatory models, and scenario-building for the Celtic Seas. Risk governance, the law of the sea, and MSP in areas beyond national jurisdiction are treated in Chapters 15 to 17. Then, to round out the topics, chapters 18 and 19 discuss the evaluation of MSP applications and successful professional practices.

Generally, *Maritime Spatial Planning* will be particularly invaluable for readers who are new to the subject. The diversity of topics described in this book illustrates numerous dimensions of the field, which are important for developing a comprehensive understanding of a multifaceted planning method and process. Readers who are knowledgeable about MSP may find some treatments to be less detailed than preferred and definitions of MSP given in several chapters to be repetitious (recognizing that each chapter was written to stand on its own).



Selected Chapter Summaries

Chapter 1: Ehler, C., Zaucha, J., & Gee, K. Maritime/Marine Spatial Planning at the interface of research and practice (pp. 1-21). https://doi.org/10.1007/978-3-319-98696-8_1

In the first chapter, Ehler, Zaucha, and Gee describe the evolution of MSP over the past twenty years. Their analysis focuses on changes in the conceptualization of MSP, from its initial understanding as a zoning tool to a position as a multidimensional governance approach. This chapter is straightforward due to the accessible language that the authors use. Thus, the chapter is informative and can be considered as mandatory reading for readers beginning to learn about MSP.

Chapter 2: Gee, K. The ocean perspective (pp. 23-45). https://doi.org/10.1007/978-3-319-98696-8 2

In this chapter, Dr. Gee discusses the ocean as marine space. She challenges readers to re-think conceptions of ocean space in terms of geophysical and social processes. The chapter presents the intrinsic value of the ocean (its existence and permanence value), which is closely related to the protection of the ocean as a fundamental part of our responsibility as humankind. Gee's use of poetic language to guide readers through a brief history of MSP is particularly enjoyable.

Chapter 5: Zaucha, J. Can classical location theory apply to sea space? (pp. 97-119). https://doi.org/10.1007/978-3-319-98696-8 5

This chapter can be considered more descriptive than generally informative and could be difficult to understand if a reader does not have some basic understanding of economics. This chapter's significant contribution is the perspective that both market forces and public choices shape the allocation of activities in marine spaces and that planners need to work to balance both elements to promote suitable uses of marine areas.

Chapter 7: McKinley, E., Acott, T., & Stojanovic, T. Socio-cultural dimensions of marine spatial planning (pp. 151-174). https://doi.org/10.1007/978-3-319-98696-8 7

In chapter 7, McKinley, Acott, and Stojanovic comment on how little attention has been given to the socio-cultural dimensions of MSP compared to economic, ecological, and administrative

components. This chapter is well-organized and provides a helpful table displaying concepts and their potential application in MSP. The importance of these social aspects is emphasized, although details about the actual application of this significant component are not provided. To strengthen the importance of socio-cultural dimensions in Marine Spatial Planning, readers would benefit from suggested direction to other publications and successful examples of socio-cultural inclusion in MSP processes.

Chapter 8: Saunders, F. P., Gilek, M., & Tafon, R. Adding people to the sea: Conceptualizing social sustainability in marine spatial planning (pp. 175-199). https://doi.org/10.1007/978-3-319-98696-8 8

In Chapter 8, the authors argue that sustainable development, and in turn, MSP, often focuses on economic and ecological dimensions while assuming that social factors will be addressed as a result. Even when social dimensions are reflected in MSP initiatives, they often lack meaning or share power with other components. Calls for more deliberative, democratic approaches to stakeholder inclusion are often met with skepticism due to their complicated nature and potential inability to guarantee equitable outcomes. While acknowledging these relevant challenges, the authors propose a conceptual approach for considering social sustainability in MSP that moves towards meeting social sustainability goals, including equity, inclusion, and social cohesion.

Chapter 10: Morf, A., Kull, M., Piwowarczyk, J., & Gee, K. Towards a ladder of marine/maritime spatial planning participation (pp. 219-243). https://doi.org/10.1007/978-3-319-98696-8 10

Chapter 10 starts from the position that social inclusion is important for fostering healthy decision-making processes. The chapter presents a comprehensive review of various models of stakeholder participation, highlighting that selection of a model should be based on the analysis of the planning requirements, according to particular themes, e.g., urban planning, MSP, health care research, etc. It is particularly helpful that the authors describe the different models in such a way that it is easy for a reader to understand the differences and similarities between them. Thus, it is also easy to understand how the authors integrate and restructure the models to develop a specific hierarchy of participation for the MSP context. According to Morf et al., the MSP participation ladder should consider three dimensions (communication and learning intensity, degree of responsibility for tasks, and level of power-sharing) and six levels of inclusion (information, consultation, deliberation, collaboration, decision-making, and process responsibility) and must be based on context.

Chapter 13: Twomey, S., & O'Mahony, C. Stakeholder processes in marine spatial planning: Ambitions and realities from the European Atlantic experience (pp. 295-325). https://doi.org/10.1007/978-3-319-98696-8_13

Chapter 13 offers a detailed look at stakeholder engagement and the role of openness, participation, transparency, and accountability. The European Union Blue Growth strategy for

developing maritime industries has intensified the importance of these good governance principles. Twomey and O'Mahony consider stakeholder engagement in planning Europe's Atlantic Sea basin. Beginning with the widely accepted notion that stakeholders should be included early and throughout the MSP planning process, the authors compare the results of the Transboundary Planning in the European Atlantic in Ireland (between the Republic and Northern Ireland) and in the Gulf of Cadiz between Spain and Portugal. While geographically and politically quite different, both areas are witnessing increasing pressures from growing maritime industries, most notably marine renewable energy. In addition, practical approaches to engagement are noticeably different. Northern Ireland has the smallest planning area, for example, but the largest planning team and the Iberian Peninsula engagement workshops saw a very low turnout from industry representatives, with the vast majority (72%) coming from the government (versus 26% in the Irish case). Overall, it seems that participation in MSP plays out very differently in reality and often fails to live up to its promise. The chapter concludes with some useful recommendations to improve transparency and to ensure early and ongoing engagement.

Chapter 18: Varjopuro, R. Evaluation of marine spatial planning: Valuing the process, knowing the impacts. (pp. 417-440). https://doi.org/10.1007/978-3-319-98696-8 18

Marine spatial planning is a complex undertaking, involving many actors (at national and international levels) and different environmental, economic, social, and political factors. Therefore, the evaluations of MSP plans need to be carefully designed to account for the multifaceted planning processes and outcomes. In this chapter, Rilko Varjopura applies "commonly used approaches in the evaluation of policies and spatial planning on land" to marine spatial planning. Further, in writing this chapter, Varjopura drew on experience gained from the evaluation and monitoring of cross-border collaboration in marine spatial planning in the Baltic Sea area. This chapter identifies various types of evaluation that can be implemented at different stages of MSP processes and includes numerous questions that can guide evaluation activities. Varjopura cautions against rigidity in evaluation approaches and focusing solely on input-output measures. Much can be learned from the MSP processes that would be missed if only outputs or outcomes were assessed. Readers expecting to find a clearly articulated description of how to conduct evaluations of marine spatial plans will be disappointed by this chapter, however. A more tightly written chapter that had schematically outlined the evaluation processes applied to the marine spatial plans in the Baltic Sea area would have strengthened this account about an important subject. Determining whether a plan has achieved its objectives is essential for ensuring that marine spatial plans remain effective.

Conclusion

Zaucha and Gee have assembled a book that offers a solid starting point for readers beginning their journey into studying and/or applying MSP. *Maritime Spatial Planning* touches on many

aspects critical to both researchers and practitioners. The book strikes a good balance, through practical examples, of where MSP is known to work well and where it is subject to some common critiques. Moreover, a good balance has been achieved in describing theory and practice. The book also engages with some progressive and challenging ideas, such as the complex land-sea interface and application of MSP in areas beyond national jurisdiction.

Social scientists' contribution to this volume is a notable strength, arguably filling a gap found in much of the literature on marine spatial planning. Depending on their knowledge of the subject, readers may find some chapters more informative than others. The chapters focusing on stakeholder processes and participation were of particular interest to our research group and these chapters have been included as a resource in a university course. As we discussed the book in our research team meetings, the chapters often prompted debate that led us to probe the themes that authors had outlined. Reading this book allowed our research team to consider essential and interdisciplinary aspects of MSP.

The chapters devoted to socio-cultural perspectives provide much-needed consideration of subjects that have typically been overshadowed by the considerably greater attention given to natural science and economic aspects in many applications of MSP. Since social scientists contributed to many of the chapters, the book offers insights from marine social science that practitioners could easily miss in the growing body of literature on the subject. *Maritime Spatial Planning* is an important addition to the literature about marine spatial planning. Thus, it will be a valuable reference as more countries continue to develop marine spatial plans or begin entirely new planning processes.

References

Ehler, C. N. (2020). Two decades of progress in marine spatial planning. *Marine Policy*, 104134. https://doi.org/10.1016/j.marpol.2020.104134

Marine Spatial Planning Global. (n.d.). About. https://www.mspglobal2030.org/about/

Morf, A., Caña, M., & Shinoda, D. (2021). *Ocean governance and marine spatial planning: Policy brief* (IOC/POL/2021/5; p. 11). Paris: Intergovernmental Oceanographic Commission of UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000375723?posInSet=149&queryId=N-469c3ef7-7963-4f86-a70b-3be43dbd5060

Türkmen, A., Salazar, E. R., Vlaswinkel, B., & Mahadeo, S. (2021). *Marine spatial planning and the sustainable blue economy: Policy brief* (p. 14) [ICO/POL/2021/2]. Paris: Intergovernmental Oceanographic Commission of UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000375720

UNESCO. (2021, October 7). UNESCO and European Commission launch flagship guide on marine/maritime spatial planning. https://en.unesco.org/news/unesco-and-european-commission-launch-new-flagship-guide-marinemaritime-spatial-planning

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