

Challenges and opportunities of ecosystem services integration into marine spatial planning: examples from case studies in the Baltic Sea

Authors: Strake S., von Thenen M., Luhtala H., Schiele K., Hansen H. S.

Abstract

The integration of the Ecosystem Service (ES) concept into Marine Spatial Planning (MSP) is still a major challenge and requires helping marine planners to understand ecosystem services in a practical way. By focusing on three different case studies, ecosystem service concept integration in various MSP situations is explored in the BONUS BASMATI project. The Latvian case study aims to support the marine protected areas (MPAs) designation process that, besides meeting the conservation goals, would consider social and economic issues to ensure that MPA sites are, as far as possible, chosen to maximize ecological, social and economic benefits while minimizing associated costs. The Danish-German case study on aquaculture investigates mussel farming opportunities in the south-western Baltic Sea. In both cases, different potential sites will be compared against each other based on the level of ecosystem services provision. The case studies apply the revised BONUS BASMATI ES framework. The third case example, the Pan-Baltic case study, assesses the role of business sector involvement in MSP, especially focusing on maritime transport and marine tourism sectors. The case aims to evaluate the current understanding of business stakeholders about the concepts of MSP and their perceptions on the benefits provided by ecosystems services. First findings from the three case studies will be presented and discussed.

Keywords:

ecosystem services, marine spatial planning, Baltic Sea case studies

Contact author:

Solvita Strake, Latvian Institute of Aquatic Ecology, Department of Marine Monitoring, Riga, Latvia. solvita.strake@lhei.lv