

Meeting conservation targets for 2030 at sea: the importance of adopting Systematic Conservation Planning principles

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Italy formally adopted its Maritime Spatial Planning in 2024 (Ministerial Decree No. 237) as a result of a gradual and phased process. Three marine areas, each characterized by different types of use designations (generic, priority, limited, reserved) and strategic objectives, were identified: 1) Maritime Area “Adriatic”; 2) Maritime Area “Ionian and Central Mediterranean”; 3) Maritime Area “Tyrrhenian and Western Mediterranean”.

Focusing on the third Maritime Area, we conducted a multi-zone, multi-objective spatial prioritization analysis based on Systematic Conservation Planning principles and compared the results with the Ministerial plan. The aim of this work was to assess whether the plan effectively addresses the legally binding targets of the EU Biodiversity Strategy for 2030, which seeks to protect at least 30% of EU land and sea areas by 2030, with 10% under strict protection. Considering 12 biodiversity features and the same human uses included in the national plan (i.e., fishery, aquaculture, marine transport and tourism), we defined conservation and management objectives for four types of zones: Zone 1: Strict Protection (10% target); Zone 2: Partial Protection (30% target); Zone 3: Fishery Areas; Zone 4: General use. Metrics related to connectivity, climate change, and restoration were also incorporated into the prioritization process.

This approach enabled us to optimize the design of a network of conservation areas for achieving both conservation and socio-economic objectives, thereby refining the use designations defined by the national plan. Our analysis revealed that, to meet the 10% target, all existing Marine Protected Areas within the planning region should be placed under strict protection regimes. Achieving the 30% target will require greater consideration of Other Effective Area-based Conservation Measures and offshore areas. Finally, we provide a concrete example of how conservation and restoration objectives can be jointly integrated within maritime spatial planning frameworks using best planning practice and optimization tools.