Area-based Management Tools (ABMTs) for cross-border biodiversity and ecosystem protection in the Otranto Strait (Mediterranean Sea)

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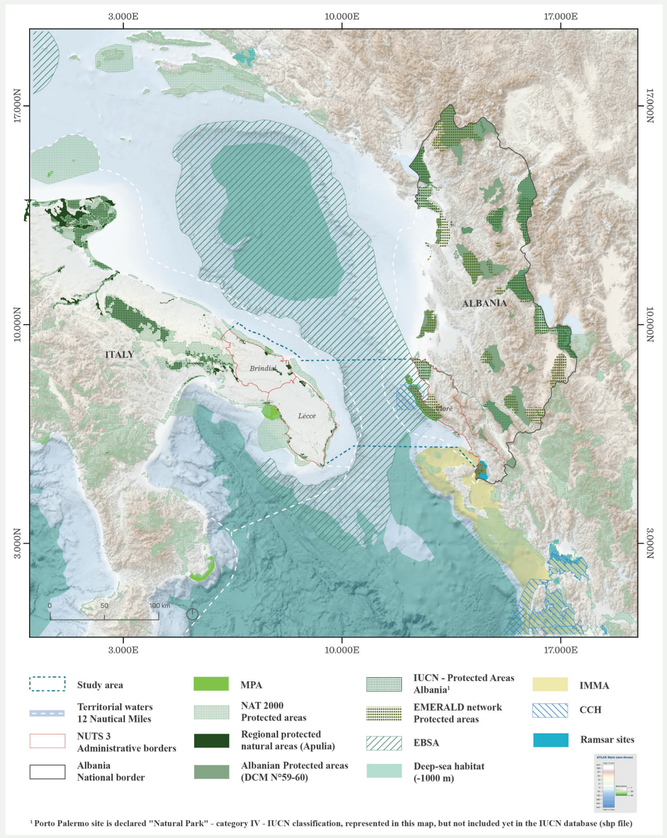
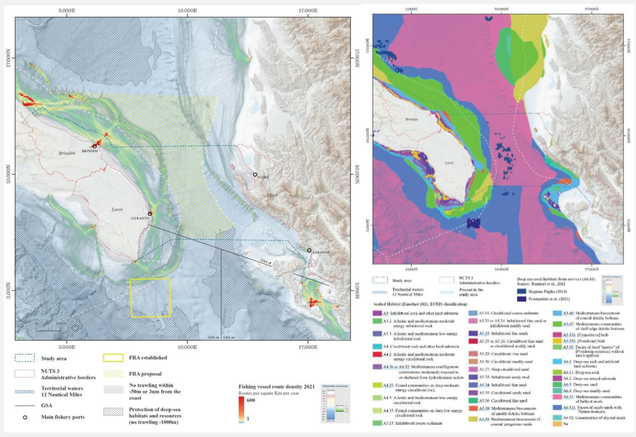
The Strait of Otranto, spanning 72 km between Albania and Italy, links the Southern Adriatic and Northern Ionian Seas. Historically, it has been crucial in regulating maritime traffic between the Mediterranean and the Adriatic. Today, it is recognized as an area of high ecological value, hosting diverse marine habitats and species that benefit from multiple layers of protection. These include Marine Protected Areas (MPAs), Natura 2000 and Emerald sites under the European Union and Bern Convention, National Parks, Specially Protected Areas of Mediterranean Importance (SPAMI) under the Barcelona Convention, Ecologically or Biologically Significant Areas (EBSAs) in the South Adriatic and Ionian Sea, and Cetacean Critical Habitats (CCH).



Protected natural areas

However, the Otranto region faces significant environmental challenges. Its complex and highly diverse ecosystems are under pressure from issues such as coastal erosion, flood risks, and the impact of maritime industries. Deep-sea trawling, marine litter accumulation, urbanization, and tourism further threaten the area's biodiversity and ecological stability. Offshore, deep-sea corals are impacted by trawling, while maritime traffic and fishing activities endanger marine megafauna. Along the Albanian coast, fishing activities pose challenges, compounded by pollution, debris, and overuse of protected areas. Meanwhile, the Italian coast faces threats to Posidonia oceanica meadows from tourism, fisheries, and pollution.



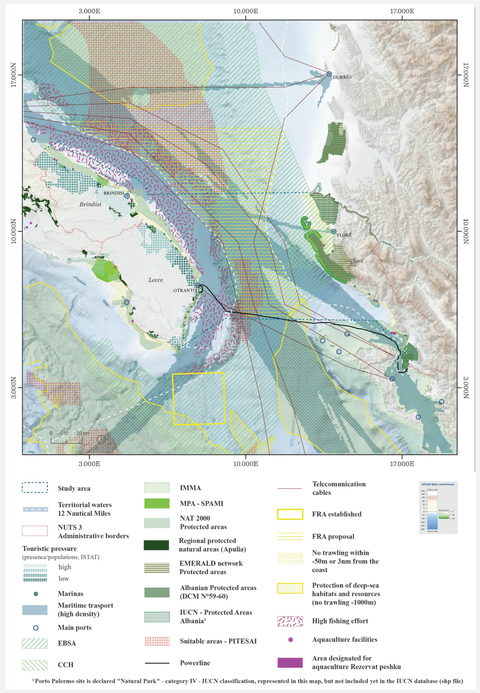
Density of fishing vessel traffic. Seabed habitat: presence of Posidonia beds (extended areas along the Apulian coast) and of deep-sea corals (e.g. Lophelia pertusa, Madrepora oculate, Isidella elongata).

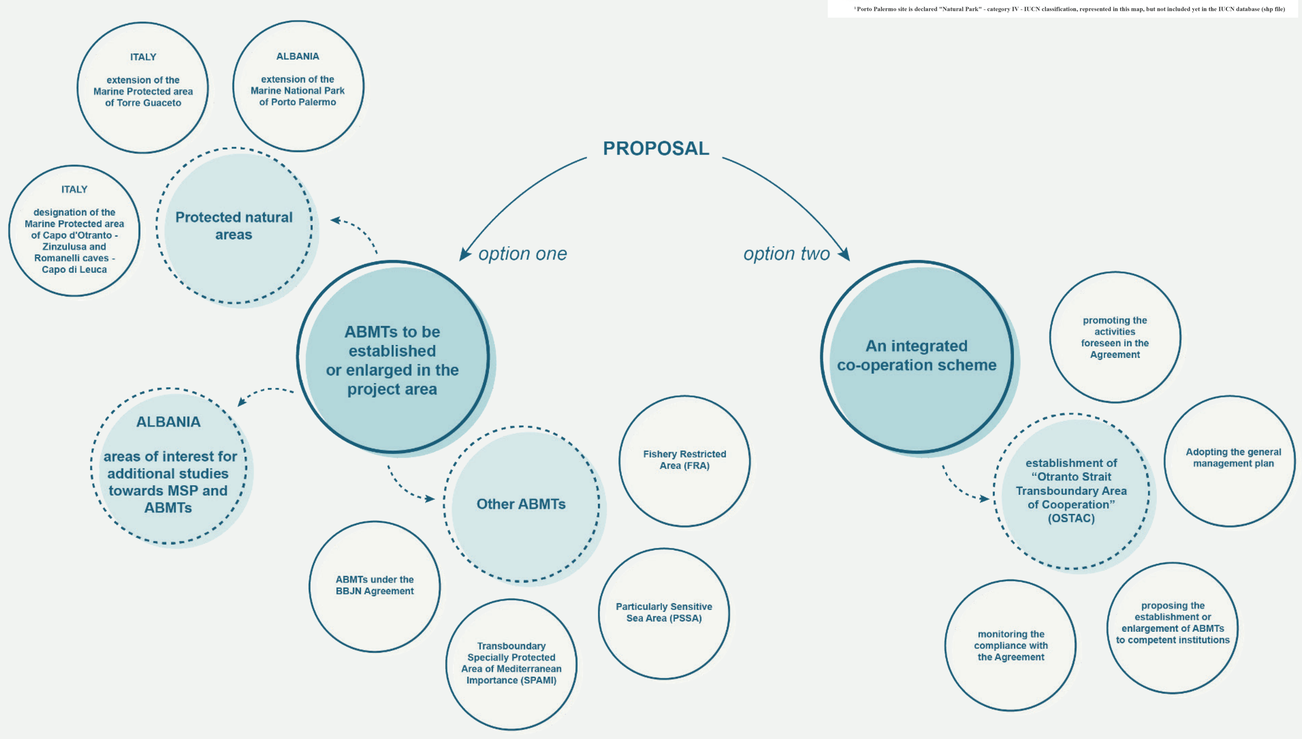
FEASIBILITY STUDY:

The study area is affected by numerous anthropogenic activities that often share the same spaces and numerous sectoral spatial tools, which struggle to dialogue with each other that can potentially compromise the smooth development of activities and uses. Such as:

- · interaction between traffic corridors and ecological areas
- · interactions between the tourism sector and protected areas.
- · Interaction between fishing activity and natural-ecological components

In order to explore options for mitigating risks in the Straight, a Feasibility Study was prepared to assess the potential for establishing Area-Based Management Tools (ABMTs) in the area. This study was carried out as part of the Coastal Area Management Programme (CAMP), under the implementation activities of the Protocol on Integrated Coastal Zone Management (ICZM) to the Barcelona Convention.
The study identified options for Albania and Italy to enhance the protection of existing natural areas and establish new spatial management tools.
As an approach to spatial management of the strait of Otranto, two proposed options, have been identified, based on two different levels of co-operation in the project area

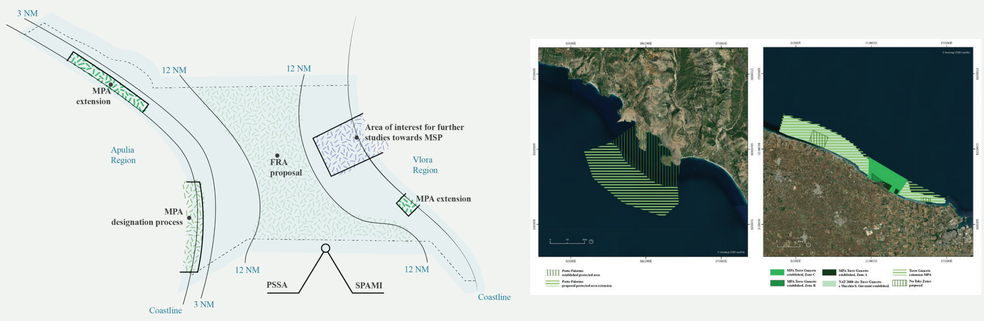




ALTERNATIVES:

First option: use the available legal tools to establish one or more ABMTs on a case-by-case basis, within or beyond territorial waters, as part of a flexible "single complex project area." This approach supports the 30 x 30 conservation target under both the Kunming-Montreal CBD targets and the Post-2020 Barcelona Convention goals.
Main elements:

- · MPAs: Existing areas + new areas + extension of existing areas (e.g. Torre Guaceto).
- · Natura 2000 / Emerald network: Existing areas + new areas.
- · GFCM/FRA: Link with the GFCM roadmap for the establishment of a FRA in the southern Adriatic Sea.
- · Other possible ABTMs: E.g. PSSA/IMO, SPAMI/BC.



Strengthening of protection and/or extension of the Marine National Park of Porto Palermo (AL)
Extension of the Marine Protected area of Torre Guaceto (IT)

Second option: agree on a more advanced level of cooperation. This more integrated co-operation option builds upon the first one. This option proposes embedding ABMTs within a permanent, adaptable framework, with expanded MPAs, Fisheries Restricted Areas (FRA) under the GFCM, SPAMI sites, and Particularly Sensitive Sea Areas (PSSA) under the IMO among the proposed tools.

Such more integrated level of co-operation could be envisaged based on a bilateral framework Agreement - Otranto Strait Transboundary Agreement - which envisages the Strait of Otranto area as "a single complex area". This could be named: Otranto Strait Transboundary Area of Co-operation (OSTAC).

– The Agreement will have as geographical scope of application the entire project area, including the land part of the coastal zone
– The Agreement will strengthen the ABMTs already in place in the area and provide a framework for other ABMTs to be established.

– A Co-ordination body shall be defined by the Parties at a later stage, It should be composed as to represent the two States Parties and the the public bodies involved in the implementation of the management plan of the project area. In order to guarantee effective management, it is important to involve also institutions, local bodies and operators based in the territory.

– The Management plan of the OSTAC will identify objectives, measures, scope, and the authorities responsible for implementation of the measures identified for the entire Agreement area, as well as for each single ABMT.

Results and dissemination

Additionally, the study emphasizes Maritime Spatial Planning (MSP) as a means to strengthen cooperative efforts to protect biodiversity in the Strait. In line with an ecosystem-based approach, the study also recommended extending transboundary cooperation to Greece to enhance sustainable management of this shared marine area.
A story-map was developed to share study findings and aid implementation by stakeholders at various levels. The storytelling starts with an area overview, advancing to proposed options. The transboundary, multiscalar scope is visualized with automatic map zooms, while multisectoral activities are depicted through navigable sequence of pictograms, photos, animations and data sliders for protective zoning insights. A cohesive visual style and professional photography are expected to enhance the tool's cultural and emotional engagement.

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Resources

Story maps to explore the content of the Feasibility Study

Full text of the Feasibility Study

Other resources

TRANSBOUNDARY CAMP OTRANTO PROJECT