



# Beyond 'paper' MPAs in Italy

Policy Brief

December 2025

## Highlights

This policy brief presents research-based recommendations to improve the capacity of Italian MPAs to facilitate the implementation of the European Green Deal. Given institutional barriers pertaining to limitations of resources and finances, mismatch of responsibilities and resources, lack of management plans with measurable objectives and insufficient monitoring, control and enforcement in Italian MPAs, it is recommended:

- Supplying MPAs with SMART plans.
- Setting up local, co-managed, science-based fisheries measures.
- Providing for stronger laws, enforcement, more resources, technology, and volunteer work to improve protection and compliance.
- Ensuring MPAs have guaranteed budgets to fund staff, equipment, infrastructure, and essential operations.

This policy brief is a result of research conducted under the PERMAGOV project.

## Policy objectives and current status of MPAs

Improved Marine Protected Area (MPA) governance is part and parcel of the European Green Deal (EGD) objective of preserving and restoring ecosystems and biodiversity. In fact, the EU Biodiversity Strategy contains specific commitments and actions on MPAs, including protecting a minimum of 30% of the EU's sea area by 2030, with 1/3 of the 30% being strictly protected.

Italy has directly adopted this goal into its National Strategy for Biodiversity. Currently, Italy has 30 MPAs and 2 submerged National Parks, designated by the Ministry of the Environment and Energy Security under the national protected areas law (Law 394/91), and more than 280 Natura 2000 sites at sea designate under the Habitats Directive.

However, the area of actual protected sea is far from the 2030 objectives. Currently, the protected sea areas cover only 13% of Italian territorial waters. In addition, fragmented management and lack of implementation of management plans severely hamper the achievement of an adequate conservation status for areas under protection. In practice, the 13% is largely protected on paper only.

MPAs of sufficient size are well documented to generate a 'reserve effect' where protection leads to more and larger fish inside the protected area compared to outside. This results in a 'spillover effect' which boosts larvae and fish populations outside the protected area, creating widespread benefits from protection of limited areas.

However, lack of resources and adequate systems of surveillance and enforcement within Italian MPAs has, in most cases, led to the absence of the 'reserve effect', indicating that these areas are not being adequately protected (Guidetti et al., 2008 and 2014; Di Franco et al., 2016).

This is particularly evident for Natura 2000 sites, which in most cases can be considered protected only 'on paper', lacking both management plans and enforcement. National MPA management bodies are generally made by a consortium of local authorities who elect the MPA Director, which increases the exposure of MPA management to local politics. A more centralized approach to decision-making, as that of the National Parks, should decrease the likelihood of political interference in the management of protected areas. An attempt of reforming the Italian MPA system was started in 2023, but the legal process has been at a standstill since the end of 2024.

### Barriers to achieving MPA objectives in Italy

- Lack of human resources and multi-annual financing for MPA management to ensure stable employment and investment in technical skill development (Galaverni, 2025).
- Mismatch between the conservation objectives and the criteria for distribution of financing among MPAs.
- Lack of management plans with measurable objectives for most MPAs, without which it is difficult to plan effective conservation measures. Currently, the annual planning of MPA is based on the Standardised Interventions for Effective Management in Marine Protected Areas (ISEA) plan, where primary biodiversity targets for the MPAs are identified. However, these plans lack measurable objectives for monitoring MPA effectiveness. This prevents the adoption of a more flexible and adaptive management approach. Furthermore, the current planning system is constrained by rigid regulations that limit adaptation to new monitoring results and local conditions.
- Lack of adequate surveillance and control of illegal activities within MPAs.

### Recommendations

- **Measurable objectives for monitoring:** A positive step in this regard would be the Italian Ministry for the Environment and the Energy Transition requesting MPAs to develop management plans with SMART (Specific, Measurable, Actionable, Relevant, Timely) objectives and related clear conservation actions, and to provide technical support for the monitoring of these through ISPRA (the National Institute for environmental protection and research).
- **Locally grounded fisheries management plans:** It would be beneficial to regulate fisheries measures in MPAs according to adaptive local fisheries management plans or tailored local provisions based on monitoring results and the most recent scientific data. These plans or local provisions should preferably be outlined by a fishery co-management working group with the participation of the MPA's managing body, the local representatives of the fisheries sector, scientific institutions, and civil society (Di Franco et al., 2016). The co-management approach is also requested by the Regional Plan of Action on Small Scale Fisheries FAO-GFCM, signed by Italy in 2018, and supported by the Initiative Report of the European Parliament 2022/2003 (INI) "Co-management of fisheries in the EU and the contribution of the fisheries sector for the implementation of management measures".
- **Improved surveillance and enforcement:** Lack of surveillance and enforcement are main causes of the absence of a 'reserve effect' in most Italian MPAs (Guidetti et al., 2008 and 2014). There are several solutions that could be applied to overcome this management weakness:
  - Revision of the law to ensure dedicated surveillance units in MPAs, as it already happens in national terrestrial parks.
  - Revision of the law to extend the enforcement and sanctioning mandate to the MPA staff.
  - Revisions of the sanctioning framework in the national law to increase its deterrence and make sanctions more effective.



- Strengthening the collaboration between different law enforcement authorities (Capitaneria di Porto, Guardia di Finanza, Carabinieri, and the judiciary system) and providing them with additional resources, such as more staff and boats dedicated to MPA surveillance.
- Develop technological solutions, such as the use of drones and video-surveillance.
- Promote the support of voluntary rangers in MPAs.

- **Financial support:** A key improvement would entail guaranteeing a minimum budget for all Italian MPAs to ensure essential services, such as:
  - The salary of the Director (already included).
  - Basic competent staff for administrative and conservation management tasks.
  - The acquisition and maintenance of necessary means of transport (cars and/or boats) for the management of the protected area.
  - The acquisition, installation, and management of signal buoys and eco-mooring systems.
  - Maintenance of offices and other MPA infrastructure.

## Research Context

The Horizon Europe funded research project PERMAGOV (2023-2026) set out to improve EU marine governance to better meet the goals and objectives established in the European Green Deal. The case study on Marine Protected Areas (MPAs) in Italy focuses on the challenges to and opportunities for effective fisheries co-management in MPAs using Torre Guaceto MPA as a case example. The collaborative research between scholars from Wageningen University, Aalborg University, and WWF Italy as a key partner of the Torre Guaceto MPA management consortium, contributes to discussions on how MPA governance can be designed to deliver for both environmental conservation and fishers' livelihoods. This policy brief highlights governance challenges of Italian MPA management and provides recommendations for action.

## References

Di Franco, A., Thiriet, P., Di Carlo, G., Dimitriadis, C., Francour, P., Gutiérrez, N. L., ... & Guidetti, P. (2016). Five key attributes can increase marine protected areas performance for small-scale fisheries management. *Scientific Reports*, 6(1), 38135.

Galaverni, M. (2025). First system-level evaluation of Italian National Parks management effectiveness for nature conservation. *Discover Conservation*, 2(1), 16.

Guidetti, P., Milazzo, M., Bussotti, S., Molinari, A., Murenu, M., Pais, A., ... & Tunesi, L. (2008). Italian marine reserve effectiveness: does enforcement matter? *Biological Conservation*, 141(3), 699-709.

Guidetti, P., Baiata, P., Ballesteros, E., Di Franco, A., Hereu, B., Macpherson, E., ... & Sala, E. (2014). Large-scale assessment of Mediterranean marine protected areas effects on fish assemblages. *PLoS One*, 9(4), e91841.

**Authors:** Giulia Prato, WWF Italia ([g.prato@wwf.it](mailto:g.prato@wwf.it)); Moses Adjei, Wageningen University, Netherlands ([moses.adjei@wur.nl](mailto:moses.adjei@wur.nl)); Troels J. Hegland, Aalborg University, Denmark ([tjh@plan.aau.dk](mailto:tjh@plan.aau.dk))

PERMAGOV has received funding from the European Union's Horizon Europe research and innovation program HORIZON-CL6-2022-GOVERNANCE-01-03 under grant agreement No 101086297, and by UK Research and Innovation under the UK government's Horizon Europe funding guarantee grant numbers 10045993, 10062097, 101086297.