

# Marine Protected Areas and 30x30

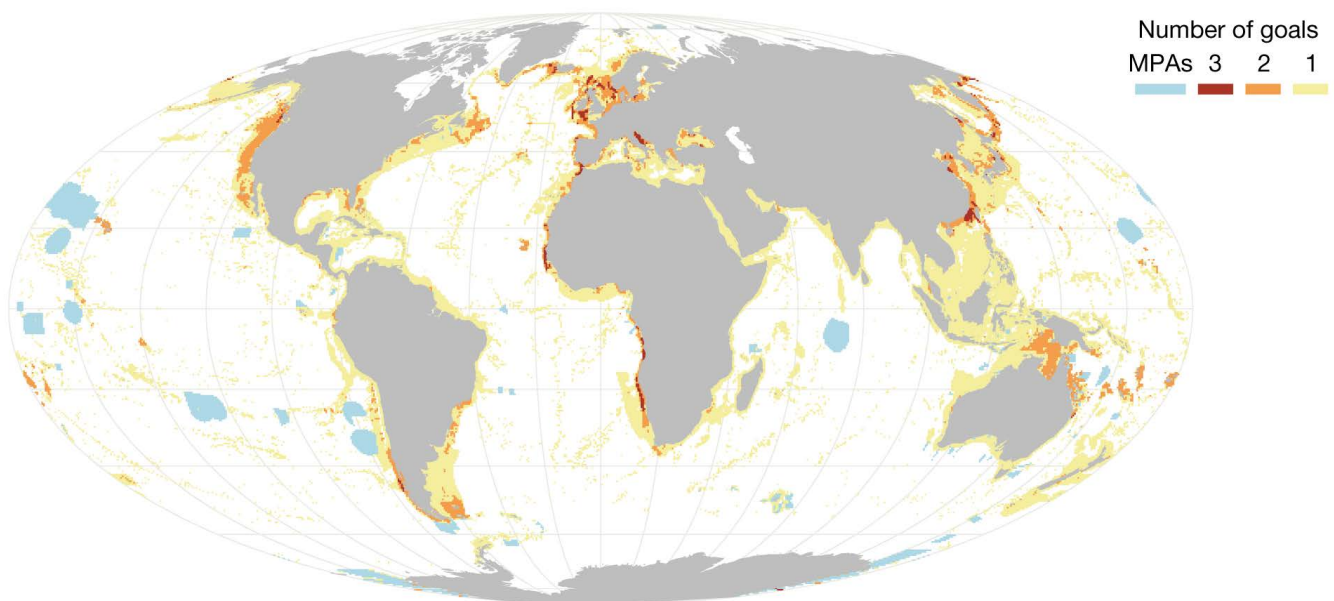
Marine biodiversity and habitats are of fundamental importance for human well-being, providing a nutritious source of food for the global population and livelihoods for millions,<sup>1</sup> while carrying cultural significance for communities around the world. Some parts of the ocean are characterized by unique features or are of crucial importance for the life cycles of certain species (e.g. tropical coral reefs, seamounts, seagrass beds).

Limiting or excluding human activity from such areas by designating them as marine protected areas (MPAs) is considered an important tool for ocean conservation.

- The international community committed (by 2020) to reach targets of 10% conservation of marine and coastal areas (SDG 14.5 / Aichi Target 11).
- Currently around 7% of the ocean is designated as MPAs but only 2.7% is considered “highly or fully protected”<sup>2</sup>

- 76 countries have signaled support for “30x30” (placing 30% of the ocean under protection by 2030) and momentum is growing.<sup>3</sup>
- Scientific support for the 30x30 target is largely drawn from a series of “meta-analyses”, which have assessed multiple MPA studies and concluded that 30-40% of the ocean should be set aside in MPAs to achieve maximum environmental and societal benefits.<sup>4</sup>

A key aspect of designating protected areas is identifying the “correct” areas with regard to biodiversity and ecological connectivity. MPAs have tended to deliver the most significant impacts when they result from inclusive and equitable stakeholder engagement processes, and where sufficient financial and human resources are available for monitoring and surveillance.<sup>5</sup> In some cases, “paper parks” have been developed, which exist on paper, but do not result in exclusion of destructive activities or conservation benefits.



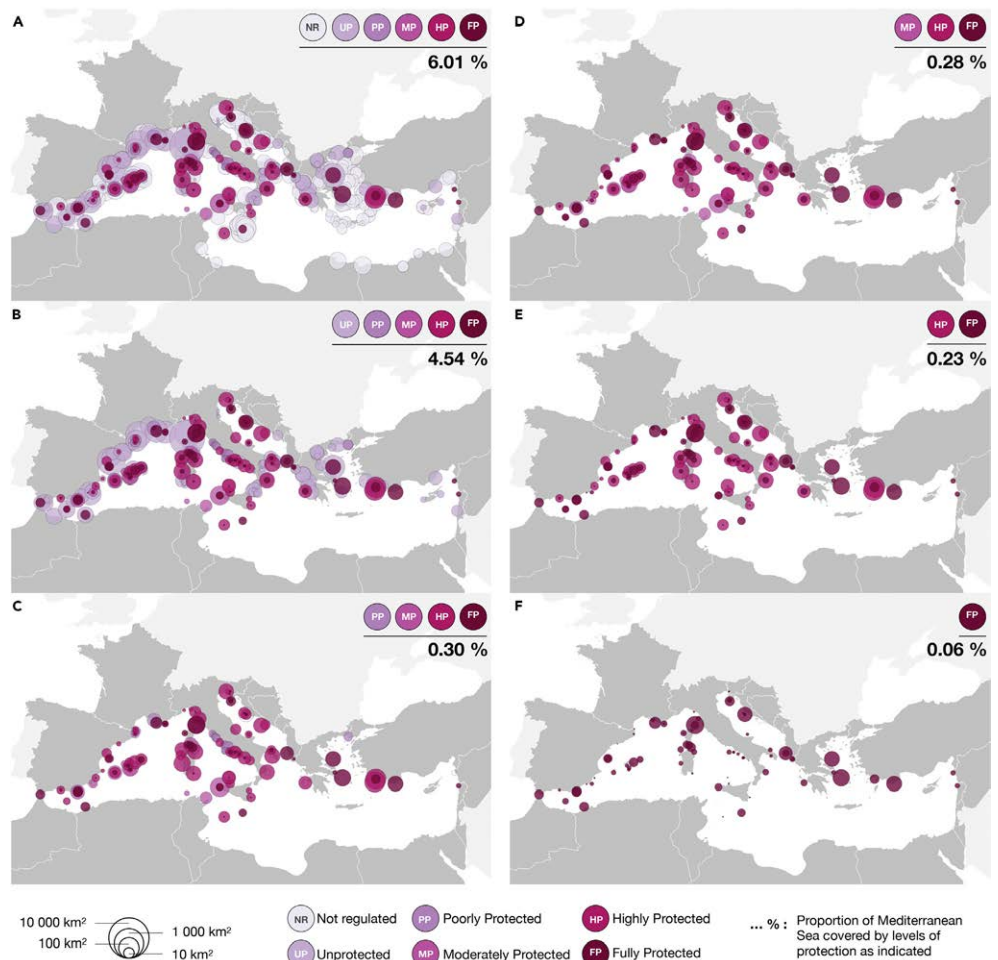
Priority areas to achieve 90% of the maximum benefits for one (yellow), two (orange) and three (red) simultaneous conservation objectives (biodiversity conservation, carbon stocks and food provisioning). Existing fully protected areas are shown in light blue. Reprinted by permission from Springer Nature: Nature Protecting the global ocean for biodiversity, food and climate, [Sala et al. 2021](#).

## How is it relevant for the seafood industry?

Effective identification, designation and monitoring of MPAs are of interest for the seafood industry. These could, for instance, protect crucial spawning or feeding grounds for commercial fisheries. In certain cases, “spillover effects” have been identified,<sup>6</sup> whereby exclusion of fishing activities in one area have led to a significant rebound in population levels, resulting in a spillover into adjacent areas in which fishing is allowed. In some cases, the spillover effect has outweighed the perceived costs of exclusion from the MPA, and is thought to make fishing more resilient.

As the range of ocean uses expands (e.g. to seabed mining), concerns exist about MPAs that exclude fishing, but allow other uses, resulting in a disproportionate impact on the seafood industry and potentially undermining conservation outcomes.<sup>7</sup> In addition, MPAs do not always result in a reduction of fishing effort, but rather a displacement of fishing effort, posing a challenge for fisheries managers.<sup>7</sup> Since stakeholder engagement is the most critical factor in success or failure of MPAs to deliver on their objectives, engagement with diverse actors – including the seafood industry – and sharing of data could support the success of such efforts.

The 30 by 30 agenda has primarily been developed with an understanding of the ecological challenges facing the ocean, but it has not been uncontroversial.<sup>8,9</sup> The seafood industry and social scientists have both highlighted the challenges associated with cost and benefit sharing. However, given the increase in policy attention to the 30 by 30 agenda, the question is likely not if this development will become a target, but rather, how it can effectively be implemented in a fair and effective way, and also how it can benefit from novel technologies and innovations in a way that it can really represent a step towards ocean stewardship.



Coverage of the different levels of protection in the Mediterranean sea. Adapted from [Claudet et al. 2020](#).

## Further reading

**Are MPAs effective? (2017).** *ICES Journal of Marine Science* <https://academic.oup.com/icesjms/article/75/3/1160/4098822>

**Revisiting “Success” and “Failure” of Marine Protected Areas: A Conservation Scientist Perspective (2018).** *Frontiers in Marine Science* <https://www.frontiersin.org/articles/10.3389/fmars.2018.00223/full>

**Critical habitats and biodiversity: Inventory, thresholds and governance (2020).** *Blue Paper of the High Level Panel for a Sustainable Ocean Economy* <https://www.oceanpanel.org/blue-papers/critical-habitats-and-biodiversity-inventory-thresholds-and-governance>

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## References

1. FAO. The State of World Fisheries and Aquaculture - Meeting the sustainable development goals. (2020).
  2. World Database on Protected Areas (<https://www.protectedplanet.net/en>) (Accessed April 2021).
  3. Lewis Pugh Foundation <https://lewispughfoundation.org/30x30> (Accessed April 2021).
  4. Rogers, A. D. et al. Critical habitats and biodiversity: inventory, thresholds and governance. (2020).
  5. Giakoumi, S. et al. Revisiting "success" and "failure" of marine protected areas: a conservation scientist perspective. *Frontiers in Marine Science* (2018).
  6. Di Lorenzo, M., et al. Assessing spillover from marine protected areas and its drivers: A meta-analytical approach. *Fish and Fisheries* (2020).
  7. Hilborn, R. Are MPAs effective?. *ICES Journal of Marine Science* (2018).
  8. '30x30' will make fisheries management less flexible. *National Fisherman* (2021).
  9. An Open Letter to the Lead Authors of 'Protecting 30% of the Planet for Nature: Costs, Benefits and Implications.' <https://openlettertowaldronetal.wordpress.com> (2021)
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