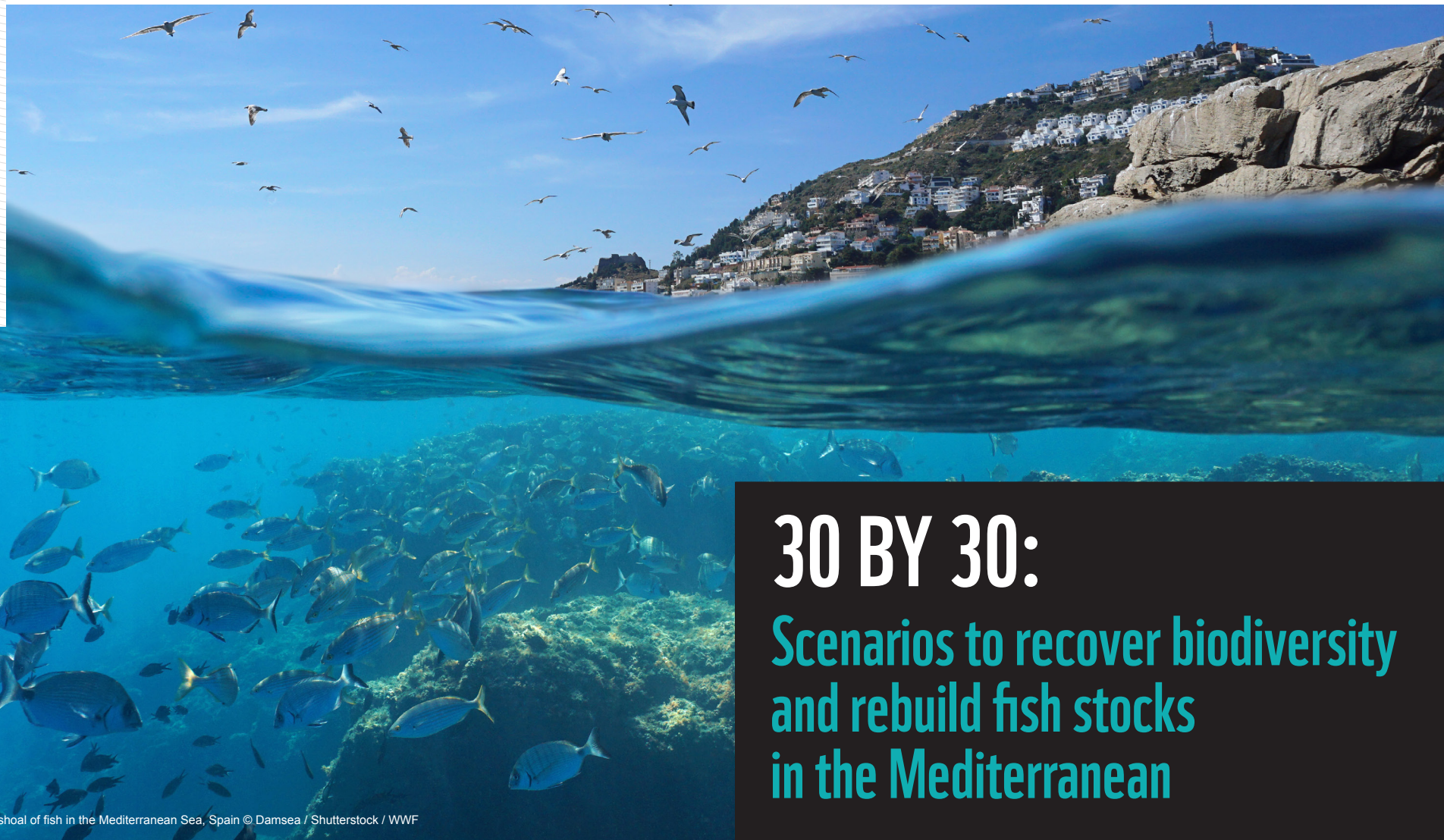




WWF

SUMMARY  
REPORT

2021



Seabirds flying in the sky and a shoal of fish in the Mediterranean Sea, Spain © Damsea / Shutterstock / WWF

# 30 BY 30: Scenarios to recover biodiversity and rebuild fish stocks in the Mediterranean

**This year, governments are expected to commit to strengthening the protection of the Mediterranean Sea by 2030. Such a commitment is vital for the region’s long-term socio-economic prosperity, as well as for the protection of its unique biodiversity. But it’s crucial that the right places are protected in order to deliver the greatest benefits for people and nature. This report presents the first scientific results and recommendations looking at where and how increased protection will have the most positive impact, including on the fisheries sector.**

The Mediterranean is one of the most economically important seas in the world, generating an estimated annual economic value of US\$450 billion from ocean-related activities. But this economy depends on healthy marine ecosystems and biodiversity, especially in the fishing and tourism sectors. Both sectors have been badly hit by the coronavirus pandemic and socio-economic downturn, but structural problems run deeper. About 75% of assessed Mediterranean fish stocks are overexploited, and marine biodiversity has declined dramatically. Climate change and economic development threaten to make things worse: temperatures in the Mediterranean are increasing 20% faster than the global average, while maritime activities such as wind farms, oil and gas extraction, shipping routes and mass tourism are predicted to expand substantially. It's a no-brainer that the region's blue economy has no chance to grow and prosper long-term in a depleted and warming sea.

Protecting the Mediterranean's natural assets and rebuilding marine resources to a healthy status is a precondition for securing a future for the region and its communities.

**WWF is calling for a network of effective and equitably managed marine protected areas (MPAs) and other effective area-based conservation measures (OECMs) covering 30% of the Mediterranean Sea by 2030.**

Designated MPAs now cover 9.68% of the Mediterranean Sea, but effectively managed ones make up just 1.27%.

Conserving in an effective way at least 30% of the Mediterranean Sea will help to:

- **Restore natural ecosystems**
- **Rebuild fish stocks**
- **Mitigate the impacts of climate change**
- **Secure the future of sustainable fisheries and tourism and guarantee food and wellbeing to local communities.**

WWF collaborated with the French CNRS-CRIOBE, the Ecopath International Initiative and the Spanish ICM-CSIC to develop a series of spatial conservation scenarios for the Mediterranean Sea. These scenarios propose candidate areas for protection to contribute to reaching the 30% target by 2030. They also show how removing unsustainable industrial fishing and other damaging activities from these areas would affect marine biodiversity and fish stocks.

The scientific analysis showed that in a business-as-usual scenario, biodiversity and key commercial fish stocks will continue to decline. However, with effective protection for specific areas covering 30% of the Mediterranean Sea, these same commercial fish stocks will increase and the marine ecosystem will significantly recover.

This proves that protecting 30% of the Mediterranean is not only possible but is needed to secure the future of our sea and its people.

## WWF CALL FOR A POST-2020 GLOBAL BIODIVERSITY FRAMEWORK

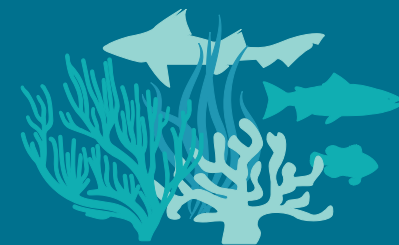
Worldwide, governments, businesses, leaders and civil society are calling for a New Deal for Nature and People to put nature on a path to recovery by 2030 that safeguards human health and livelihoods.

WWF is calling for an ambitious, adequately resourced and transformative post-2020 global biodiversity framework under the UN Convention on Biological Diversity (CBD), with strong and transparent implementation and accountability mechanisms, to:



# PROTECT AT LEAST 30% OF THE PLANET AND SUSTAINABLY MANAGE THE REST

## WORK TO RESTORE NATURAL HABITATS



## RECOGNIZE PEOPLE'S LAND & WATER RIGHTS

A stronger biodiversity framework will help countries in achieving both the Sustainable Development Goals and the Paris Agreement.



# RESULTS

The analysis produced scenarios identifying macro areas within which MPAs and OECMs could be established to reach the target of protecting 30% of the Mediterranean Sea. The four scenarios predicted to provide the largest biodiversity and fishery benefits are the protection as highly or fully protected areas of:

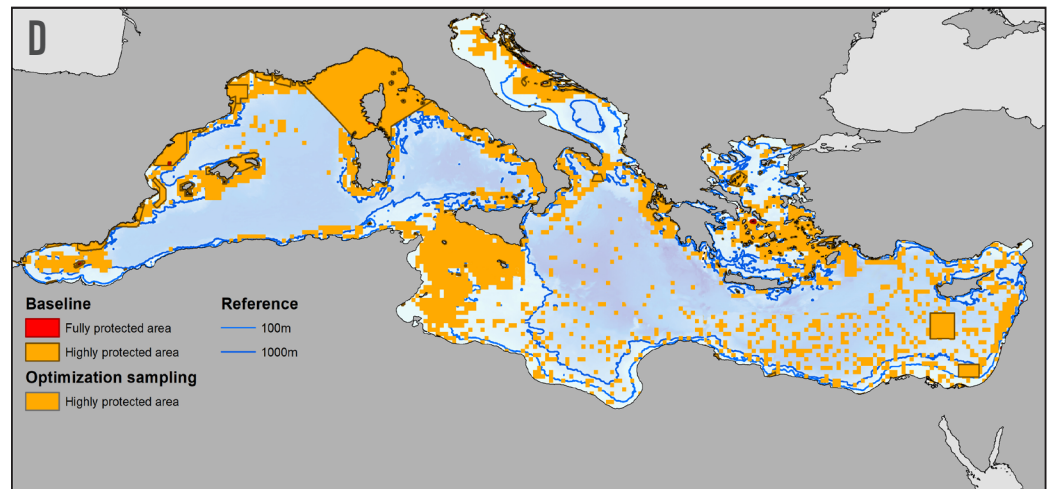
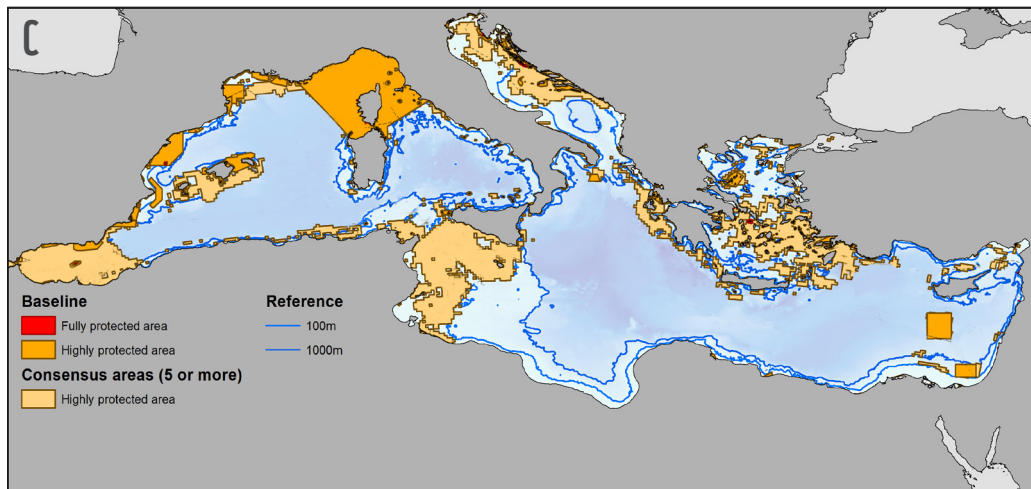
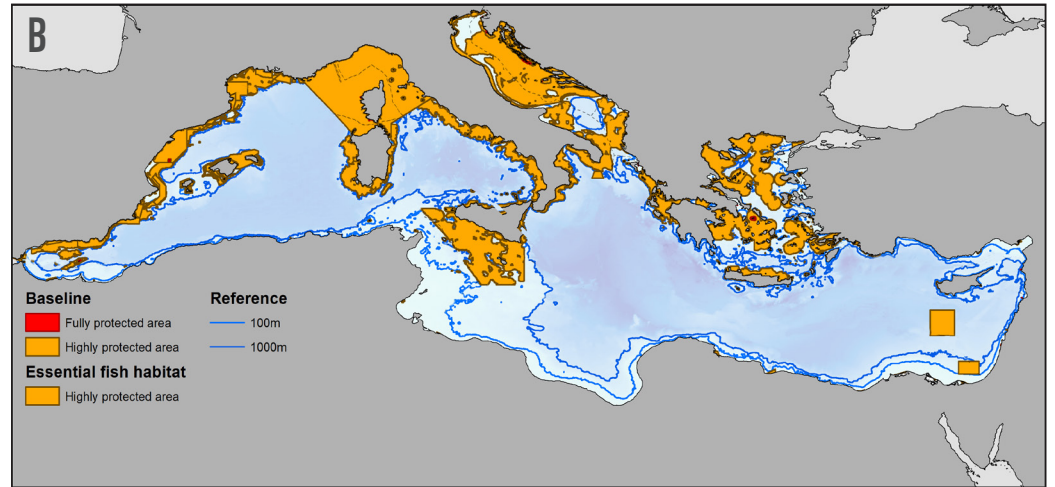
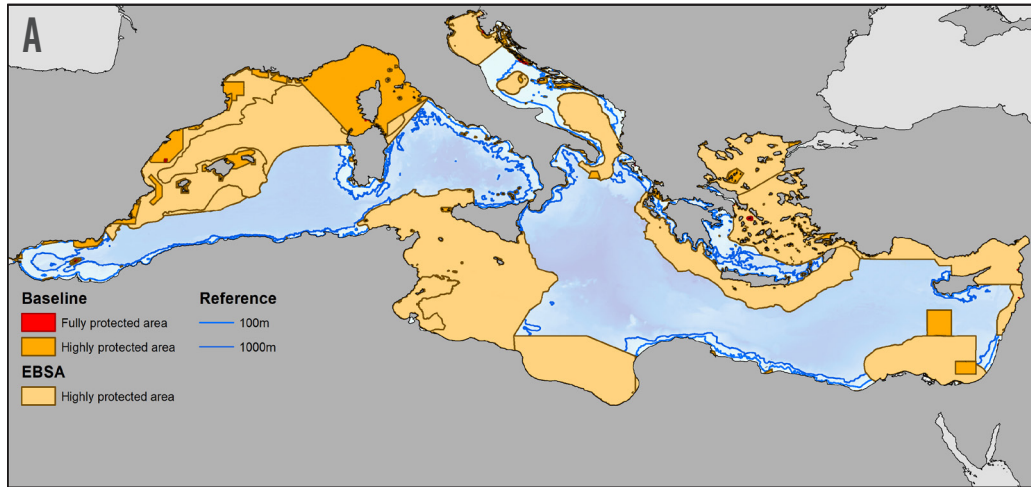
**A Ecologically or Biologically Significant Areas** covering 46.07%

**B Consensus areas** covering 19.1%,

**C Essential Fish Habitats** covering 14.7%

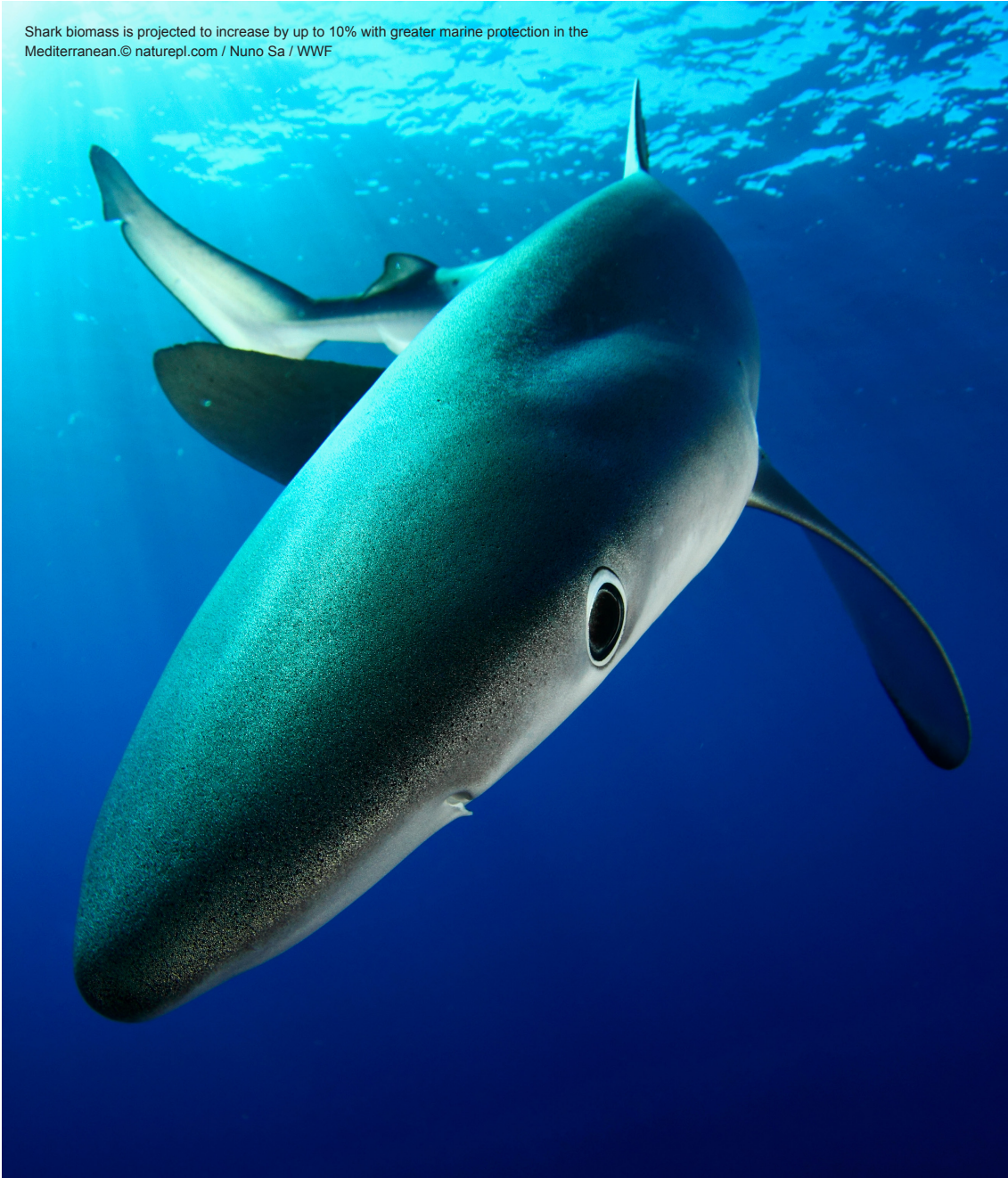
**D Spatial optimization** to cover 30% of the sea.

+ turning all existing MPAs into fully protected (with no extractive activities permitted) or highly protected areas (allowing low-impact small-scale fishing).



Scenarios for marine protection based on priority areas for conservation previously identified in the Mediterranean: A) Ecologically or Biologically Significant Areas, B) Consensus areas, C) Essential Fish Habitats, and D) Spatial optimization of the mathematical model.

Shark biomass is projected to increase by up to 10% with greater marine protection in the Mediterranean. © naturepl.com / Nuno Sa / WWF

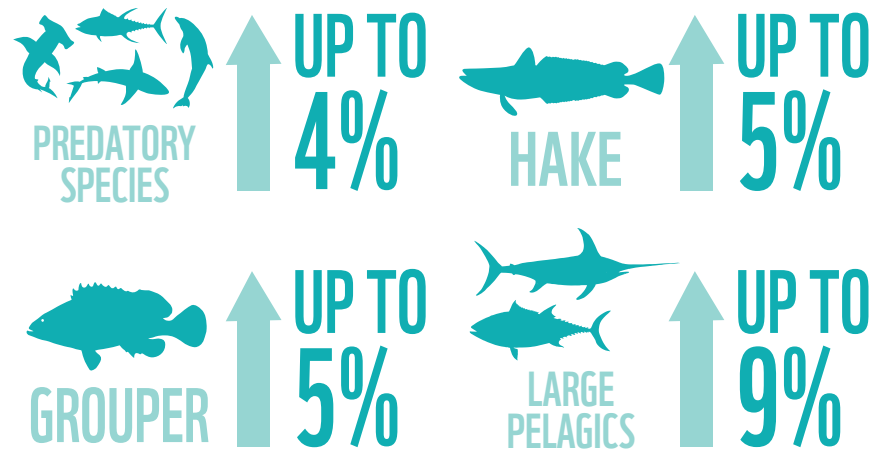


For these four scenarios, we modelled how creating new fully or highly protected MPAs and OECMs would affect marine species biomass by 2030:

- **The biomass of predatory species and large pelagic fish** showed noticeable increases. Predatory species (e.g. cetaceans, monk seals and predatory fishes) increased by up to 4% and large pelagic fish (e.g. swordfish, tunas and sharks) by up to 9% compared to the status quo scenario.
- The biomass of commercial species like **sea breams** and **European hake** showed substantial increases. Potential catches of sea breams are predicted to increase by 4-20% and of large commercial demersal fish by up to 5%. These catches are predicted to increase mainly in coastal areas.

Because there is more and better data for the western Mediterranean, we carried out a similar analysis focusing on this area. Results here were much higher with a predicted 10-45% increase in biomass of predatory species and a 10-23% increase in biomass of commercial species, depending on the scenario.

### INCREASE IN SPECIES BIOMASS IN THE MEDITERRANEAN SEA





## MAIN FINDINGS

- 1 The current network of MPAs and OECMs in the Mediterranean does not and will not deliver conservation benefits.** The model showed that the biomass of ecologically important and commercial species will decrease in 2030 under the status quo.
- 2 If we do not limit the fishing effort, potential fish catches are expected to continue to decline.**
- 3 Only by increasing the level of effective conservation effort in strategic areas can the loss of marine biodiversity be reversed by 2030:** a random designation would not provide significantly more benefits than the status quo. Key under-represented areas include coastal and offshore areas in the southern and eastern Mediterranean, offshore and open-sea habitats, and vulnerable marine ecosystems in deep-sea and offshore environments.
- 4 To be effective, multiple-use MPAs and OECMs should be combined with fully and highly protected areas:** the 30% target should be composed of a variety of spatial tools, including locally managed marine areas, no-take zones, fishery restricted areas, ecological corridors, etc.
- 5 Considering the socioeconomic impact associated with the closure of fishing areas, fishers and the fisheries sector should be fully engaged in the decision-making processes** to ensure that spatial closures, fishery management plans and other management solutions to avoid unsustainable fishing are agreed, meet livelihood needs, and recognize their use rights.
- 6 The Mediterranean areas that, if turned into highly protected areas, are predicted to provide the greatest conservation benefits are the Alboran Sea, north-western Mediterranean, Sicily Channel, Adriatic Sea, Hellenic Trench, Aegean Sea and Levantine Sea.** Protecting these areas is predicted to provide the most positive conservation and fishery outcomes by 2030. At the same time, these areas are also blue economy hotspots with the highest concentration of current and expected maritime activities.
- 7 Overall, increasing conservation efforts in new and larger areas in the Mediterranean Sea will deliver healthier ecosystems by 2030.**

- 8 An increase in large predators will lead to decreases in certain other fish species, including commercially targeted species.** Conservation and fishery management decisions should integrate these natural effects of predation and competition and, together with local communities, find a trade-off based on the ecological characteristics of the areas and on conservation and fishery objectives.
- 9 Scientific modelling provides clear results for the western Mediterranean, where data is more robust.** Marine observation and research should be scaled up in the eastern part of the Mediterranean to better inform decision-makers, but the absence of scientific data should not prevent new conservation initiatives.



Small-scale tuna fishing, Tarifa, Spain. © Jorge Bartolome / WWF



## WWF CALL TO ACTION

WWF urges Mediterranean countries to support a New Deal for Nature and People and, through the CBD, an ambitious post-2020 global biodiversity framework.

These global commitments should be translated into an equally ambitious **regional plan (the post-2020 SAP BIO of the Barcelona Convention) to protect at least the 30% of the Mediterranean Sea with MPAs and OECMs by 2030** in order to ensure marine assets recover, continue to generate economic benefits, and mitigate climate change impacts.

In order to achieve an effective 30% protection, Mediterranean countries must:

- **Integrate the MPA and OECM network into wider ecosystem-based integrated ocean management** to sustainably manage all activities across the Mediterranean.
- **Urgently increase the level of protection of existing and future MPAs and OECMs** including fully and highly protected areas that allow ecosystem restoration and deliver the greatest benefits.
- **Work with other sectors to establish OECMs. Steps towards OECMs should include setting new:**
  - Locally managed no-take zones
  - Fishery Restricted Areas
  - Ecological corridors
  - Extended deep-water and coastal trawling bans.
- **Ensure all MPAs and OECMs are effectively managed**, with zoning and management plans and sufficient resources (funding and staff) to implement, enforce and monitor them.
- **Employ just and fair financial instruments to move from business-as-usual to effective conservation and a sustainable blue economy.** Lower-income countries require financial support to fund research, marine spatial planning and conservation measures.
- **Involve local stakeholders at every stage of the process through co-management and participatory processes.** Fishers and other local people must be involved in the decisions that affect their rights and livelihoods and share responsibility for the management of their resources.



[READ THE FULL REPORT HERE.](#)



Working to sustain the natural world for the benefit of people and wildlife.

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WWF Mediterranean Marine Initiative - Via Po 25/c, 00198, Rome, Italy.

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**For more information:**

Marina Gomei

Regional Projects Manager

WWF Mediterranean Marine Initiative

[mgomei@wwfmedpo.org](mailto:mgomei@wwfmedpo.org)