



THIS REPORT HAS  
BEEN PRODUCED IN  
PARTNERSHIP WITH



REPORT

EU

2019

# PROTECTING OUR OCEAN

## EUROPE'S CHALLENGES TO MEET THE 2020 DEADLINES





## FOREWORD

We launched Sky Ocean Rescue to raise awareness of one of the most critical environmental disasters that faces our planet – the health of our ocean.

All life on earth depends on our seas; they regulate our climate, generate oxygen and provide food and livelihoods for hundreds of millions of people. Yet the ocean is facing greater threats than ever before.

By inspiring action on plastics, at business, political and individual level, we can make a significant difference. This action on plastic pollution leads to action on other ocean conservation challenges.

We aim to create a legacy for ocean health, but this isn't something we can do alone. That's why we've partnered with WWF to protect our ocean and increase its resilience to environmental challenges.

By working together, we can better understand the status of ocean health and evaluate whether the European Union's Marine Protected Areas are doing their job. This report clearly indicates that the most critical elements of MPAs are not effective and are failing to protect the magnificent biodiversity found in European Seas.

If we are serious about ocean recovery, the designation of MPAs to protect the marine environment is not enough. This report highlights the need for a shift from actions on paper, to effective actions in our oceans.

Jeremy Darroch  
Group CEO, Sky



© DAMSEAN / SHUTTERSTOCK.COM

## CONTENTS

EXECUTIVE SUMMARY	6
DEEPLY TROUBLED WATERS	8
What is a Marine Protected Area?	11
The quality of management determines success in marine protection	12
LACK OF EFFECTIVE PROTECTION	14
EU Member States floundering on MPA management plans	18
The challenge of transparency in MPA reporting	20
THE LOST POTENTIAL OF EUROPEAN MPA NETWORKS	22
Assessing Ecological Coherence of Europe's regional MPA networks	24
DELIVERING MARINE PROTECTION FOR 2020 AND 2030	28

# EXECUTIVE SUMMARY

**In the final year before the 2020 deadline for 10% of the ocean to be protected, (Convention on Biological Diversity Aichi target 11 and the United Nations Sustainable Development Goal 14), European seas remain in a poor state and significantly lack appropriate biodiversity protection.**

Marine Protected Areas (MPAs) are tools designed to provide spatial protection for specific species or habitats in marine ecosystems. MPAs which provide the greatest benefits for both biodiversity and society are those supported by rigorous protection standards - such as 'no-take areas' or 'marine reserves' where extractive activities are prohibited. However, the majority of European MPAs are designed to be 'partially protected MPAs', which are divided into zones allowing extractive activities to occur to differing degrees. In addition to this, the majority of European MPAs are still at the first stage of MPA development, which means that they are legally designated as MPAs, but lack effective management and proper conservation measures, and do not yet provide any biodiversity protection.

**Today, only 1.8% of the European Union (EU) marine area is covered by MPAs with management plans, despite 12.4% of the EU marine area being designated for protection. To make matters worse, in reality far less than 1.8% is under effective management and monitoring.** Due to inadequate reporting, it is currently not possible to calculate the marine area providing true biodiversity protection under effective MPA management. Eleven EU Member States have not reported any management plans for their MPAs and eight Member States have management plans for less than 10% of their marine area. This means that **19 of the 23 marine EU Member States have no or hardly any management plans in place for their MPAs, which are required for designated MPAs to develop towards areas effectively protecting marine habitats and species.**

In addition to the lack of protection currently provided, **this assessment indicates that the designated European MPAs fail to function together as a network.** This means that MPAs in the Baltic Sea, North-east Atlantic Ocean and Mediterranean Sea do not currently replicate or represent enough habitats within their boundaries, nor are they close enough to other MPAs to deliver biodiversity protection, increase ocean resilience and sustain our European Blue Economy.

International assessments tracking the development of MPAs in Europe for the past decade show progress towards increased ocean protection.<sup>1</sup> Surpassing 10% MPA designation in 2017 was widely celebrated by the EU as achieving the international and European 2020 commitments for improved marine protection (Convention on Biological Diversity Aichi target 11, Sustainable Development Goal 14, and Good Environmental Status according to the EU Marine Strategy Framework Directive). However, achieving real protection of European marine areas requires significantly more than marking areas on a map. **For effective protection of our ocean, from the seabed to the surface, MPAs must have comprehensive management plans that address all cumulative human stressors which impact biodiversity.** These management plans must, in turn, be effectively implemented and translated into actions for conservation or active nature restoration, with proper restrictions against extractive activities. Only then can these areas be counted towards national and international assessments of ocean protection.

The ocean is under enormous pressure. In the face of climate change and continued unsustainable exploitation of the ocean, even protecting 10% of the EU marine area in well-managed and enforced MPAs is not enough to secure resilient marine ecosystems. Scientific advice and International Union for Conservation of Nature (IUCN) recommendations call for at least 30% effective protection of the oceans by 2030 - a target now a mere decade away.<sup>2</sup> Greater political ambition is required to fulfil the 2020 and 2030 global ocean and biodiversity conservation targets. **Without urgent actions to enforce and implement effective ocean protection, nearly all EU MPAs stand at risk of remaining protected on paper, but not in practice.** Investment in ocean conservation is a down payment on future human and economic health, and must be prioritised.

**WWF implores the EU and its Member States to urgently and rapidly implement concrete efforts to increase biodiversity protection in European seas.**

## WWF calls for urgent action and recommends that:

- EU Member States ensure that the main priority of all MPAs is conservation of biodiversity, not economic opportunity. MPA management plans must lead to effective protection measures to conserve and restore ecosystems, and include zones fully protected from destructive activities;
- EU Member States actively and urgently establish, enforce and implement effective management and monitoring in already-designated MPAs, including relevant legislation and investment;
- EU Member States commit to the goal of reaching at least 30% effectively managed MPAs by 2030. Together, these MPAs will act as a network to rebuild biodiversity, improve ocean resilience and increase the assets of the European Blue Economy;
- EU Member States increase transparency of the protection of their marine area by ensuring timely and accurate reporting to all relevant MPA authorities and databases.

<sup>1</sup> HELCOM 2010. Towards an ecologically coherent network of well-managed Marine Protected Areas – Implementation report on the status and ecological coherence of the HELCOM BSPA network. Baltic Sea Environmental Proceedings No. 124B.; OSPAR 2017. 2016 Status Report on the OSPAR Network of Marine Protected Areas. Biodiversity Series 693/2017.; WWF 2015. An assessment of the network of marine protected areas in the Celtic Seas. 30pp.; HELCOM 2016. Ecological coherence assessment of the Marine Protected Area network in the Baltic. Baltic Sea Environmental Proceedings No. 148.; Agnesi et al. 2017. Spatial Analysis of Marine Protected Area Networks in Europe's Seas II, ed. Kunitzer, A. ETC/ICM Technical Report 4/2017, 41pp.; IPBES 2019. Summary of Global Assessment Report on Biodiversity and Ecosystem Services. IPBES Plenary 6 May 2019 in Paris.

<sup>2</sup> IUCN Resolution 2016. WCC-2016-Res-050-EN

# DEEPLY TROUBLED WATERS

With the ever intensifying use of our ocean and evidence of unprecedented habitat and species loss, protection of the marine environment is crucial from an ecological, economic but also social point of view.<sup>3</sup> In total, the annual value of goods and services from fishing, shipping and tourism alone contribute USD 2.5 trillion to the global economy. This tremendous output is part of the ocean's total estimated asset base, measured conservatively in 2015 at USD 24 trillion annually, and is expected to double by 2030.<sup>4</sup> Beyond the long-term economic and social benefits of healthy oceans and the ecosystem services they provide, well protected oceans also safeguard marine and human habitats against the impacts of climate change.<sup>5</sup> However, protection of our ocean and the assets we rely on has not been prioritised by decision makers, and currently only 2% of the world's global oceans are fully or strongly protected.<sup>6</sup>

Marine Protected Areas (MPAs) are the primary mechanism for safeguarding exceptional natural resources, processes, habitats and species, and ensuring a sustainable blue economy. Well functioning MPAs are also essential to habitats and species beyond the protected zones, as they provide refuge for mobile species such as seabirds and marine mammals, serve as spawning and nursery grounds for fish, and act as buffer zones between areas of intensive human use. MPAs with the highest level of protection (where extractive activities are prohibited) provide the greatest benefits for biodiversity and society - known as 'no-take' or 'marine reserves'. Marine reserves help restore ecosystem complexity, which is known to provide greater resilience against climate change impacts and lower risks of disease. Although marine reserves were developed to protect ecosystems within their boundaries, they also enhance fisheries, as the positive effects of species thriving within these areas spill over into the wider marine environment. This supports livelihoods by creating jobs and developing new income streams for coastal communities. Fully protected MPAs have been shown to increase species richness by over 20% and total fish biomass by over 600% when compared to adjacent unprotected areas. Although partially protected MPAs still provide spillover effects to adjacent areas, these are significantly less, such as in the case of fish biomass with increases of around 300%.<sup>7</sup> The benefits of marine reserves on species abundance and richness take up to five years to measure on target species and over 10 years on non-target species, emphasising the importance of a long-term view in MPA management plans.<sup>8</sup>

## UNITED NATIONS SUSTAINABLE DEVELOPMENT GOAL 14: LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

## CONVENTION ON BIOLOGICAL DIVERSITY: AICHI TARGET 11

By 2020, at least 17 percent of terrestrial and inland water areas and 10 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascape.

The European MPA network has been assessed multiple times by the European Environment Agency (EEA) and several Regional Sea Conventions.<sup>9</sup> However, these assessments have focused solely on the designation of MPAs, when emphasis should have been placed on how well the MPAs are managed and monitored to restrict exploitative activities and ensure the protection of the marine environment.

With this assessment, WWF evaluates the EU MPAs which have management plans in place and are therefore delivering on the first step towards the goal of effective marine protection. While management plans are not a direct proxy for MPA success or level of marine protection, they can provide an indication that the MPA is moving from lines on a map towards being a managed area that protects the marine environment in practice. This analysis was constrained to publicly available data that was submitted by EU Member States to the EU or to regional seas databases by October 2018. More data may be available within individual Member State databases, but to ensure a consistent comparison across the EU Member States, it has not been used for this assessment. To have confidence that an MPA is effectively managed, more detailed assessments including stakeholder user surveys are required.<sup>10</sup> Further information on the assessment methodology of this report is available in the supporting online Technical Annex.

## EU POLICY OBLIGATIONS

The EU and its Member States have committed to international agreements to protect the marine environment. The United Nations Sustainable Development Goal (SDG) 14 calls for the conservation of at least 10% of coastal and marine areas by 2020 and the EU's Marine Strategy Framework Directive (MSFD) calls for Good Environmental Status (GES)<sup>11</sup> by the same year. The Convention on Biological Diversity (CBD) Aichi target 11 specifies that at least 10% of coastal and marine areas must be conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas by 2020, while the International Union for Conservation of Nature (IUCN) encourages its members to effectively implement protection for at least 30% of their national waters where no extractive activities are allowed by 2030.<sup>12</sup>

Integrating these objectives with the EU Maritime Spatial Planning (MSP) Directive, which calls for "sustainable growth of Europe's blue economy" where growth is defined as value and jobs, and requires Member States to complete their marine spatial plans by 2021, is a challenging but necessary task. The Natura 2000 network of protected areas, based on the Birds and Habitats Directives, together with MPAs designated under national and regional programmes to meet the needs of the MSFD, are the primary mechanisms for protecting the EU's marine environment while meeting these goals on time and ensuring a sustainable blue economy. In addition, several Regional Sea Conventions operate in the EU marine area, with their Contracting Parties committing to further agreements which align with the EU Directives.

3 WWF. 2018. Living Planet Report - 2018: Aiming Higher. Grooten, M. and Almond, R.E.A. (Eds). WWF, Gland, Switzerland.

4 Hoegh-Guldberg et al. 2015. Reviving the Ocean Economy: the case for action - 2015. WWF International, Gland, Switzerland., Geneva, 60 pp.; OECD 2016. The Ocean Economy in 2030, OECD Publishing, Paris

5 European Commission 2018. Action Plan: Financing Sustainable Growth. COM/2018/097

6 Sala et al. 2018. Assessing real progress towards effective ocean protection. Marine Policy 91: 11-13.

7 Lester et al. 2009. Biological effects within no-take marine reserves: a global synthesis. Mar. Ecol. Progress. Ser., 384: 33-46; Sala & Giakoumi 2017. No-take marine reserves are the most effective protected areas in the ocean ICES Journal of Marine Science 75.

8 Babcock et al. 2010. Decadal trends in marine reserves reveal differential rates of change in direct and indirect effects. Proceedings of the National Academy of Sciences, 107: 18256-18261.

9 HELCOM 2010. Towards an ecologically coherent network of well-managed Marine Protected Areas - Implementation report on the status and ecological coherence of the HELCOM BSPA network. Baltic Sea Environmental Proceedings No. 124B.; HELCOM 2016. Ecological coherence assessment of the Marine Protected Area network in the Baltic. Baltic Sea Environmental Proceedings No. 148; Agnesi et al. 2017. Spatial Analysis of Marine Protected Area Networks in Europe's Seas II, ed. Kunitzer, A. ETC/ICM Technical Report 4/2017, 41pp.

10 Young et al. 2019. The compass pilot report for North Devon compiled by WWF as part of the UK SEAS Project.

11 Good Environmental Status (GES) is defined in the MSFD as the environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive. Dir 2008/56/EC.

12 IUCN Resolution 2016. WCC-2016-Res-050-EN





## WHAT IS A MARINE PROTECTED AREA?

According to the definition of the World Commission on Protected Areas under the International Union for Conservation of Nature (IUCN WCPA), an MPA is “a clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”.<sup>13</sup> There are several different categories of MPAs, ranging from fully protected areas (e.g. marine reserves) to multi-use areas, however, **the common denominator is that only those areas where nature conservation is the primary objective can be considered MPAs.**<sup>14</sup>

Establishing an MPA starts by identifying the need for protection, for example of a specific species, habitat or ecosystem function, followed by the decision to designate the marine area for protection to meet that need. At the time of designation, a baseline of the status of the marine environment and the goals for protection must be established for future reference. Based on these goals, a management plan is developed which identifies harmful human activities in the area, establishes rules on restrictions and regulations to reduce the impacts of those pressures and ensures the protection of the target species or habitat. In many cases, management plans also include a restoration plan for improving protected habitats and species.

In addition to the management plan, monitoring within MPAs is needed to track performance. Through monitoring and research of the site, the management plan can be appropriately adapted over time. According to the IUCN WCPA, “such monitoring should be standardised across MPAs in the network to document and demonstrate management effectiveness, and to report that conservation goals, objectives, and defined biodiversity conservation targets are being achieved.”

<sup>13</sup> IUCN WCPA, 2018. Applying IUCN's Global Conservation Standards to Marine Protected Areas (MPA). Delivering effective conservation action through MPAs, to secure ocean health & sustainable development. Version 1.0. Gland, Switzerland. 4pp.

<sup>14</sup> Day et al. 2012. Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas. Gland, Switzerland: IUCN. 36pp.

## THE QUALITY OF MANAGEMENT DETERMINES SUCCESS IN MARINE PROTECTION

A critical element of any MPA is its management plan. These are often based on the IUCN model which addresses details ranging from legislative authority, site description, its value to general and specific conservation objectives, existing uses, regulation of human activities (e.g. through zoning or other regulation), and monitoring of progress towards objectives and enforcement.<sup>15</sup> These details are an integral part of any MPA decision-making process, and the quality and implementation value of the management plan lies in the level of detail of the data it is based on. If a management plan is vague or does not cover all relevant sectors, it is ultimately at risk of failing to provide biodiversity protection. Too many management plans fail to set clear, measurable conservation objectives or to effectively address and regulate stressors and impacts that might prevent the MPA from achieving its conservation objectives. For example, the IUCN's global conservation standards for MPAs prescribe that they individually, or as part of a network of MPAs, incorporate significant fully protected or no-take areas.<sup>16</sup> However, such fully protected areas are very rare in Europe.



© MATS WESTERBOM

Marine Natura 2000 sites have been established to protect threatened habitats and species in the EU. Yet, management planning has been slow and many European MPAs are not actually protecting marine biodiversity against exploitative activities such as destructive bottom trawling and other harmful fishing techniques which continue to occur widely within MPA boundaries (see case study on Dogger Bank on page 25). A recent study showed that average trawling intensity has been 1.4 times higher inside of northern European MPAs than outside them, and that commercial trawling is the strongest predictor of biodiversity loss.<sup>17</sup> In contrast, the IUCN's global conservation standards for MPAs only consider low-impact fisheries managed to the highest standard and with no impact on the ecological integrity of the area to be compatible with the MPA definition.<sup>16</sup>

In addition to a comprehensive management plan, the success of an MPA requires a thorough study of the area's ecological status at the time of MPA designation in order to assess the proper implementation of actions for conservation, active nature restoration, monitoring and adaptive management. This, in turn, requires adequate funding, competent staff and resources which many MPAs still lack. According to the IUCN-WCPA, monitoring of MPAs should be standardised across the network, and include monitoring stations both inside and outside the MPAs. To date, however, most European MPAs have no or only very limited monitoring of habitats and species. When monitoring is in place, it is seldom more than one station per site, making it difficult to determine whether ecosystem health is improving compared to the environment outside the MPA. In addition, monitoring is not systematically reported, which leaves decision makers in the dark regarding the actual progress of protection in MPAs.

The existence of a management plan for a given MPA is, therefore, not a direct proxy for success or effective management. However, for this EU-wide assessment, the presence of a management plan has been used to indicate that an area designated as an MPA has taken the first step towards protection of the environment in practice.

The first part of this report assesses the spatial coverage of all designated MPAs and MPAs with a management plan in EU marine areas. The spatial coverage could not be assessed for effectively managed MPAs, as information on these is not available in the public databases for all 23 marine EU Member States.<sup>18</sup> However, page 13 features a case study of the spatial coverage of the effectively managed Dutch marine area.

Designated MPAs	refers to all areas that have been designated for marine protection. This is the <b>starting point</b> for marine protection.
MPAs with a management plan	are areas that have been designated for marine protection and are reported to have an implemented or officially endorsed management plan. This is the <b>first step</b> on the way for an MPA to be developed to protect the marine environment.
Effectively managed MPAs	are areas that have been designated, have an implemented management plan and are carrying out actions for conservation and/or active nature restoration that results in <b>actual protection</b> .

<sup>15</sup> Kelleher 1999. Guidelines for Marine Protected Areas. IUCN, Gland, Switzerland and Cambridge, UK.107pp.; Salm, Clark and Siirila 2000. Marine and coastal protected areas: a guide for planners and managers. IUCN. Washington DC. 371pp.

<sup>16</sup> IUCN WCPA 2018. Applying IUCN's Global Conservation Standards to Marine Protected Areas (MPA). Delivering effective conservation action through MPAs, to secure ocean health & sustainable development. Version 1.0. Gland, Switzerland. 4pp

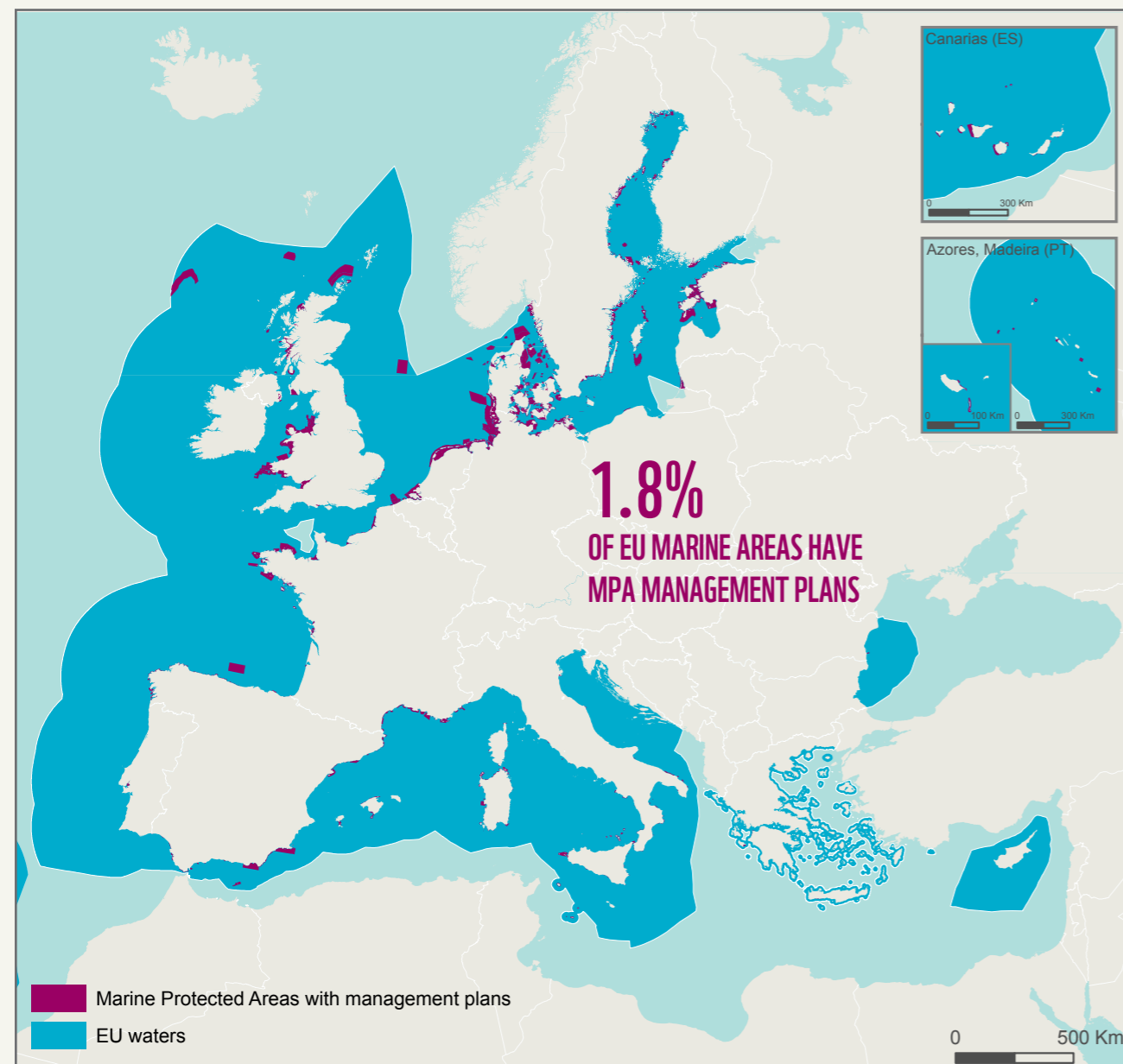
<sup>17</sup> Dureuil et al. 2019. Elevated trawling inside protected areas undermines conservation outcomes in global fishing hot spot. Science 21: 1403-1407.

<sup>18</sup> The EU marine area was defined as the area extending 200 nautical miles from the coastline of mainland Europe, excluding overseas territories outside of the European continental shelf. The assessment was based on MPA data reported to the Natura 2000, CDDA, HELCOM MPA, OSPAR MPA and MapaMed databases. For complete assessment details please refer to the online Technical Annex.

# LACK OF EFFECTIVE PROTECTION

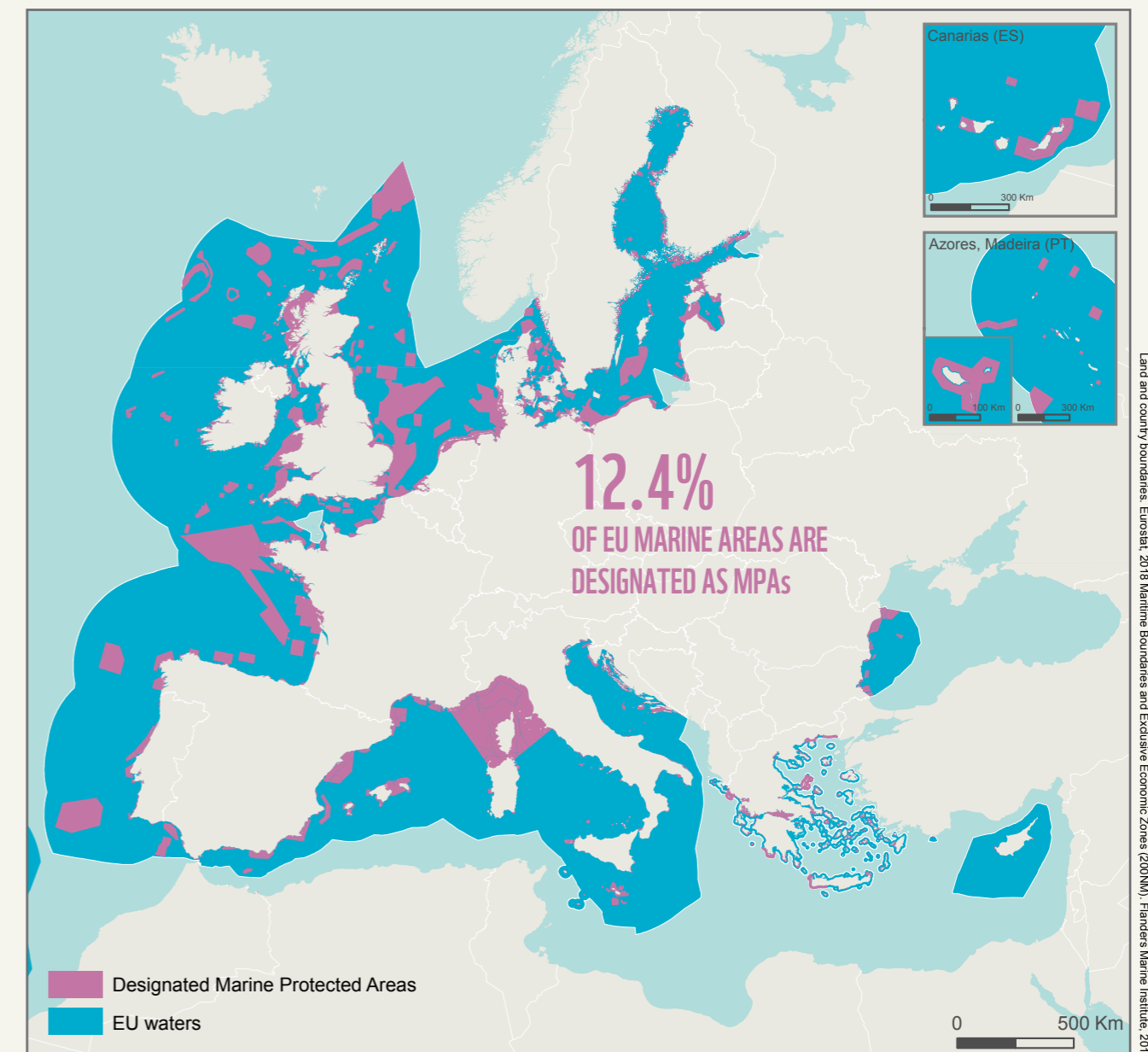
Marine Protected Areas (MPAs) are a tool for protecting marine biodiversity. Marine EU Member States have been designating coastal and marine areas for protection for many years, however, **designation alone does not deliver any protection measures to the marine environment.** A comprehensive, fully implemented management plan, backed up by legislation, stakeholder support and sustainable finance, along with actions for conservation, active nature restoration, monitoring and adaptive management are needed for an MPA to provide biodiversity protection from seabed to surface.

Comparing MPAs in the EU which have management plans with all designated MPAs reveals the poor efforts of Member States to follow through with developing robust marine protection. **Today, only 1.8% of the EU marine area has an MPA management plan in place, while 12.4% is officially designated as MPAs.**



**This means that over 10% of EU waters are covered by MPAs that are failing on the first step of achieving effective marine protection and stand at risk of remaining Paper Parks.<sup>19</sup> This equals 85% of all designated MPAs.**

**Moreover, of the 1.8% of the EU marine area that has an MPA management plan, only a small portion has effective protection measurements in place.** Due to the lack of information in international databases, the coverage of effectively protected marine areas could not be measured, reflecting the urgent need for improved reporting mechanisms in the EU. In the majority of European MPAs, existing management plans account for zonation which allows activities such as fisheries and energy generation to continue. This undermines biodiversity protection objectives which results in significant and long-term harmful consequences on marine life.

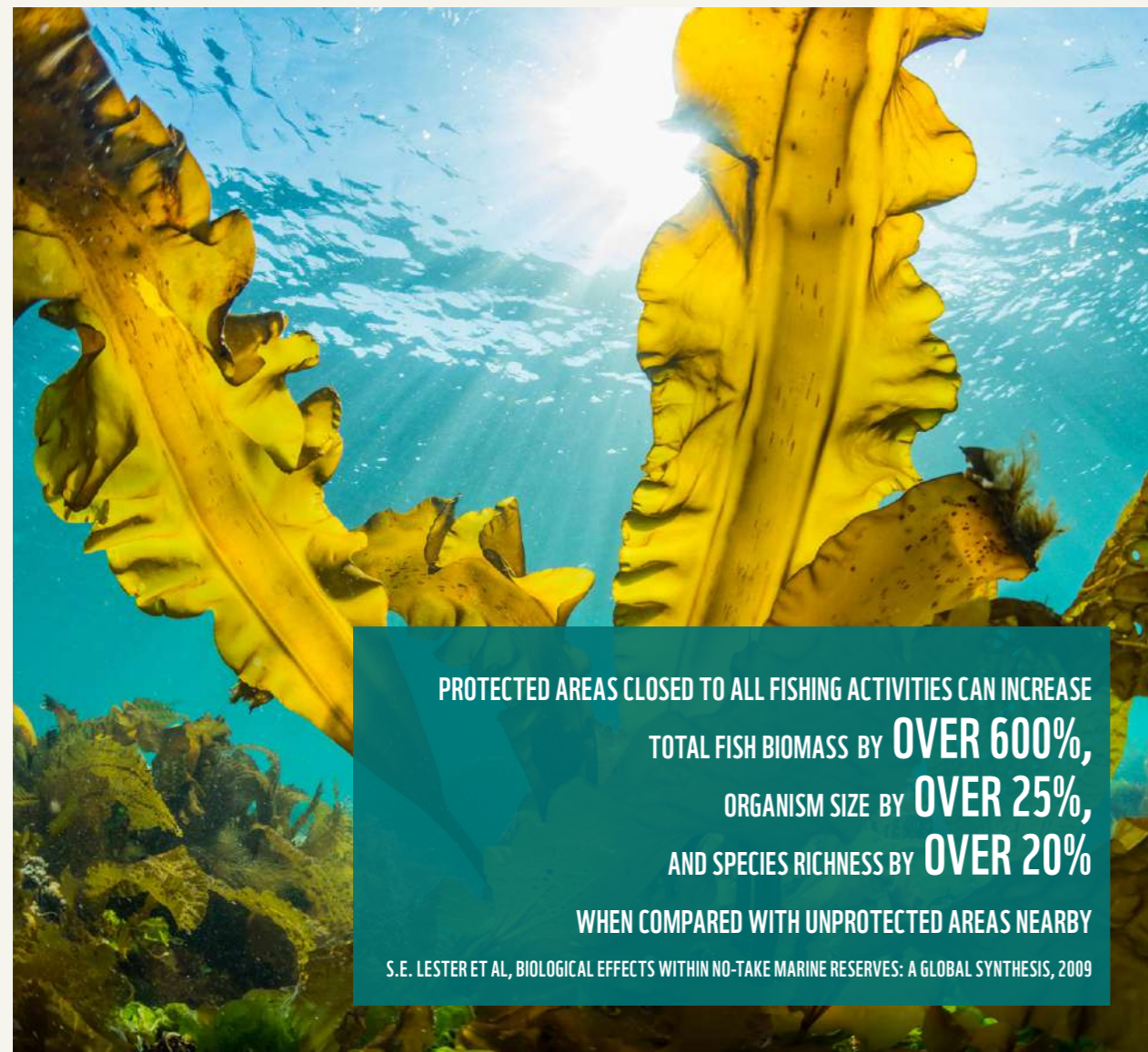


<sup>19</sup> The EU marine area was defined as the area extending 200 nautical miles from the coastline of mainland Europe, excluding overseas territories outside of the European continental shelf. The assessment was based on MPA data reported to the Natura 2000, CDDA, HELCOM MPA, OSPAR MPA and MapaMed databases. For complete assessment details please refer to the online Technical Annex.



A study published in 2017 indicated that the Baltic Sea, the North-east Atlantic Ocean and the Mediterranean Sea had already achieved the Aichi target 11 of conserving at least 10% of coastal and marine areas at the end of 2016.<sup>20</sup> However, that assessment exclusively analysed the percentage of marine areas designated as MPAs. In the Baltic Sea, only 7% of the marine area is covered by MPAs with a management plan, which accounts for less than half of the designated MPAs in this sea basin (16%). The situation is worse in the North-east Atlantic, where only 2% of the marine area is covered by MPAs with a management plan, while the designated MPAs cover 11% of the sea. Less than 1% of the Mediterranean Sea is covered by MPAs with a management plan, while almost 13% is designated as MPAs. The MPAs with a management plan are focussed along the coasts in all regional seas, reflecting the lag in development of offshore MPAs.

**It is essential that existing MPAs in the EU fulfil their purpose through comprehensive and fully implemented management plans, enabling partial and full biodiversity protection.**



20 Agnesi et al. 2017. Spatial Analysis of Marine Protected Area Networks in Europe's Seas II, ed. Kunitzer, A. ETC/ICM Technical Report 4/2017, 41pp

## THE NETHERLANDS: INEFFECTIVE PROTECTION AGAINST HARMFUL FISHERIES

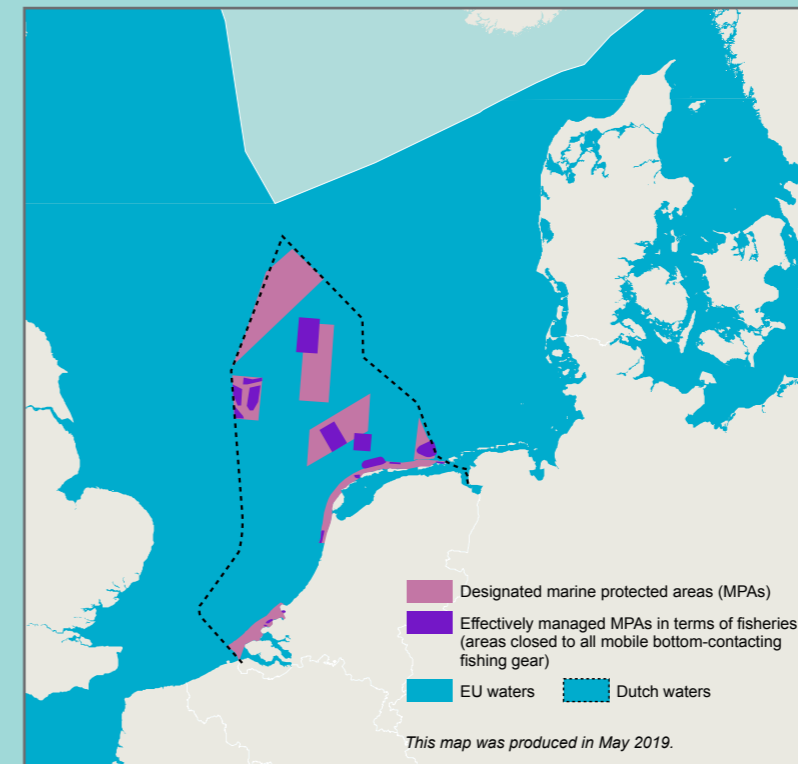
In 2005, a landmark scientific study showed that protection of marine areas in the Dutch part of the North Sea is crucial and should be a priority.<sup>21</sup> Five areas were designated as Special Areas of Conservation (SACs) under the Habitats Directive and three as Special Protection Areas (SPAs) under the Birds Directive. The SACs were designated for the protection of their sandbanks and reefs, following centuries of industrial fishing which left them severely degraded. Most of these areas were also designated for the protection of harbour porpoise, as well as the harbour seal and the grey seal. Further, two areas were designated as search areas for sea floor protection measures under the Marine Strategy Framework Directive. Together, these designated areas cover 25% of the Dutch marine area.

Seafloor protection is the core of effective MPA management in these waters, although additional measures are necessary. However, the management plans that are currently in place for these designated areas only protect tiny patches against all mobile bottom contacting fishing gear, including beam trawling, twin rig and seining.

**The result is that in 2019, a meagre 0.3% of the Dutch marine area is protected against harmful fishing activities. Proposals for further fisheries management measures submitted to the European Commission in June 2019 would add an extra 4.8% to this.\***

However, protecting a total of 5.1% of the Dutch marine area's seafloor against mobile bottom-contacting fishing gear would still be far from sufficient for the recovery of this marine area and its biodiversity. Moreover, other activities that are harmful to the seabed, such as exploration for oil and gas fields, are generally not restricted. It is also worrisome that no protection measures for harbour porpoises and seals have been taken, nor are any planned, in the areas designated for the protection of these species.

Immediate improvements are required in the Dutch marine area to ensure the protection of important feeding, spawning and nursery areas for many species, such as soft corals, sharks, rays and harbour porpoises. The recovery of these habitats and species is urgently needed for the Dutch MPAs to finally become a driver for ecological recovery in the wider North Sea.



\*Due to last minute changes, proposals covering a small portion of this area failed to be submitted to the European Commission, meaning that even the 4.8% of additional protection wouldn't be achieved.

Although 25% of the Dutch marine area is covered by designated MPAs (Natura 2000 areas and MSFD search areas for seafloor protection), only 5.1% is intended\*\* to be closed to all mobile bottom-contacting fishing gear year-round. These types of fisheries activities irreparably damage the seafloor and impede any efforts to effectively conserve marine ecosystems.

\*\*While 0.3% of the Dutch marine area is already closed to mobile bottom-contacting fishing gear, the majority of proposals to prevent these harmful fishing activities in the remaining 4.8% were submitted to the European Commission in June 2019. Until these proposals are adopted, the true scope of marine protection remains unclear.

21 Lindeboom et al. 2005. Areas of special ecological values at the Dutch Continental Shelf. Report RIKZ/2005.008/- Alterra Report no. 1203

## EU MEMBER STATES FLOUNDERING ON MPA MANAGEMENT PLANS

The 23 marine EU Member States can be divided into four categories based on the percentage of their marine area covered by MPAs with a management plan: 0%; up to 10%; >10-29%; and >30%. The figure on page 19 shows that only Belgium has MPAs with management plans for more than 30% of its marine area, while three Member States (Germany, Estonia and Denmark) have MPA management plans for >10-29% of their marine areas, and eight Member States have MPA management plans for less than 10% of their marine areas (Finland, France, Italy, Lithuania, the Netherlands, Spain, Sweden and the UK). However, it should be noted that those countries which do have MPA management plans in place for over 10% of their marine areas have not necessarily kept development of those plans up to speed with the areas which have been designated for protection; in the case of Germany, for example, management plans are in place for only half of the designated MPAs. **While all of the Member States mentioned above have taken every necessary step in the administrative MPA process, they must now focus on effectively managing their designated MPAs by addressing and regulating stressors and impacts that prevent them from achieving their respective objectives for protection.**

Eleven Member States (Bulgaria, Croatia, Cyprus, Greece, Ireland, Latvia, Poland, Portugal, Romania, Malta and Slovenia) have not reported any MPAs with a management plan in their marine areas and need to urgently designate and/or develop their MPAs. Of these countries, Croatia, who joined the EU in 2013, currently lies within the six-year period between establishing Natura 2000 sites and reporting to the European Commission, which is why there is no official data on the status of their management plans to date. While additional sources report that national MPA management plans are in place for some Croatian MPAs, the mere presence of a management plan is not coupled with proven conservation effects.<sup>22</sup>

**It is striking that almost half of the EU's marine Member States have no or hardly any management plans in place.** Keeping in mind that management plans are only the first step for a designated MPA to develop into an area which actively protects the marine environment, and that the presence of a management plan is not a direct proxy for effective management of an MPA, improvement is urgently needed. Moreover, the Member States which claim to have management plans in place and seem to do well, in fact have limited or no real protection in many cases. For example, in Denmark, protection against fishing gear which causes physical damage to the seafloor has been implemented within a number of sites protecting reefs; however, this approach has provided protection solely for physical reef structures while all remaining areas within MPA boundaries are left open to mobile bottom contacting gear (see other similar examples from the Netherlands on page 13 and the Dogger Bank on page 23).

Delays in reporting to the international MPA databases are evident: for example, according to national sources, Spain has increased its MPA designation from 8.6% to 13% in recent years by designating the Cetacean corridor; however, this has only been reported to the national database.<sup>23</sup> For the same reason, national French databases report that the majority of MPAs older than three years are covered by a management plan, while reporting to international databases is lagging behind and only accounts for management of 2.4% of the total marine area.<sup>24</sup> Reporting to the Natura 2000 database is mandatory by European law and reporting to regional sea databases is agreed by the Member States through the recommendations of the Regional Sea Conventions.

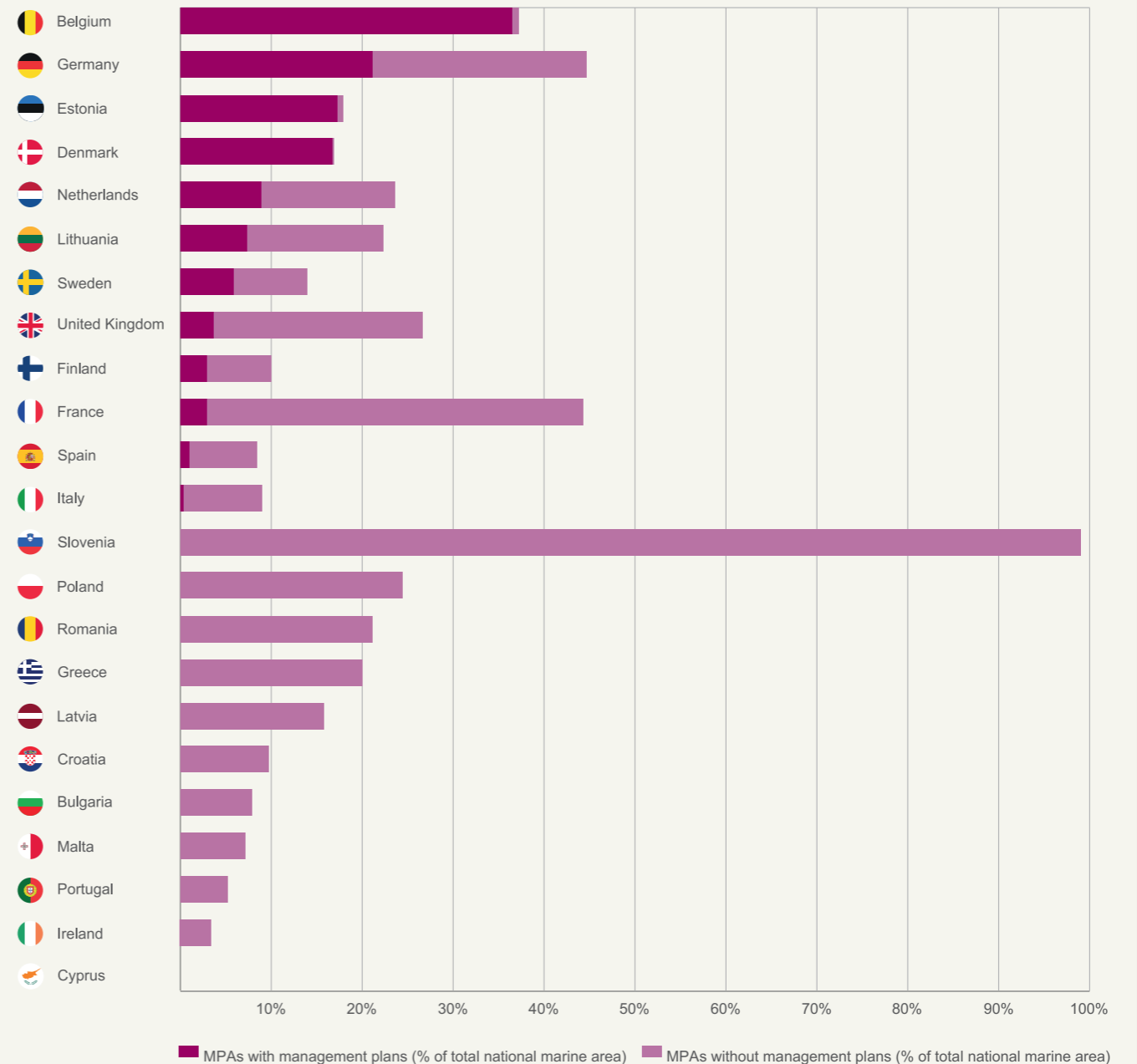
**Increased transparency of ocean conservation actions by EU Member States to EU and regional seas databases is essential to determine the first steps taken towards biodiversity protection and progress towards international targets. Member States must improve their reporting into the international MPA databases, in compliance with EU law.**

<sup>22</sup> National reporting on Croatian Marine National Parks and Nature Parks.

<sup>23</sup> Spanish Ministry for Ecological Transition and Regional Government.

<sup>24</sup> The French Biodiversity Agency calculates the sustainable management of MPAs as the proportion of MPAs established three or more years ago and having a validated management document. In January 2018 this value was 98.5%.

### MPAs with and without management plans in the EU



Most EU countries have created very few management plans for their MPAs (dark purple column), while MPA designation can be high (light purple column). Effective MPA management cannot be assessed for all EU Member States due to the lack of publicly available data. Note that the results are shown in percentage and therefore do not reflect the actual size of the countries' marine areas. For example, Slovenia, with a small marine area of around 200 km<sup>2</sup>, has a very high designation percentage. The data is based on national reporting to the databases of Natura 2000, CDDA, MapaMed, OSPAR MPA and HELCOM MPA (excluding national MPA databases), and any delay in reporting to these databases is reflected in the figure. Full methodological details of this assessment are available in the online Technical Annex.

## THE CHALLENGE OF TRANSPARENCY IN MPA REPORTING

Reporting on the implementation of Natura 2000 sites is required by EU law under Article 17 of the Habitats Directive and should be uploaded to the publicly accessible Natura 2000 database by the end of each calendar year. The Regional Sea Conventions operate under commonly agreed recommendations which encourage regular reporting on the MPAs into their regional MPA databases. However, this study revealed significant gaps in reporting to all MPA databases used for the analyses of the report. Timely reporting on protection measures, as well as a clear baseline assessment of the environment within the MPA at the time it was established are crucial to ensure full transparency of protection and measurable progress of the marine environment.

It is common for several different protection schemes to overlap in one geographical location (for example an MPA protected under both the Habitats Directive and by a Regional Sea Convention), and this requires reporting to different databases which is not always completed by all EU Member States. Clear reporting on the protection targets, especially for coastal Natura 2000 sites, is important when differentiating between terrestrial and marine protection. A good example of this is the Finnish Natura 2000 site called the Eastern Gulf of Finland Archipelago and Waters which, based on a map analysis, is comprised 99% of marine areas and just 1% of islands and according to the HELCOM MPA database, provides marine protection. However, a closer look into the Natura 2000 database and the management plan of the area reveals that no marine areas are included in the national park. The management plan lists no actions for protection or restoration of the underwater ecosystems, apart from occasional clearance of reeds from the shallow flada bays (a marine habitat protected by Finland's Water Act).

In addition, some EU countries split the management of a single MPA between different authorities, such as between the coast guard for the marine parts of an MPA and the forest services for islands. This further complicates reporting and decreases the transparency of what underpins the reported numbers. Increased clarity and harmonisation of reporting is essential in these cases, as well as an agreed holistic management plan which allocates roles and determines the body responsible for the overall coordination of management activities.



# THE LOST POTENTIAL OF EUROPEAN MPA NETWORKS

MPAs are usually established to protect certain species, habitats or ecosystem processes under the Birds and Habitats Directives, regional conventions or national law. A single MPA can protect species and habitats within its borders, but a network of MPAs can deliver beyond their boundaries and extend this protection to cover wider areas, such as a sub basin or an entire regional sea, provided that the network is effectively designed. This is especially crucial in light of ocean acidification and increasing sea temperatures resulting from climate change, which will transform a given species' habitat into an uninhabitable environment. Designing an ecologically effective network requires transboundary cooperation and an understanding of how the individual MPAs can support each other across the network.

**This network-wide protection is referred to as ecological coherence. The three main criteria commonly used in ecological coherence assessments are representativity, replication and connectivity:**

<b>Representativity</b>	ensures that the MPA network protects the typical and unique nature in each sea basin. This means that all habitats found in the sea basin must also be found within the MPA network.
<b>Replication</b>	acts as the insurance of the network, ensuring that there are several copies of a given habitat across the regional sea's MPA network and that they are not clustered together in only one MPA.
<b>Connectivity</b>	acts as the glue of the MPA network. This parameter ensures that individual MPAs are spatially close enough to allow species and their larvae to move between MPAs containing the required habitat type, and to seek refuge within the MPA network should an unforeseen hazard (e.g. oil spill, bottom-disturbing fisheries, marine construction) threaten their original location. This ensures both the genetic diversity and survival of the species populations, including species whose life stages depend on different habitats.

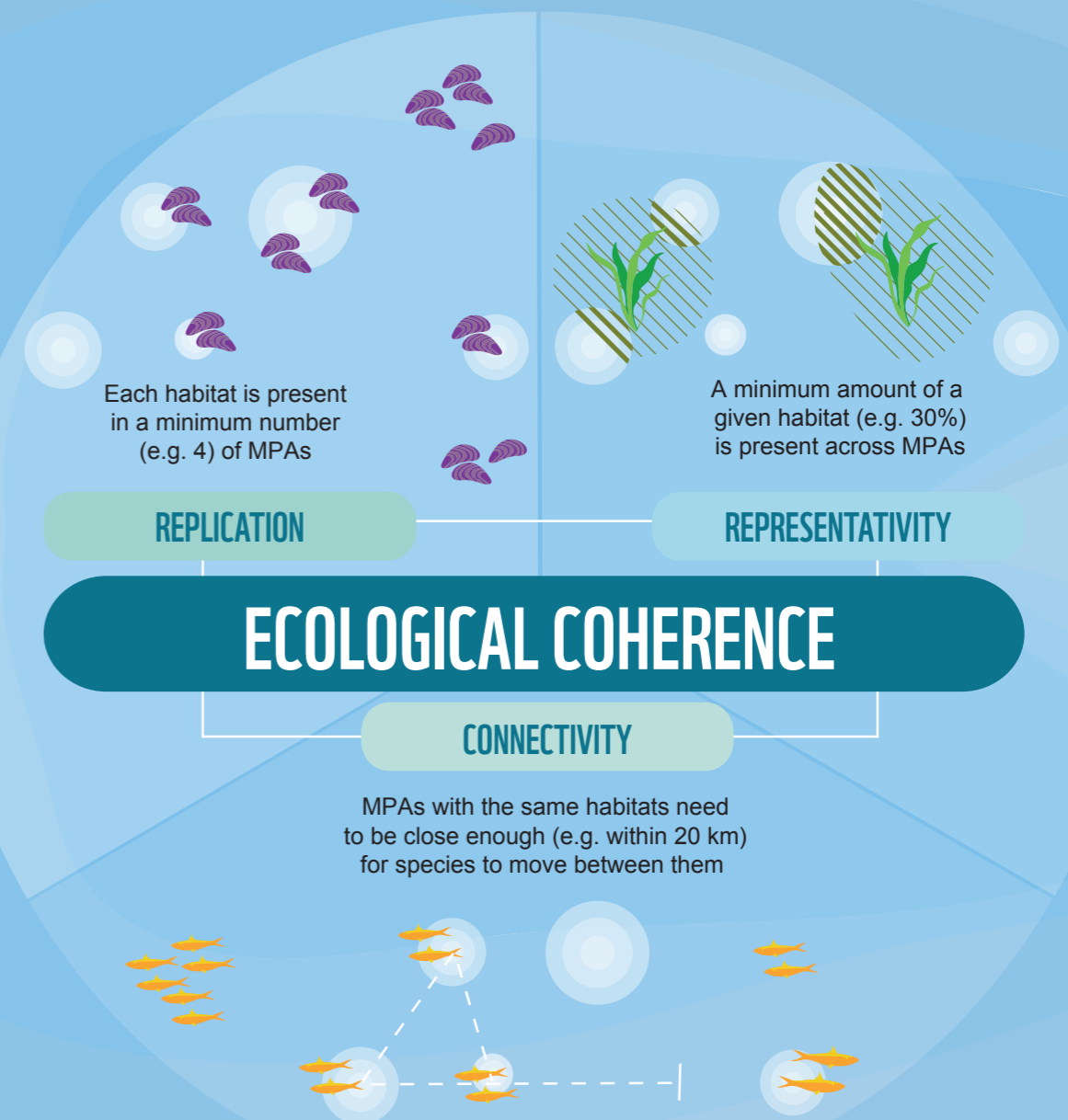
**A network of MPAs is only ecologically coherent when all assessment criteria are fulfilled at the same time.**

Previous assessments of ecological coherence have included additional criteria such as adequacy, resilience, viability and management.<sup>25</sup> The definitions of these additional criteria partly overlap and vary between regional assessments. For the purposes of this WWF report, the assessment of ecological coherence was based on the three main criteria defined above.

<sup>25</sup> Rees et al. 2015. Assessment of the Ecological Coherence of the MPA Network in the Celtic Seas: A report for WWF-UK by the Marine Institute, Plymouth University and The Marine Biological Association of the United Kingdom. pp 165.; HELCOM 2016. Ecological coherence assessment of the Marine Protected Area network in the Baltic. Baltic Sea Environmental Proceedings No. 148; Agnesi et al. 2017. Assessing Europe's Marine Protected Area networks - Proposed methodologies and scenarios, ed. Kunitzer, A. ETC/ICM Technical Report 2/2017, 72pp.

## MEASURING THE QUALITY OF MARINE PROTECTION

Understanding Ecological coherence in Marine Protected Area (MPA) Networks



## ASSESSING ECOLOGICAL COHERENCE OF EUROPE'S REGIONAL MPA NETWORKS

The assessment of ecological coherence carried out for this report focuses on continental EU marine waters and was carried out on three European sea basins: the Baltic Sea, the North-east Atlantic Ocean and the Mediterranean Sea.<sup>26</sup> It was completed by analysing spatial data (Geographic Information System (GIS)) of designated MPAs and European Nature Information System habitats (EUNIS). The assessment focused on the three criteria most commonly used and defined across ecological coherence assessments carried out in different regional seas: representativity, replication and connectivity.<sup>27</sup> Full methodological details of this assessment are available in the online Technical Annex.

**Network quality is measured against strict cut off lines. Each criterion must be met with 100% success and all three criteria must be achieved simultaneously.**

<p>For good <b>representativity</b>, at least <b>30% of each habitat</b> must be found within the MPA network of the regional sea.<sup>28</sup></p>	<p>For good <b>replication</b>, each habitat <b>must occur in at least four separate MPAs</b> in the regional sea.<sup>27</sup></p>	<p>For good <b>connectivity</b>, each habitat in an MPA <b>must be within 20 km of at least 10 patches of the same habitat</b> in another MPA in the regional sea.<sup>29</sup></p>
---	---	---

None of the MPA networks in Europe's regional seas are ecologically coherent. This lack of an effective network in Europe's seas fails to deliver adequate means for our marine ecosystems to recover to a healthy state and impedes our ocean's resilience in the face of climate change and harmful human activities.

<sup>26</sup> The EU marine area was defined as the area extending 200 nautical miles from the coastline of mainland Europe, excluding overseas territories outside of the European continental shelf. The assessment was based on MPA data reported to the Natura 2000, CDDA, HELCOM MPA, OSPAR MPA and MapMed databases. The EU part of the Black Sea covers such a small area that an ecological coherence assessment for that sea was not ecologically meaningful. For complete assessment details please refer to the online Technical Annex.

<sup>27</sup> Agnesi et al. 2017. Assessing Europe's Marine Protected Area networks - Proposed methodologies and scenarios, ed. Kunitzer, A. ETC/ICM Technical Report 2/2017, 72pp.

<sup>28</sup> IUCN Resolution 2016. WCC-2016-Res-050-EN

<sup>29</sup> Further developed from HELCOM 2016. Ecological coherence assessment of the Marine Protected Area network in the Baltic. Baltic Sea Environmental Proceedings No. 148.

## BALTIC SEA MPA NETWORK QUALITY



The MPA network in the Baltic Sea is not ecologically coherent, as none of the three criteria are fully met by the MPA network. Only a quarter of all Baltic Sea habitats reach the required 30% coverage within the MPA network, with habitats in the deep offshore areas especially underrepresented. Replication is close to sufficient in the Baltic Sea network, with almost 90% of all habitats showing enough replicates within the network. However, only two thirds of the MPAs are connected to each other, meaning that one third of them do not allow for sufficient species distribution from one MPA to another.

All in all, the quality of the MPA network in the Baltic Sea is poor, and the low representativity and connectivity results indicate that MPAs are failing to function together as a network. Improved protection is needed, especially for the deeper offshore areas of the Baltic Sea. Even though 16% of the Baltic Sea area has been designated as MPAs, the majority of these have been established in the coastal zone and territorial waters, while very few of them are established in the Exclusive Economic Zone.

## NORTH-EAST ATLANTIC MPA NETWORK QUALITY



The MPA network in the North-east Atlantic is not ecologically coherent, even though the network shows excellent results for replication of habitats. This is nevertheless not enough to make the MPA network in the North-east Atlantic ecologically coherent, as all three criteria must be met concurrently. Only half of all North-east Atlantic habitats reach the minimum 30% representativity within the MPA network, which means that the network should be expanded to cover a wider range of habitats. Two-thirds of the habitats in the MPAs show enough connectivity, which leaves a third of the assessed habitats without sufficient connection and their species without an escape route in case of an unexpected event in one MPA of the network.

In conclusion, with 11% of the North-east Atlantic designated as MPAs, the quality of the MPA network is poor. Only the criterion for replication is fulfilled, which means that while there are enough copies of the protected habitats, they do not cover enough of the North-east Atlantic habitats, nor are they close enough to each other.

## MEDITERRANEAN MPA NETWORK QUALITY



The MPA network in the Mediterranean is not ecologically coherent, as none of the three criteria are fully met by the MPA network. Only a third of all Mediterranean habitats reach the minimum 30% representativity within the MPA network, which means that the network should be expanded to cover a wider range of habitats. Replication is close to sufficient, with around 80% of the habitats having enough replicates throughout the network. However, connectivity is alarmingly low, with only a sixth of the habitats having enough connections within the MPA network. In practice, this means that the MPAs are isolated from each other which leaves them without support from neighbouring MPAs.

All in all, with 13% of the Mediterranean Sea designated as MPAs, the quality of the Mediterranean MPA network is very poor, with connectivity between MPAs the weakest point.

## UK: THE CHALLENGE OF HARBOUR PORPOISE PROTECTION AND WINDFARM DEVELOPMENT



© NATUREPL.COM / FLORIAN GRANER / WWF

Harbour porpoises are one of the most sensitive marine mammal species to man-made noise. Young animals take only 30 hours to develop full hearing abilities, after which they depend on echolocation to communicate and find food almost 24 hours a day.<sup>30</sup>

In 2017, thanks to pressure from WWF, the UK created six new MPAs for these enigmatic animals, a protected species under the Habitats Directive. One of these protected areas included the Southern North Sea MPA, a large area that overlaps with several proposed offshore wind farm sites. Wind energy projects produce a significant amount of underwater noise during the construction phase when turbines are hammered into the seabed, adding to other sound sources at sea, such as shipping and seismic surveys.

In the case of the Southern North Sea MPA, protection objectives within the site include the need to avoid 'significant disturbance' to porpoise populations from noise and other pressures. An official review of the proposed wind farms concluded that they would not cause this level of disruption, even though thousands of square kilometres were predicted to be affected at key times of the year.<sup>31</sup> Therefore, although the site is officially reported as having 'partial' management due to these assessments, no actual mitigation is considered necessary to reduce the noise levels.<sup>32</sup> There is also no overall management plan in place to consider the integrity of the site as a whole. Unfortunately, these examples of MPAs with key differences between what is reported and how the site is managed in practice, are numerous in Europe.

<sup>30</sup> Wisniewska et al. 2016. Ultra-High Foraging Rates of Harbor Porpoises Make Them Vulnerable to Anthropogenic Disturbance. *Current Biology* 26: 1441-1446.; Wahlberg, Delgado-Garcia & Kristensen 2017. Precocious hearing in harbour porpoise neonates. *Journal of Comparative Physiology* 203: 121-132.; Weigart 2018. The impact of ocean noise pollution on fish and invertebrates. Report for OceanCare, Switzerland. 34 pp.; Southall et al. 2019. Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing. *Aquatic Mammals* 45: 125-232.

<sup>31</sup> UK Government, Department for Business, Energy & Industrial Strategy 2018. Southern North Sea review of consents: draft Habitats Regulations Assessment (HRA), closed consultation.

<sup>32</sup> OSPAR MPA datasheet of Southern North Sea MPA.

## DOGGER BANK: A CROSS-BORDER CONSERVATION FAILURE

The Dogger Bank, a submerged sandbank and transboundary Natura 2000 area, is located in the shallow waters of the central North Sea, spread across the offshore waters of the Netherlands, UK, Germany and Denmark. If properly protected, the Dogger Bank could become a beacon of recovery for the wider North Sea.

The British, Dutch and German governments have each designated their parts of the Dogger Bank (a total of 18,765 km<sup>2</sup> and almost 75% of the entire Dogger Bank) as a Natura 2000 area under the EU Habitats Directive, with the intention to protect the sandbank ecosystem, harbour porpoises and seals in the area; only Denmark abstained from designation. However, the final proposal for fisheries management measures within the MPA continues to allow the use of mobile bottom-contacting fishing techniques in 95.3% of the designated site. These fishing methods are highly destructive to marine ecosystems and cause long term degradation of seafloor biodiversity.

Since 2009, the three governments in question have involved fisheries, nature conservation organisations and scientists in discussions to define the needed protection measures for the Dogger Bank. In 2013, this led to an agreement between the governments to close 33.8% of the Natura 2000 area to damaging mobile bottom-contacting fishing. EU law demands that scientific support is provided for the proposal to leave 66.2% of the site open to all mobile bottom-contacting gear; however, the countries have not been able to prove that the site will not be adversely affected.

In the final proposal to the European Commission in 2019, the three governments' ambition has dramatically dropped, proposing for harmful bottom-contacting fisheries like flyshoot to be allowed within most of the Dogger Bank. These kinds of seine fishing disturb and damage the seabed, and result in the bycatch of sharks, cold water corals and other fragile marine life.

Only in the German, and the smallest of the Dogger Bank sites, is a marginal area to be closed to all harmful mobile bottom-contacting types of fisheries and, even then, only on an experimental basis for three years. In total, this area accounts for just 4.7% of all three designated Natura 2000 areas, which is far from sufficient for the recovery of the Dogger Bank given its limited scope and brief duration.

One of the main reasons governments are failing to deliver effective protection for the Dogger Bank is that countries without marine territory in the Dogger Bank Natura 2000 area are allowed to obstruct the decision-making process on fisheries restrictions under the Common Fisheries Policy. These are countries that exploit fishing opportunities in these Natura 2000 areas and for whom economic interests are more important than nature protection.

The European Commission must better scrutinise fisheries management measures submitted by Member States to ensure that conservation objectives are achieved within Natura 2000 sites in line with Article 11 of the Common Fisheries Policy. Doing so will ensure that fishing activities are permitted in Natura 2000 sites only when they are proven to not have adverse effects on the integrity of the species and habitats for which the protected area was designated.



© UDO VAN DONGEN

# DELIVERING MARINE PROTECTION FOR 2020 AND 2030

The European Commission and EU Member States must urgently improve biodiversity protection in all European marine areas and ensure effective management of all MPAs.

With the EU increasing its focus on the Sustainable Blue Economy and EU Member States completing the development of their Marine Spatial Plans (MSP), recognising and securing the social and economic benefits of MPAs for future generations is imperative.<sup>33</sup> The EU can no longer afford to have biodiversity protection pushed to the sidelines. All Member States must place the issue of effective marine protection centre stage and incorporate it into the overarching spatial and temporal planning of their activities at sea.

Without further delay, the EU Member States must ensure that comprehensive, ambitious and effective management plans are developed and implemented for all their designated MPAs to help deliver proactive results for marine conservation and restoration. Further, it is critical that those Member States with low designation of MPAs urgently establish these areas and ensure that they are effectively managed. **Only by shifting focus from actions on paper to effective actions in the ocean can the marine environment improve.**

The quality of marine protection stems from the design of an ecologically coherent MPA network, without which the protection of species and habitats in the wider marine environment will fail. **Improving the poor network quality in the EU relies on both protecting a representative percentage of all habitats and ensuring that all MPAs are well connected.** Today, marine protection in Europe's regional seas remains largely focused on coastal areas, leaving protection of deep offshore areas and their habitats in stark need of improvement. As the ocean knows no borders, and species' historical distributions are now shifting due to rising sea temperatures brought on by climate change, transboundary cooperation is key, within the EU and beyond.

**The 1.8% of the EU marine area currently covered by MPAs with management plans is a far cry from the minimum 10% well-managed and well-connected MPAs required by both SDG 14 and the CBD Aichi target 11 by 2020.** However, even these goals are based on political compromise and should be viewed as an important waypoint rather than an end goal for marine protection. Scientific evidence shows that the benefits of MPAs to the marine environment are directly proportionate to the size of the protected area as well as to the quality of the provided protection. This same evidence unequivocally supports full protection of marine areas in the form of no-take zones for at least 30% of the world's oceans.<sup>34</sup>

**The European Commission and EU Member States must now take action to ensure that at least 30% of EU marine areas are covered by effectively managed MPAs by 2030.** If all EU Member States start by effectively managing the 12.4% of MPAs already designated today, the EU will have achieved a crucial first step toward the 30% minimum target. EU Member States must prioritise building an effectively managed, well-connected, coherent and representative network of MPAs, and ensure that no MPA is left behind as a Paper Park.<sup>35</sup>

WWF recommendations for accountability, transparency and effective management of ocean protection measures presented in this report must be integrated into both EU and Member State legislative agendas to achieve the comprehensive biodiversity protection required for the 2020 international targets. **Investment in ocean conservation is a down payment on future human and economic health.**

## WWF recommends that:

- EU Member States actively and urgently establish, enforce and implement effective management and monitoring in existing MPAs;
- EU Member States ensure that the main priority of all MPAs is conservation of biodiversity, not economic opportunity. MPAs must be effectively managed and include fully protected zones that do not allow destructive and exploitative activities such as dredging, the use of bottom-disturbing fishing gear, oil and gas exploration and extraction, wind farm development, sand and gravel extraction, disruptive coastal developments, and seabed mining;
- EU Member States secure appropriate resources and investment for MPAs, and use participatory processes, which include all relevant stakeholders in the development of functional management plans, to ensure effective implementation and compliance by all actors;
- EU Member States designate further areas for protection to achieve at least 30% effectively managed MPAs by 2030 in line with the IUCN Resolution,<sup>36</sup> and ensure that the design of MPA networks, delivered through transboundary processes, supports appropriate representativity, replication and connectivity of MPAs at national level and across the sea basin;
- Further offshore areas and deep-sea ecosystems are urgently designated in all regional seas; these new designations must also include habitats and species not listed in annexes of the Birds and Habitats Directives;
- EU Member States recognise the benefits of MPAs beyond nature protection and include them as the basis of the ecosystem-based approach in their Marine Spatial Plans (MSP) to support securing a Sustainable Blue Economy by 2021;
- The European Commission provides greater scrutiny over fisheries management measures submitted by Member States to ensure that conservation objectives are achieved within Natura 2000 sites in line with Article 11 of the Common Fisheries Policy, ensuring the integrity of the species and habitats intended to be protected;
- EU Member States increase transparency of their protected marine areas through timely and accurate reporting to all relevant MPA authorities and databases.

<sup>33</sup> Pantzar et al. 2018. Study on the economic benefits of marine protected areas. Literature review analysis. 136pp

<sup>34</sup> IUCN Resolution 2016. WCC-2016-Res-050-EN; Sala et al. 2018: Assessing real progress towards effective ocean protection. Marine Policy 91: 11-13.

<sup>35</sup> WWF 2017. Preventing Paper Parks: How to make the EU Nature Laws work. 67pp.

<sup>36</sup> IUCN Resolution 2016. WCC-2016-Res-050-EN.



WWF is one of the world's largest independent conservation organisations, with over five million supporters and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption.

The WWF European Policy Office contributes to the achievement of WWF's global mission by leading the WWF network to shape EU policies impacting the European and global environment.

The WWF European Policy Office wishes to thank the WWF marine officers from across the EU for their assistance to review and refine this report. Their national perspectives on marine protection and the issues at hand were invaluable to the information presented herein. In particular, we wish to thank Thomas Kirk Sørensen from WWF Denmark for contributions on the topic of management plan quality, Thomas Rammelt from WWF Netherlands for contributions on the Dogger Bank and Dutch marine protection, and Alec Taylor from WWF UK for his contribution on harbour porpoise protection in the UK.



Sky Ocean Rescue and WWF are working together to help protect and restore our amazing ocean. With climate change, pollution and growing demand for resources such as food and energy, our ocean and marine wildlife are reaching a crisis point. Together, we are working to improve the management of Marine Protected Areas (MPAs). This will enable marine wildlife to thrive and to improve the health of our waters, which play an essential role in securing food, jobs, energy and the oxygen we breathe.

For further information on this report and the WWF European Policy Office's ocean policy work, see [www.wwf.eu/what\\_we\\_do/oceans](http://www.wwf.eu/what_we_do/oceans) or contact:

**Janica Borg**  
Marine Protection and Spatial  
Planning Policy Coordinator  
[jborg@wwf.eu](mailto:jborg@wwf.eu)

**Dr Samantha Burgess**  
Head of Marine Policy  
[sburgess@wwf.eu](mailto:sburgess@wwf.eu)

**Larissa Milo-Dale**  
Marine Communications Officer  
[lmilodale@wwf.eu](mailto:lmilodale@wwf.eu)



Front cover photograph © Arco/Naturepl.com  
Layout: Heedi Graphic Design  
Printed by Zwartopwit, Belgium

Published in September 2019 by WWF – World Wide Fund For Nature (formerly World Wildlife Fund), Brussels, Belgium. Any reproduction in full or in part must mention the title and credit the above-mentioned publisher as the copyright owner.



© Text 2019 WWF. All rights reserved.

This programme is implemented with the support of the European Union. The contents of this publication are the sole responsibility of WWF and can in no way be taken to reflect the views of the European Union.



# PROTECTING OUR OCEAN: EUROPE'S CHALLENGES TO MEET THE 2020 DEADLINES



1.8%

Less than 2% of the EU marine area has protection with a management plan

2020

Deadline to meet targets to effectively protect at least 10% of marine and coastal waters



32,000+

European seas are rich in biodiversity and home to an incredible number of species

\$2.5 TRILLION

If our ocean were a country, its annual value would make it the 7th largest economy in the world, meriting a seat at the G7



**Why we are here**

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

[wwf.eu](http://wwf.eu)

