

Position paper

EU Targets for Protected Areas and Restoration at Sea

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arine and coastal environments contain diverse habitats supporting an abundance of marine life, and they provide a range of fundamental ecosystem services such as fisheries, coastal protection, recreation, tourism, carbon sequestration and storage. They are particularly vulnerable to biodiversity loss and to climate change, which further exacerbates the impact of other drivers of the biodiversity crisis.

Europe's seas are among the busiest in the world and are currently in a poor state; 65% of protected seabed habitats are in unfavorable conservation status, and 87% of fish stocks in the Western Mediterranean are currently overfished and at risk of being depleted¹. In EU waters, it is estimated that more than 200,000 seabirds are bycaught in fishing gear each year². Destructive fishing practices have contributed to the vanishing of most of the seafloor and continental shelf's rich biodiversity, as well as biodiversity in the water column. In response to global warming, distribution ranges of seagrass meadows and kelp forests are shifting. In addition, rapidly expanding human activities such as the development of offshore wind infrastructure are adding to existing pressures on the marine environment, including from fishing and shipping.

Marine Protected Areas (MPAs) are an important tool for protecting and conserving marine ecosystems and their associated services in the long term. However, MPAs require proper management to achieve their conservation objectives. The effective management of a network of protected areas needs to be complimented by the sustainable management of the entire marine area through the application of ecosystem-based marine spatial planning to direct activities away from highly sensitive/protected areas by identifying areas of highest and least environmental constraint³.

This will support the achievement of healthy seas and contribute to strengthening ocean resilience, especially in the face of climate change.

In addition, in light of the current degraded state of the marine environment, conservation and protection of remaining ecosystems is not sufficient to halt biodiversity loss. Action is needed to restore ecosystems to a state of 'high-quality' to improve the health and resilience of those ecosystems, to restore ecosystem services and to put biodiversity on course to recovery.

Existing EU legislation such as the Birds Directive, the Habitats Directive and the Marine Strategy Framework Directive have already started this process, but lack of implementation and poor enforcement have impeded effective conservation. The EU 2030 Biodiversity Strategy provides additional opportunity to contribute to halting and reversing biodiversity loss at sea by increasing to at least 30% the area of the EU's sea area that is legally protected, with at least 10% being strictly protected, and ensuring that the protection, management and enforcement of all protected areas is effective.

Furthermore, the future proposal for legally binding EU nature restoration targets can make an important contribution by enabling large-scale restoration of habitats and ecosystem functioning, connectivity and resilience at the seascape level. Restoration of marine habitats can make a significant contribution to climate mitigation and adaptation efforts and can provide significant social and economic benefits, such as the creation of sustainable jobs for local communities or recreation opportunities, and contribute to improved human health and wellbeing through the provision of vital ecosystem services.

^{1. &}lt;u>http://rua.ua.es/dspace/handle/10045/78050</u>

^{2.} Action Plan for reducing incidental catches of seabirds in fishing gears https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0665&from=EN_

 $^{3. \, \}underline{\text{https://www.birdlife.org/sites/default/files/how_to_apply_the_ecosystem-based_approach_in_marine_spatial_planning.pdf} \\$

1. Legally protect a minimum of 30% of the EU's sea area

o achieve the goals of the Biodiversity Strategy we need a clear and ambitious definition of protected areas at sea in the EU – one that expressly prohibits destructive activities. This will help establish a coherent and high standard across EU Member States.

Marine Protected Areas definition

Only protected areas that comply with the IUCN definition⁴, along with its accompanying principles and common objectives⁵, and that are effectively managed should count towards the 30% target.

Protected areas are fundamental tools to address the current biodiversity crisis and preventing biodiversity loss. In addition, MPAs can create jobs such as scientific researchers, field surveyors and monitors, and enforcement officers. Furthermore, because of the positive effects MPAs have on nature, they can be beneficial for tourism.

MPAs are generally highly sensitive areas that are very unlikely to be compatible with certain human activities, including activities with inherent impacts, such as bottom trawling and deep-sea mining. These activities are by their nature incompatible with protected areas and should not take place within the 30% protected areas or in surrounding areas if they will negatively impact the biodiversity of protected areas. The precautionary principle should always be applied whenever the scientific evidence regarding possible environmental impacts of an activity to an area is uncertain, and a legal framework should be established to allow for the restriction of human activities.

MPAs should be primarily managed to conserve nature and biodiversity with the key objective of any activity, if needed, to be for natural processes to take over. Protected areas should aim to maintain, or ideally increase, the degree of naturalness of the protected ecosystem. This includes leaving nature to restore itself through management of anthropogenic activities that have benefits for nature conservation, and not economic benefits, as their main objective. Natura 2000 sites, and nationally-designated and regionally-designated MPAs (such as those adopted under the Marine Strategy Framework Directive) managed in this respect would contribute to the 30% target.

Within the 30% protected areas, no activities, exploitation, or management practices that are harmful to the habitats or species for which the area has been designated should take place. Human activities can occur where these activities will not impact the species and habitats that those areas are protected for. In case of conflict, nature conservation should be the priority.

Activities permitted within MPAs must be compatible with the conservation objective of the site. Projects should be allowed only after undertaking an Appropriate Assessment (for Natura 2000 sites) or Environmental Impact Assessment (for other MPAs) that demonstrates that the project will not have a negative impact on the MPA. Where sites are protected for specific species, such as seabirds and other vulnerable taxa, mitigations measures should be taken to reduce negative impacts of those activities to an acceptable level and, if not possible, spatiotemporal closures should be used.

All protected areas under the 30% target should:

- Include effective management and demonstrate recovery through systematic biodiversity monitoring.
- Include effective legal provisions to prevent development and activities that are not consistent with the ecological needs and integrity of the site and its characteristic habitats and species, and appropriate mechanisms to ensure implementation, monitoring and enforcement.

Establishment of a representative and ecologically coherent and resilient network

The overarching objective for additional designations needed to reach the 30% target should be to create an ecologically coherent and representative network of protected areas that covers the full range of ecosystems and their characteristic biodiversity across the EU's seas.

Natura 2000 is the backbone of this network of protected areas and remaining gaps towards the completion of the Natura 2000 network at sea need to be filled as a priority.

Additional designations should be done according to a harmonised methodology, taking into account criteria such as:

- The completion of the Natura 2000 network to achieve an ecologically coherent network.
- The need to improve the representativity, connectivity, coherence⁶, and effectiveness of the protected area network (e.g., the need to ensure ecological corridors/ mosaics of habitats to enhance biodiversity outcomes, ecosystem functionality and resilience).
- The presence of red-listed and other priority species and important habitat types for which the Member State has an important responsibility (because an important part of the population/habitat distribution is found in that particular Member State), particularly covering globally threatened species that are not sufficiently covered by the Natura 2000 network.
- The need to create buffer zones around sensitive habitats.
- The need to maintain, enhance or restore ecosystem functionality and services (e.g., food webs, carbon sinks, coastal protection).
- Areas earmarked for nature restoration in line with upcoming EU legally binding targets.

^{4.} IUCN definition: "A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values". 5. https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf

^{6.} There is still a need to develop a sound scientific method for an assessment of the ecological coherence of MPA networks based on biological

Other effective area-based conservation measures (OECMs)

An OECM is defined as: "A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socioeconomic, and other locally relevant values." (CBD, 2018).

As they are beneficial for biodiversity, the 2030 Biodiversity Strategy should define OECMs as a potential additional protection tool.

In the marine environment, OECMs meeting the CBD definition could include active management of an area where biodiversity outcomes are secondary management objectives or areas that deliver in-situ conservation of biodiversity as a byproduct of management activities, even though biodiversity conservation is not a management objective.

An illustrative example of an OECM in the marine environment is Scapa Flow in the Orkney Islands, which protects shipwrecks and war graves.

In order to meet the OECM definition, an area should offer effective protection equivalent to a well-managed MPA and any activities occurring or affecting this area should have undergone the necessary assessments. Areas containing high impact installations such as wind farms and small, semi-natural areas within an intensively managed landscape with limited biodiversity conservation value, such as recreational beaches and marinas, should not be recognised as OECMs. The biodiversity benefits provided by these areas should be demonstrated through systematic biodiversity monitoring.

2. Strictly protect at least 10% of the EU's sea area

trict protection is the most efficient conservation measure at sea, so it is important that within the 30% protected areas target, one-third (i.e., 10% of the EU's sea area) should be strictly protected.

In the marine environment, strict protection should align with IUCN category "Ia Strict Nature Reserve and Ib Wilderness Area". This means marine areas with non-intervention management and restriction of anthropogenic activities to scientific research that contributes to improved understanding of the species, habitats, and ecological process at the site, and low impact tourism (sea watching tourism, low impact scuba diving, sailboats).

We define a strictly protected MPA as:" A natural area in which pressures from anthropogenic sources are reduced to levels where they have minimal (no) effects on marine biodiversity and ecosystems through the adoption of adequate regulations that effectively and permanently exclude all industrial, extractive, destructive, and depositional uses ensuring the protection and recovery of the area to natural conditions in the long-term."

The establishment of strict protection areas should focus primarily on the protection of large-scale natural processes, vulnerable biodiversity, and carbon rich ecosystems. The strict protection status of an MPA should be granted permanently.

Strict protection must exclude all extractive and habitat altering activities, such as fishing, offshore energy developments, oil and gas extraction, and seabed mining. Therefore, strictly protected areas correspond to the concept of no-take zones.

A "no take zone" is an area where extractive activities are prohibited and where the only form of extraction permitted is for scientific research (on the condition that this research cannot be conducted elsewhere), for invasive species control, and in some circumstances sustainable resource use by indigenous people to conserve their traditional, spiritual, and cultural values, provided this is done in accordance with cultural traditions.

In order to ensure a buffer area around strictly protected MPAs, zoning schemes with restricted and authorized activities should be created. In the buffer area, typically, non-extractive, non-destructive, and low-intensity recreational uses can be authorized (e.g., scuba diving, wildlife watching, boating) together with sometimes some low-impact extractive uses, such as selective artisanal fishing (under certain conditions).



Strictly protected/no take zones are the most **effective type of MPA.** They restore the biomass and structure of fish assemblages and restore ecosystems to a more complex and resilient state. Numerous studies have demonstrated the positive effects of areas closed to fishing including increased individual size as well as abundance and biomass of fish species7. For example, the biomass of whole fish assemblages in a no take zone is, on average, 670% greater than in adjacent unprotected areas, and 343% greater than in partially protected areas8. In addition, increased biomass of target fish species within no-take MPAs can result in juvenile and adult specimen "spill over" into surrounding fishing grounds9.

Furthermore, a study concluded that 68% of the MPAs generate increased incomes for small-scale artisanal fishers allowed to operate within the buffer zones surrounding no-take zones10. The benefits to people and coastal communities, and the degree of delivery of conservation outcomes generally increase with the level of protection and effective management, and by a commensurate reduction in the intensity of use and exploitation¹¹.

Currently, strictly protected/no take MPAs are a very small fraction of the total MPA estate. This proportion needs to be increased considerably to provide additional conservation benefits¹².

3. Improving the management effectiveness and actual protection of all existing and new protected areas

Il protected areas must have legally binding management plans, with clearly defined and measurable conservation objectives, based on sound science and the ecological needs of the area, explicit timelines, periodic monitoring, and specific management actions that are likely to be effective in restoring and maintaining the habitats and their characteristic species to good ecological status.

Member States have a responsibility to ensure the full implementation of management plans and to provide adequate funding in this regard. They should evaluate progress regularly, taking account of biodiversity monitoring results, and adjust plans accordingly to increase the effectiveness in achieving the conservation objectives and grant a long-term protection status for several generations to come.

Too many existing Natura 2000 sites still have no conservation measures adopted or are not covered by management plans, and where they do exist, they are often not legally binding, which severely limits their effectiveness. Even when binding conservation objectives and measures are adopted, in many cases they are either not effective, not implemented or enforced, or lack sufficient and secure funding. All Member States need to urgently make progress to close the gaps in these areas.

To improve management effectiveness, the following elements should be strengthened:

and adequate conservation measures to meet these objectives.

- Management Planning: Management plans with clearly defined and quantifiable conservation objectives, based on science,
- 7. Claudet et al, 2008; Guidetti et al, 2014; Lowe et al, 2003; Mateos-Molina et al, 2014.
- 8. Enric Sala, Sylvaine Giakoumi, No-take marine reserves are the most effective protected areas in the ocean, ICES Journal of Marine Science,
- Issue 3, May-June 2018, Pages 1166-1168.
- 9. Gell and Roberts, 2003; Halpern, Lester and Kellner, 2009; Roberts et al, 2001; Russ et al, 2004
- 10. Di Franco et al (2016)
- 11. Guidelines for applying the IUCN protected area management categories to marine protected areas, IUCN 12. Ibid.

- Stakeholder engagement: Working across sectors and at all levels through equitable and participatory processes, with the involvement of all interested parties aiming to increase ownership of the conservation goals.
- Monitoring of biodiversity outcomes in the field: Regular, systematic, standardised monitoring of habitats and species condition, abundance and diversity, to check the effectiveness of the measures
- Monitoring of threats and pressures impacting conservation objectives.
- Funding: Proper financial instruments and other incentives must be established for

- sea users to benefit from treating their sea in a way that helps delivering conservation outcomes.
- Adequate funding for competent agencies to allow for meeting the requirements which go along with the ambitious targets of the EU Biodiversity Strategy 2030.
- Capacity building and communication: Protected area staff need a growing range of technical skills, while managers need to provide professional leadership and direction and to secure and wisely use the resources needed.
- Appropriate mechanism to ensure enforcement and compliance.

4. Restoration at sea

estoration is the act or process of recovering the original state of an ecosystem. There is growing evidence of the benefits that marine restoration can bring, both for biodiversity and climate action, by ensuring the continuation and improved provision of marine ecosystem services and preserving and enhancing the sea's natural function as a climate regulator. Restoration can also deliver social and economic benefits through employment creation in various sectors.

Restoration can be achieved through active manipulation, or through passive natural recovery that allows the ecosystem to recover by limiting human pressures. Different forms of restoration will often need to complement one another to achieve the best results.

Active restoration of the seabed should be implemented where carbon rich ecosystems were historically abundant (i.e., seagrass beds, biogenic reefs). This would emphasise the carbon sequestration benefits that marine restoration of such ecosystems can deliver, especially compared to terrestrial habitat restoration. A concrete pathway for restoration is needed.

Passive restoration methods are generally lower risk, involve fewer logistical constraints, and cost less per unit area than active restoration, they are therefore more feasible for large-scale restoration efforts. However, the success of passive restoration depends on the arrival of wildlife to colonize the degraded area and on the possibility to prohibit destructive activities which will prevent the recovery of those ecosystems. Fish recovery grounds, nursery areas and carbon sinks should be a priority. Since the response of wildlife can be uncertain, passive restoration can sometimes be insufficient for recovering wildlife flora and fauna. There is a wealth of research showing that many degraded marine ecosystems will not recover from the stress of human activities unless there is some form of active manipulation. This can include restoring seabed habitats by transplanting plants or corals to degraded areas or creating artificial nests to increase the use of certain coastal areas or islands by seabirds.

The concept of no take zones or strictly protected areas as a form of passive restoration has been widely effective in Marine Protected Areas¹³. As such there is a clear interlinkage between the 10% strictly protected area target and any future restoration targets.

BirdLife Europe & Central Asia

^{13.} https://www.birdlife.org/wp-content/uploads/2021/10/turning_the_tide_report_june-2020_1.pdf



Marine restoration targets in the future EU restoration legislation

The future EU legislation on restoration must set a binding restoration target of 15% of the EU's sea areas and should include a target for CO2 removal by sinks, in addition to the 2030 emissions reduction target.

To be of added value, restoration must explicitly go beyond what is already required by the Habitats Directive and other EU legislation and cannot merely add a deadline to already existing requirements in protected areas. The future EU restoration legislation should add targeted and specific additional restoration requirements, both inside and outside of protected areas (including Natura 2000 areas), while the implementation and enforcement of existing legislation is improved simultaneously. This means that the restoration must:

- Be additional to the management or restoration already legally required by the Birds and Habitats Directives, and
- Not be undertaken in a way which undermines the species or habitats protection of the Directives or compromises the achievement of the environmental objectives in existing EU environmental law e.g. compensation measures under Art.6(4), the recovery of Natura 2000 habitats that have been degraded since designation, or restoration strictly needed for the achievement of a site's favorable status should not qualify.

In addition, restoration measures should not be used to offset ecosystem degradation or habitat loss taking place elsewhere.

The future EU legislation on restoration should put a specific focus on marine ecosystems that have a significant carbon storage and sequestration potential and areas where these carbon rich ecosystems (i.e., seagrass beds, biogenic reefs) were historically abundant. However, contributing to climate change mitigation and adaptation should be a secondary - not primary - objective.

Restoration measures should result in permanent change aiming to restore ecosystem services and highly diverse biological communities and resilient nature, with a very significant improvement from the starting condition, should ensure significant management change that puts nature on a path towards sustaining 'high quality' and should encourage restoration activities both inside and outside already protected areas.

The restoration legislation needs to include safeguards to ensure the positive benefits from active and passive restoration are maintained by integrating restored areas into the Natura 2000 network or by establishing a regime of strict protection.

Furthermore, restoration measures should also increase connectivity between habitats.

National restoration plans

The future EU legislation on restoration should require Member States to draft national restoration plans. The plans should include clear quantitative targets in terms of locations, areas, types of ecosystems to be restored, and financial tools to be used. It should explicitly include obligations for Member States to actively engage the public at the start of, and throughout, the **restoration plan process.** To be effective, the future EU restoration legislation must contain clear deadlines regarding the establishment of the restoration plans and the implementation of all restoration measures. Furthermore, restoration plans should be **assessed by the Commission** to ensure that the proposed measures contribute to the objectives of the restoration legislation.

Effective nature restoration at sea requires adequate and efficient monitoring programs.

These programs ensure that the availability of systematic information of marine ecosystems help determine their health and resilience.

Island restoration

Islands, due to their isolation, are home to many of the world's endemic species, and are important breeding grounds for seabirds and some marine mammals, such as sea lions and seals. Their ecosystems are also very vulnerable to human disturbances and particularly to introduced species. Island restoration efforts, especially targeting breeding grounds of seabirds, can have significant positive results for biodiversity and should be targeted by the future EU restoration legislation.

5. No-effort sharing between Member States

rotected area targets at sea should be reached both at national and marine region level. Member States with marine area in more than one sea basin should ensure that the targets of 30% and 10% are achieved in each of them.

The future EU legislation on restoration must set up a binding target of 15% restoration of sea areas, which should be expressed in quantitative and similar terms for each Member State, without effort sharing.













