

Aichi Target 11 - Reshaping the global agenda for MPAs

The following policy brief is based on a forthcoming publication in *Ocean Yearbook*:

Spalding, M. D., Meliane, I., Milam, A., Fitzgerald, C., and Hale, L. Z., *in press*, *Protecting Marine Spaces: global targets and changing approaches: Ocean Yearbook*, v. 27.

1. Overview of the evolution of MPA related commitments and targets

The Convention on Biological Diversity (CBD) played a primary role in fostering the notion of ecosystem-based management, with ecosystems as the primary framework for conservation action. It actively promoted the importance of protected areas as a tool to implement ecosystem-based management.

Up until 2002, most international commitments for ocean conservation focused on achieving an integrated approach to ocean management, highlighting MPAs as one measure amongst others that could help in the implementation of such approach. In 2002, The Johannesburg Plan of Implementation of the World Summit on Sustainable Development (WSSD) encouraged the application, by 2010, of the ecosystem approach and promoted "integrated, multidisciplinary and multisectoral coastal and ocean development". It also set one of the first targets for MPAs, calling for the establishment of MPA networks – as one of the diverse approaches to improve the management of oceans – by 2012.

In 2006, the CBD further reinforced the 2012 MPA target set by WSSD, by adopting a number of biome-specific sub-targets. Specifically, these focused on the agreement that "at least 10% of each of the world's ecological regions [should be] effectively conserved" (target 1.1), and that "areas of particular importance to biodiversity [should be] protected" (target 1.2). For the past few years, these targets have dominated the marine conservation agenda of countries, non-governmental organizations (NGOs) and donor agencies. They have spurred numerous dedicated initiatives and attracted resources to support their achievement. The focus for these efforts was on protecting areas of importance for biodiversity, with their objectives generally focusing on conservation and management of habitats, species or genetic diversity.

2. Where are we with regards to the 2012 target?

MPA coverage is the primary indicator used for assessing progress towards the 2012 target. In 2010 an estimated 1.31% of the ocean surface was covered by MPAs. The analysis of MPA coverage was done in collaboration with UNEP-WCMC, and the data was drawn from the World Database on Protected Areas.

We have updated and expanded upon these analyses in 2012 – using the same underlying data sources and methodologies as the previous studies, but with two additional years of data. Our findings show that there have been dramatic increases in MPA coverage world-wide.

Global coverage of MPAs (Figure 1)

- MPAs cover over 8.3 million km² or
- 2.3% of the global ocean area.
- MPAs now covering 7.9% of continental shelf and equivalent areas (waters less than 200m deep)
- Off-shelf waters MPA coverage is now 1.79%, mostly within jurisdictional waters.

Biogeographic coverage

- There is now MPA representation in all coastal realms and provinces.
- 73 ecoregions have over 10% MPA coverage, with 13 having over 75% coverage.

By contrast

- 63 coastal ecoregions have less than 1% MPA coverage including 13 with no MPAs.
- In offshore waters, no pelagic provinces have more than 5% MPA coverage, and 20 (of 37) have less than 1% coverage.

Political coverage

- 5.69% of jurisdictional space (coastal waters out to 200 nautical miles, approximately claimed or claimable Economic Exclusive Zones) fall within MPAs.
- 28 countries and territories (out of 193) have over 10% MPA coverage (an increase from just 12 countries listed in 2010. This list includes some major maritime nations and 10 member states of the European Union.
- 111 countries and territories (58% of the total) have less than 1% MPA coverage, including 11 that have no recorded MPAs.

High Seas MPAs

- 47 sites have been recorded in high seas or international jurisdictions, covering 382,000km², or 0.17% of the High Seas. These have all been declared in only two areas: the Southern Ocean under the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and the North Atlantic under the Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR Convention).

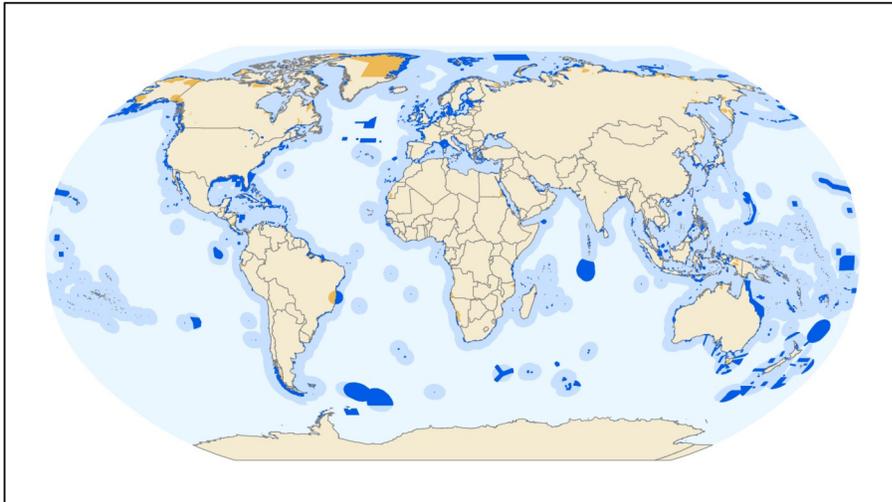


Figure 1: The global coverage of MPAs. Although many MPAs include land areas, only marine portions are marked.

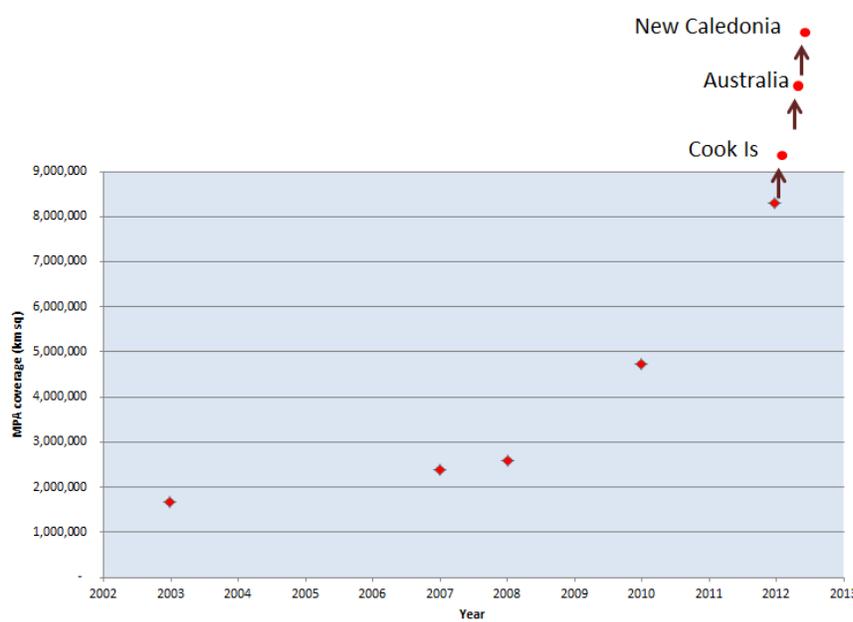


Figure 2: Summary of MPA coverage from recent WDPA assessments. A number of very large increases to the global coverage are expected within 12-24 months and the approximate influence such sites will have on global coverage is indicated here.

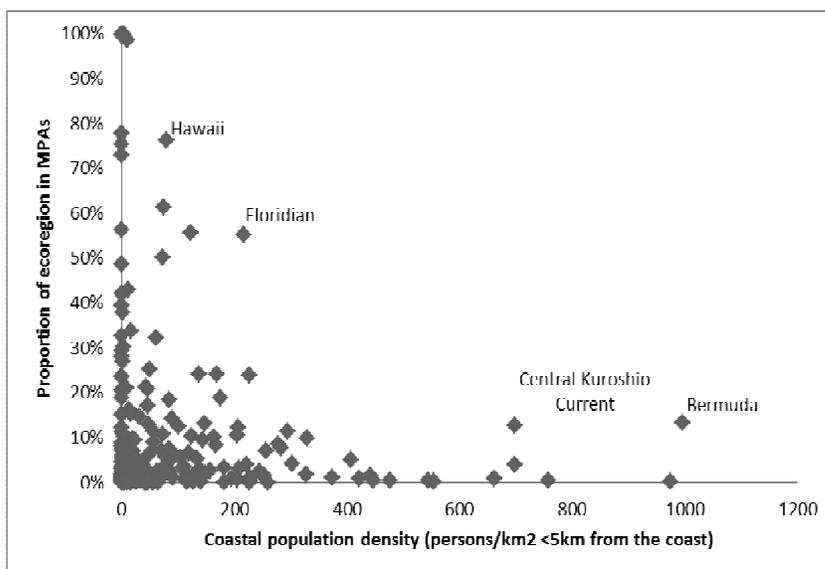


Figure 3: A comparison of MPA coverage in coastal waters with coastal population density. Data for both use the MEOW ecoregions as spatial units. Coastal population densities were generated from CIESIN and CIAT population maps for populations with 5km of the coast.

Overall Trends

- Statistics represent a quadrupling of MPA coverage over the last 10 years
- Growth is geographically widespread, with increases in every realm.
- A very small number of very large MPAs are driving the bulk of this change:
 - The 20 largest MPAs cover over 5 million km², which is over 60% of the entire global MPA coverage.
 - This pattern looks set to continue, with new sites proposed for Australia, New Caledonia and the Cook Islands alone likely to add 5.2 million km² to the global estate in the coming 12-24 months. (Figure 2)
- Most MPAs are located faraway from people

3. Aichi Target 11- new elements for considerations and future criteria for assessment

In Nagoya, after considerable debate the CBD parties agreed to maintain the 10% numerical target for MPA coverage. While some felt that this approach lacked ambition, there was also some opposition, feeling that such a target was too challenging. It is important to note, however, although the numerical target was unchanged, there was a new emphasis in the wording, focusing attention on the role and importance of people in developing conservation agendas – nature provides critical services to people and this should be one of the key underlying drivers in pursuing conservation.

Aichi Target 11 states that “by 2020... 10 per cent 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 landscapes and seascapes**” (emphasis added)

There is a need to recognize that Aichi Target 11 was not simply a re-affirmation of earlier targets. Indeed, the target calls for a great deal more than simple MPA coverage. The revised language on spatial protection measures presented in Aichi Target 11 includes 4 novel concepts that are important to highlight:

- The addition of the areas of particular importance for ecosystem services.
- The notion of equity
- The notion of “other effective area-based conservation measures”
- The notion of “integration into the wider landscapes and seascapes”

The Aichi Target 11 points to a need for a much broader perspective, both in terms of what is included in terms of spatial conservation measures, and in terms of the metrics against which such coverage is assessed. Of course measures of spatial extent alone cannot be directly equated to progress in attaining Aichi Target 11.

a- Areas of importance for ecosystem services

Most MPAs have been and are being selected based on criteria of biological and ecological significance. The CBD has even initiated a process for addressing the gap in biogeographic coverage in open ocean and deep sea – the EBSA process.

A similar process is needed to identify priorities and gaps in the global MPA coverage based on their role in enhancing ecosystem services. The greatest efforts towards MPA establishment are currently located away from human populations (Figure 3). Progress towards Aichi Target 11 will require a greater focus on high value local ecosystem service benefits which will require increasing focus on MPAs and equivalent areas closer to human populations.

a- Effectiveness and equity in management

Many sites set aside for conservation purposes are less effective than intended, due to problems either in site design or in subsequent management, or both. The reference to equitable management underlines the need for right recognition and ensuring stakeholder acceptance of MPAs, engaging them, as appropriate in the designation and management of sites and any potential benefits that might accrue. Although there have been a number of efforts to look at management effectiveness, and addressing equity there is, as yet, no means to assess this globally. The global community would benefit from an agreed upon benchmark for assessing effectiveness and equity in MPA management.

b- Integration into the wider landscapes and seascapes

It is fundamental to the success of any MPAs that they be considered as part of a wider management strategy, including both marine and terrestrial management measures. Even the best managed MPAs are still vulnerable to stressors from outside their areas, (local effects of pollution, overfishing, impacts from warming and acidification). The remaining 90% of the Oceans will also need to be effectively managed for biodiversity, but also for the sustained supply of ecosystem services on which so many people depend. At the present time there are no global datasets on wider marine spatial planning, but an understanding of such measures would be an invaluable contribution to our understanding of progress in marine conservation.

4. What should count as an MPA or “other effective area-based conservation measure”?

The definition of a protected area used by IUCN and WDPA (and therefore the primary basis for assessing progress against the target) is relatively broad, though it is one of the stricter definitions with regards to linkages with conservation. Associated with the definition is a range of interpretation by the data suppliers to WDPA of which sites meet this definition. In reality there have been considerable challenges in the application of the definition and management categories of protected areas, particularly when it comes to fisheries management areas, and there are inconsistencies in the database which are the result of national level variation in decisions, interpretation, and even perhaps the diligence of data-providers.

Several fisheries management areas are included in the database, while others that provide equivalent or even higher protection and conservation level are not. Among the latter is the area of the Southern Ocean falling under the Convention for the Conservation of Antarctic Marine Living resources (CCAMLR).

This area is highly managed and is considered by many (including some in IUCN) as an MPA that fully meets the IUCN definition, but it is not included in WDPA. The addition of CCAMLR as an MPA would alone add 35 million km² (10% of the entire ocean surface) to the global MPA coverage.

Given these challenges, there would be considerable value in improving the common understanding of the definition of an MPA. There is likely also a need to think further about whether this definition is sufficiently useful as a metric for conservation progress.

Aichi target 11 opens a new potential for enormous variability of interpretation of “other effective area-based conservation measures”. This may allow for the inclusion of a number of spatial management measures which may not meet the IUCN definition (such as narrowly targeted fisheries regulations, seasonal or short-term protection measures), including many large fishery management areas, and potentially several RFMOs or entire EEZs. For example the Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest, which restricts and controls tuna fishing operations, including activities that might threaten other species such as whale sharks, in an area that covers over one quarter of the world’s tuna supply; and the Indian and Southern Ocean Whale Sanctuaries established under the International Whaling Convention, which cover tens of millions of square kilometers. The inclusion of these areas would rapidly change global summary statistics, reaching far beyond 10% of the Ocean space.

The addition by Aichi target 11 of “other effective area-based conservation measures” need to be better defined if they are to be used to assess progress and if the Aichi Target 11 is to be properly applied.

We would recommend that such a definition would recognize the diversity of management approaches, but would also require that stricter levels of protection should be seen as an integral part of spatial conservation efforts, and even that countries should be encouraged to set sub-targets for the inclusion of such areas.

5. Future needs and directions

Recent trends in MPA coverage suggest that global coverage could reach 10% even before 2020. Using a broader definition of MPAs and “equivalent areas” it might even be claimed that the 10% target has already been reached. Such apparent success, however, would mask some significant failings, and it is critically important to realize that the Aichi Target 11 calls for a great deal more than MPA coverage.

Aichi Target 11 and other Aichi targets relevant in the marine environment, point clearly for the need to place MPAs in a wider framework of conservation and management approaches. At the same time, the role of MPAs themselves needs to be revisited. Aichi Target 11 places an important focus on the potential for using MPAs to support people.

We believe greater attention needs to be given to the development of conservation measures close to centers of population where reliance on marine ecosystem services is high. This may run counter to some existing prioritization efforts that have directed considerable attention towards the designation of large pristine sites.

Of course the challenges and costs of marine conservation are greater in locations where pressures are high, but the potential benefits are considerable.

Success in this could lead to much wider uptake of MPAs within the framework of holistic marine spatial planning. Ultimately however, for Aichi Target to be successful there is an urgent need to improve definitions of what protection means, and how to measure progress towards effective conservation. The benefits both to people and nature could be considerable.

Achieving the revised Aichi Target 11 requires setting in motion a process to guide CBD Parties to:

- identify areas that best safeguard ecosystem services and better link to delivering social, cultural and economic benefits to communities.
- develop and apply benchmarks for “effectively and equitably managed” MPAs which need to be taken into account in the design, implementation and reporting on the achievement of Target 11.
- define what constitutes “effective area-based conservation measures” in the marine environment, in particular for fisheries management areas
- consider guidance on area based targets to ensure that more comprehensive levels of protection are incorporated into targets
- integrate MPAs into wider marine spatial planning that reconciles conservation and development objectives.
- clearly define and recommend approaches for integrated planning, and encourage the documenting of progress towards such approaches

Contact:

Imèn Meliane
Director International Marine Policy
The Nature Conservancy
imeliane@tnc.org

Mark Spalding
Senior Marine Scientist
The Nature Conservancy
mspalding@tnc.org

Amy Milan
Protected Areas Programme,
United Nations Environment Programme World Conservation
Monitoring Centre (UNEP-WCMC)
Amy.Milam@unep-wcmc.org