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High Seas Environmental Impact Assessments

The importance of evaluation in areas beyond national jurisdiction

Overview

Worldwide, scientists continue to make important discoveries about the high seas and marine depths in areas beyond national jurisdiction (ABNJ), distant places that support life throughout the global ocean and are home to some of its most fascinating and valuable species. But with new and emerging activities threatening the health of these ecosystems, safeguarding their biodiversity is increasingly important.

To ensure that they do not upset the fragile and interconnected marine environment, high seas activities and any associated impacts must be fully understood and carefully managed, and an environmental impact assessment (EIA) is the most important tool in this effort. EIAs allow policymakers to identify the potential effects of proposed projects, explore alternative solutions and determine ways to prevent, mitigate and control environmental harm.

Through United Nations General Assembly Resolution 69/292, States committed to developing an "international legally binding instrument … on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction."[1] Its negotiation will address a package of issues, including EIAs. All States have not only an interest but also an obligation to ensure that this new instrument incorporates a robust EIA framework.

What are environmental impact assessments?

Defined as a "procedure for evaluating the likely impact of a proposed activity on the environment,"[2] EIAs bring together scientists, policymakers and other stakeholders, including civil society, to identify and potentially prevent activities that may cause environmental harm. EIAs are a requirement of international law: "Countries must undertake an assessment where there is a risk that [a] proposed … activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource" like the high seas.[3] This requirement is reinforced in a number of treaties and obligations, including the United Nations Convention on the Law of the Sea (UNCLOS), which obliges States to assess activities under their jurisdiction that may cause "significant and harmful changes to the marine environment and [to] communicate reports of the results of such assessments."[4]

Guidelines for conducting effective EIAs in areas beyond national jurisdiction

Despite States' obligation to conduct impact assessments under UNCLOS and international law, no global coordination mechanism requires an EIA for activities in areas beyond national jurisdiction, and no guidance standards, principles by which to evaluate EIAs or opportunities to promote public awareness and engagement over potential threats exist. As a consequence, only fragmented measures to prevent environmental damage in ABNJ remain, and there is little to no accountability for such damage when it occurs.

To improve ocean governance, a new agreement on high seas biodiversity should:

- **Set minimum requirements for an EIA:** Any framework must be flexible enough to cover a wide range of activities while also identifying the core elements necessary to implement a successful EIA, as demonstrated through decades of national and international practice. These could include the components outlined by the United Nations Environment Programme in its Goals and Principles of Environmental Impact Assessment:[5]
  - A description of the proposed activity.
  - A description of the potentially affected environment, including specific information about possible impacts of the proposed activity.
  - An assessment of the probable or potential environmental impacts of the proposed activity as well as possible alternatives to it, including the direct, indirect, cumulative, short-term and long-term effects.
  - An identification, description and assessment of measures available to mitigate any potential adverse impacts identified by the EIA.
- **Designate activities that require an EIA:** States requiring EIAs for activities under their jurisdiction or control must first screen for projects that could adversely affect the marine environment. Because some activities are inherently dangerous or harmful, States can facilitate coherence and reciprocity among themselves and across activities in EIA implementation by requiring EIAs before certain categories of projects can be carried out on the high seas. The designations could be reflected in an appendix to preserve the flexibility of the overarching instrument, as modeled by the Espoo Convention on Environmental Impact Assessment in a Transboundary Context.[6]
- **Require follow-up to ensure environmental protection:** International law requires States to do more than simply prepare and circulate EIAs. They must also provide for ongoing monitoring and enforcement to ensure that activities comply with the terms and conditions of approval; to evaluate impacts and the effectiveness of mitigation measures; and, where required, to strengthen future EIAs and mitigation measures. Such follow-up would be facilitated by the reporting obligations and implementation review process described above.

Key processes for successfully evaluating EIAs in areas beyond national jurisdiction

An EIA regime will be effective only to the extent that it is supported by robust provisions to ensure compliance by all States and that these guidelines provide for:

- **Transparency and public participation:** Governments may have limited resources to carry out and evaluate EIAs, particularly in developing States. One of the best ways to ensure that an EIA addresses all of the risks posed by a potential project is to broaden the audience for the assessment to include the public. Such disclosure will necessarily extend to members of academia and civil society who can, if given sufficient opportunity, provide expert feedback from diverse perspectives that can be incorporated into any decisions made about the proposed activity. In particular, they can ensure that all possible impacts and alternative activities that could be reasonable project substitutes are considered.
- **Communication of EIA results:** Although many States make high seas EIA results publicly available, only a State-by-State analysis can provide a comprehensive picture of all activities in ABNJ and their cumulative environmental impacts. The parties to a new instrument could enhance transparency and improve governance by establishing a centralized clearinghouse or other mechanism for communicating the results of their EIAs.
- **Periodic review of implementation:** Parties should commit to regular evaluations of their EIAs to confirm that they are using a satisfactory process and to ensure that all relevant environmental obligations are fully integrated into assessment outcomes.
- **Dispute resolution:** Responsibility for implementing high seas EIAs is likely to fall upon many States, making recourse between the instrument's parties in cases of noncompliance all the more important. An effective dispute resolution mechanism that is streamlined enough to accommodate challenges to planned activities before they begin will be instrumental in preventing irreversible damage to the marine environment. States should be able to avail themselves of all of the dispute resolution provisions reflected in Part XV of UNCLOS, including binding arbitration if necessary, in cases where another party fails to conduct an appropriate EIA or allows an activity that is inconsistent with its duties to protect the marine environment. Provisional measures, as provided under Article 290 of UNCLOS, should be made available as needed to respond to an imminent threat of serious harm to the marine environment.

Conclusion

Evaluating potentially harmful activities on the high seas is necessary to protect biodiversity, and EIA is a powerful tool for identifying and preventing negative environmental impacts. States should support all of the elements and characteristics above to ensure that an effective framework for carrying out EIAs becomes a lasting legacy of a new instrument.

Endnotes

1 U.N. General Assembly, Resolution 69/292, "Development of an International Legally Binding Instrument Under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction," June 19, 2015, http://www.un.org/en/ga/69/resolutions.shtml.

2 Convention on Environmental Impact Assessment in a Transboundary Context, Espoo, Finland, Feb. 25, 1991, 30 ILM 802, entered into force Jan. 14, 1998.

3 Argentina v. Uruguay (International Court of Justice 2010).

4 U.N. Convention on the Law of the Sea, Dec. 10, 1982, 21 ILM 1261, Art. 206, entered into force Nov. 16, 1984.

5 U.N. General Assembly, Resolution 42/184, "International Co-operation in the Field of the Environment," Dec. 11, 1987, http://www.un.org/documents/ga/res/42/a42r184.htm.

6 Convention on Environmental Impact Assessment.

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Marine Protected Areas Beyond National Jurisdiction

Overview

Although we still know little about the intricate ocean ecosystems far offshore, we do know this: Once thought to be barren marine deserts, the high seas and deep ocean beneath them are teeming with life. Underwater seamounts are home to creatures found nowhere else on Earth, hydrothermal vents cradle some of the oldest organisms on the planet, and critical migration routes help sustain species, which in turn support ecosystems and livelihoods around the world. All of this lies beyond the jurisdiction of any country and beyond the ability of any government to protect this area alone. Marine protected areas (MPAs)—and, in particular, reserves—are among the best tools that can be used to safeguard these treasures.

What are MPAs and why are they important?

The International Union for Conservation of Nature defines any protected area as "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."[1] Put simply, an MPA is an area designated to be under special management to help "conserve the biological diversity and productivity (including ecological life support systems) of the oceans."[2] In an MPA, some human activity may be allowed; in a reserve, such activity is strictly limited, which helps to maximize conservation benefits.[3]


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> The benefits of MPAs are amplified if they are large, well-managed, isolated and long-lasting.

Well-designed and well-managed MPAs, especially fully protected reserves, have been shown to safeguard biodiversity,[4] provide ecological benefits to neighboring ecosystems,[5] and protect predators to help maintain ecosystem stability.[6] Such areas can also serve as important climate reference points for scientists, and although establishing an MPA or reserve won't stop ocean acidification or warming, it can help build ecosystem resilience by eliminating other stresses. These benefits are amplified when MPAs are large, well-managed, isolated and long-lasting.[7] MPAs are thus a critical tool for policymakers seeking to pass a healthy marine environment on to future generations.

Governments around the world have recognized the need for and the value of strong marine conservation, including the benefits that MPAs and reserves provide. In 2015, the 193 member States of the United Nations confirmed their commitment to conserve at least 10 percent of coastal and marine areas by 2020, incorporating a target established under the Convention on Biological Diversity into the U.N.'s 2030 Agenda for Sustainable Development.

While that's a good start, scientists recommend a more ambitious approach to marine conservation. In November 2014, participants at the World Parks Congress recommended that governments urgently increase the area of ocean managed through a network of well-connected MPAs, with the aim of protecting at least 30 percent of each habitat in the ocean and 30 percent of the world's oceans overall.[8]

Critical features of a high seas MPA regime

The protection of such large areas of the ocean cannot be achieved without incorporating parts of the high seas into that well-connected MPA network. In spite of the urgent need to protect more of the ocean, States have no mechanisms to create comprehensive, globally recognized MPAs and reserves on the high seas.

Instead, there is a patchwork of bodies, including regional fisheries management organizations, that set policies for specific areas of the ocean or activities (such as fishing for tuna). But those bodies lack the legal mandate necessary to establish MPAs or set and enforce conservation policies that will protect biodiversity throughout an ecosystem.

A new international agreement on high seas biodiversity can address this gap by providing the following:

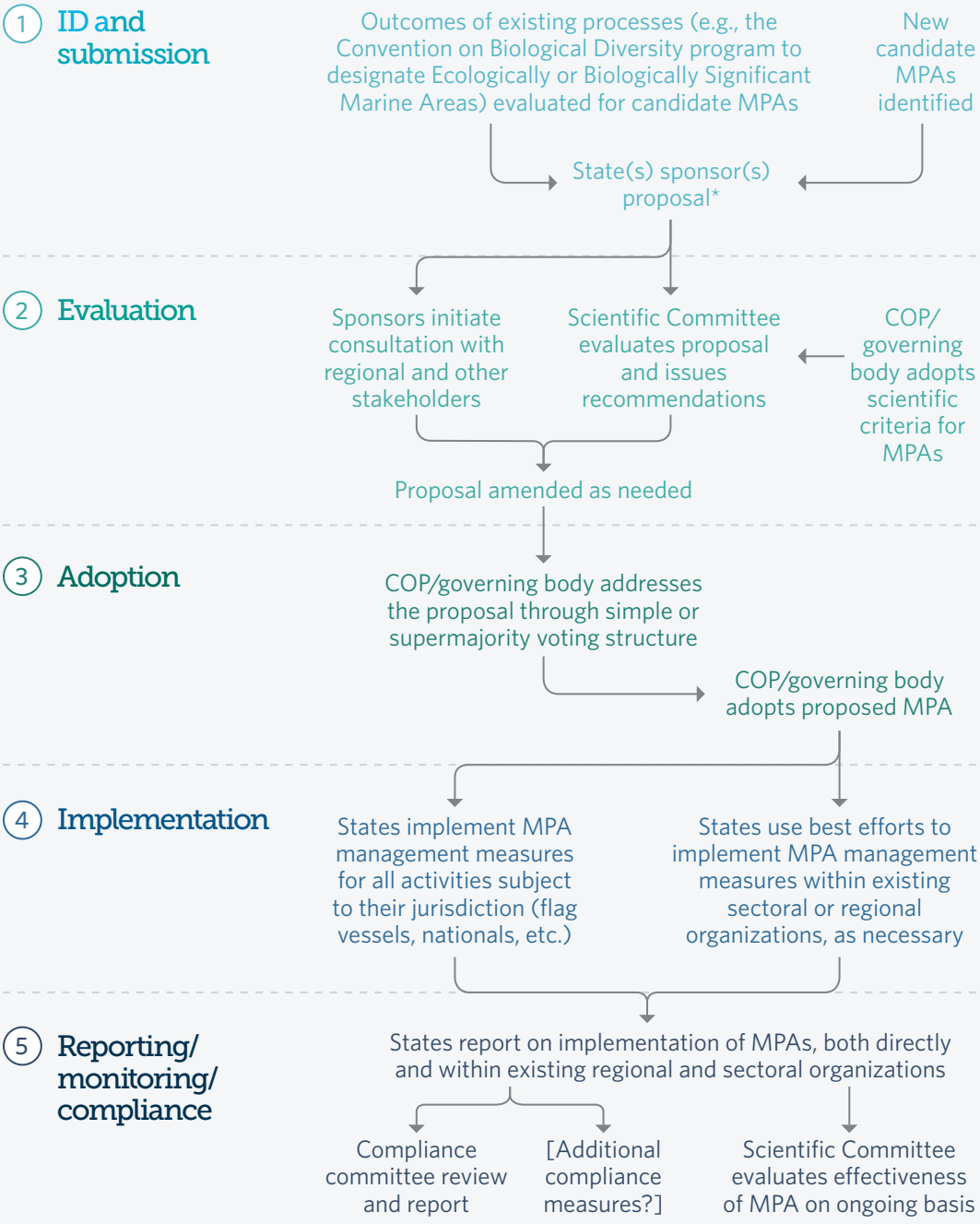
- **A mechanism to identify and designate potential high seas MPAs:** A framework through which States can propose and agree on the designation of high seas MPAs would provide a path toward establishing such MPAs.
- **Science-based criteria for evaluating potential MPAs:** The establishment of high seas MPAs should be based on environmental considerations, strongly guided by scientific standards. Models for such criteria include those adopted through the Convention on Biological Diversity's process to identify Ecologically or Biologically Significant Marine Areas. A committee of scientific experts should use such criteria to help evaluate proposals for new protected areas.

Image courtesy of NOAA Okeanos Explorer Program, Our Deepwater Backyard: Exploring Atlantic Canyons and Seamounts.

> Unlike "paper parks," MPAs with concrete goals and management and enforcement plans are more likely to protect biodiversity.

- **A framework for adopting meaningful conservation objectives and enforceable management plans:** Leaving MPA implementation to existing sectoral bodies would be ineffective because most of those bodies lack a mandate to protect biodiversity generally. High seas MPAs created with concrete objectives, management plans and enforcement protocols are more likely to become real tools for biodiversity protection than are so-called "paper parks" established without such parameters.
- **A means of consulting and collaborating with existing sectoral and regional organizations:** Under the new instrument, parties should be able to formally consult with existing sectoral bodies and similar organizations. These consultations would help to avoid conflict between management measures adopted under the new instrument and pre-existing obligations to those organizations. States can also use their best efforts to encourage organizations to adopt complementary measures recognizing high seas MPAs but should not allow these efforts to delay establishment or implementation of the MPAs. For example, the International Maritime Organization could recognize a new MPA as a Particularly Sensitive Sea Area, thus alerting all IMO members that the area is protected.

Sample Process for Creating an MPA in ABNJ



* Proposal may include management plan or a management plan may be developed later in consultation with Scientific Committee

Key characteristics of a successful MPA framework

Based on lessons learned from coastal zones, to ensure a successful system of MPAs on the high seas, a framework should at least provide for:

- **Regional stakeholder consultation, where appropriate:** While the high seas do not belong to any one country, organization or business, some parts are of particular concern to certain regional stakeholders. States considering creation of an MPA should consult with those stakeholders. Such coordination can help secure the support of the groups most likely to be affected by creation of the protected area. By the same token, a proposal submitted with the support of a uniquely concerned region should be prioritized by all other parties to the instrument.
- **Ongoing monitoring and enforcement:** The first line of monitoring and enforcement of high seas MPAs should come from States; they have the authority to take action if, for example, one of their flagged vessels violates the provisions of a protected area. Emerging technologies, such as satellite monitoring of activity on the oceans, may help in this effort. Parties that have adopted the instrument could, therefore, report regularly to each other on their implementation efforts. Under other international agreements, committees have been appointed to evaluate compliance reporting in similar contexts and might be useful under a new instrument as well.

Conclusion

High seas MPAs and reserves could be highly effective tools for protecting marine biodiversity and helping governments meet their commitments to safeguard more of our oceans. In working toward a treaty to protect high seas biodiversity, the U.N. should include the elements described above, which will help make effective, enforceable high seas MPAs and reserves a reality.

Endnotes

1 Jon Day et al., "Guidelines for Applying the IUCN Protected Area Management Categories to Marine Protected Areas," *Best Practice Protected Area Guidelines Series No. 19* (2012), https://cmsdata.iucn.org/downloads/iucn_categoriesmpa_eng.pdf.

2 Ibid.

3 Ibid.

4 Sarah E. Lester et al., "Biological Effects Within No-Take Marine Reserves: A Global Synthesis," *Marine Ecology Progress Series* 384 (2009): 33–46, doi:10.3354/meps08029.

5 Rene A. Abesamis and Garry R. Russ, "Density-Dependent Spillover From a Marine Reserve: Long-Term Evidence," *Ecological Applications* 15, no. 5 (2005): 1798–1812, http://onlinelibrary.wiley.com/doi/10.1890/05-0174/abstract; Hugo B. Harrison et al., "Larval Export From Marine Reserves and the Recruitment Benefit for Fish and Fisheries," *Current Biology* 22, no. 11 (2012): R444–46, doi:10.1016/j.cub.2012.04.008.

6 Garry R. Russ and Angel C. Alcala, "Marine Reserves: Long-Term Protection Is Required for Full Recovery of Predatory Fish Populations," *Oecologia* 138, no. 4 (2004): 622–27, doi:10.1007/s00442-003-1456-4; Gregory L. Britten et al., "Predator Decline Leads to Decreased Stability in a Coastal Fish Community," *Ecology Letters* 17, no. 12 (2014): 1518–25, doi:10.1111/ele.12354; Jordi Bascompte, Carlos Melian and Enric Sala, "Interaction Strength Combinations and the Overfishing of a Marine Food Web," *Proceedings of the National Academy of Sciences* 102, no. 15 (2005): 5443–47, doi:10.1073/pnas.0501562102.

7 Graham J. Edgar et al., "Global Conservation Outcomes Depend on Marine Protected Areas With Five Key Features," *Nature* 506, no. 7487 (2014): 216–20, doi:10.1038/nature13022.

8 Recommendations of the Marine Cross-Cutting Theme at the 6th IUCN World Parks Congress in Sydney, Australia (Nov. 12–19, 2014), http://worldparkscongress.org/downloads/approaches/ThemeM.pdf.

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