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If you have any questions or suggestions for MPA News, or if you just want to say hello, please contact me any time at mpanews@u.washington.edu. Best wishes for your work!



John Davis, Editor

What are the Sustainable Development Goals, and how will they impact MPA practitioners and decision-makers?

On 1 January 2016, member states of the United Nations adopted a series of 17 [Sustainable Development Goals](#), or SDGs. These goals are expected to guide national development plans in the coming years. The SDGs are ambitious: they include such goals as ending poverty, ending hunger, ensuring healthy lives, and achieving sustainable consumption. And under each SDG are multiple specific targets. SDG 1 for example — to end poverty — includes targets to reduce the number of people living in poverty by at least half by 2030, and to eradicate extreme poverty all together.

Nestled amid the SDGs is one goal that pertains solely to the oceans: [SDG 14](#). Named the “Life Below Water” goal, it calls on countries to “conserve and sustainably use the oceans, seas and marine resources.” Among the SDG 14 targets is one that refers to MPAs. That target, called SDG 14.5, states:

“By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.”

The SDGs may not be on most MPA managers' radar screens yet. They were adopted only a year ago. But [a global conference to develop a Call for Action for SDG 14](#) is

now being organized by the UN, spearheaded by a group of ocean-friendly member states (to be held this June in New York City). And the 2020 deadline for SDG 14.5, the MPA target, is just three years away.

Considering the level of attention and funding that the UN and other donors are likely to direct toward SDGs in coming years, it may be wise for MPA practitioners and decision-makers to consider how to harness the goals for their own sites and purposes. In this issue, MPA News provides guidance from experts who are already working on 14.5 and other SDG targets. We asked them why MPA practitioners should care about the SDGs. Here are their answers.

“MPA planners and managers may become instrumental in achieving national and local sustainable development strategies”

Editor's note: Ole Vestergaard is Programme Officer in UN Environment's Marine and Coastal Ecosystems Branch. He is leading a new global capacity-

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MPA News is published bimonthly by Marine Affairs Research and Education (MARE), a 501(c)(3) not-for-profit corporation, in association with the School of Marine & Environmental Affairs, University of Washington.

Financial support for MPA News comes from the David and Lucile Packard Foundation and the Gordon and Betty Moore Foundation.

All content has been written by the MPA News editorial staff unless otherwise attributed.

The views expressed herein are those of the author(s) and should not be interpreted as representing the opinions or policies of the Packard Foundation, Moore Foundation, or other funders of MPA News.

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building effort to enable achievement of SDG 14.5, particularly in Small Island Developing States.

MPA News: For some MPA practitioners, the SDGs might seem somewhat abstract. Why should they pay attention to the SDGs?

Ole Vestergaard: Healthy and productive oceans and coasts support large human populations with food, income, and an array of other social, economic, and cultural services. Nearly 3 billion people rely on fish as a major source of protein essential to their diet.

MPAs are one of the key management tools we have to ensure healthy oceans. They can be particularly effective when planned and developed within wider integrated marine management systems. Many of the core problems that ocean planners and managers face today are caused by a complex set of issues and drivers, involving environmental, social, and economic aspects at many levels. For example, intensive ocean-based resource extraction and fisheries are driven by increasing population growth, as are land-based impacts like pollution from intensive agriculture or urban development. In turn, these well-known impacts are amplified by climate change effects.

In essence, the SDGs aim to tackle these problems in a new way by linking social, environmental, and economic issues in more comprehensive management solutions rather than treating each issue in isolation. MPAs, when cleverly designed and well-implemented, can potentially become vehicles toward sustainable development, as they can generate ecological benefits when protecting species, habitats, and ecosystem functions; social benefits when engaging stakeholders in MPA planning and benefit-sharing; and economic benefits when ensuring long-term natural resources or tourism incomes, among other blue economy assets.

The 2030 Agenda for Sustainable Development has a specific target focused on MPAs (SDG 14.5). But perhaps more importantly, MPAs themselves can directly contribute across other SDGs, such as [SDG 2](#) on food security, [SDG 8](#) on sustainable economic growth, [SDG 12](#) on resource efficiency, and [SDG 13](#) on climate change resilience. Thereby, MPAs become a solution to a much wider set of issues, and MPA planners and managers may become instrumental in achieving national and local sustainable development strategies. Ideally, MPAs should become part of national development strategies and implementation frameworks.

MPA News: SDG 14.5 (conserving 10% of coastal and marine areas) seems to be similar to Aichi Target 11 under the UN Convention on Biological Diversity (CBD), which calls for 10% of coastal and marine areas to be conserved through protected areas and other effective measures by 2020. In terms of their impact on the global MPA field, are there distinctions between the two?

Vestergaard: While Aichi Target 11 and SDG 14.5 share similar principal objectives, there are differences. Aichi Target 11 specifically requires that 10% of marine and coastal

areas be conserved through 'protected areas', while SDG 14.5 more broadly requests 'conserving 10% of coastal and marine areas'. In essence, SDG 14.5 does not necessarily require MPA development; the 10% target could be met through a broader range of conservation measures, including management for sustainable use. (True, the SDG 14.5 indicator talks about 10% MPAs, and that is perhaps confusing.) Aichi Target 11, on the other hand, requires by 2020 "at least 10% 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."

These specific features of Aichi Target 11 are highly desirable for wider sustainable development outcomes and one would hope that countries would fully address these features in MPA designations. In practical terms, they do pose some challenges. For example, which areas have most importance for ecosystem services (which services? and for whom?); what is meant by 'effectively managed' (how is this measured?); how are MPAs benefits and costs shared among stakeholders?; and what are counted as 'other area-based conservation measures'?

Without clarity and practical utility of these concepts, the SDG 14.5 indicator and Aichi Target 11 could trigger a simplistic race to designate more and larger so-called 'protected' areas to meet the global targets, without actually implementing and enforcing effective management measures. Such marine 'paper parks' offer little benefit; rather, they reduce the credibility of the MPA field overall and the role of MPAs in sustainable development. Therefore, countries and MPA decision-makers must prioritize adequate resources and actions to deliver *effective* and *equitable* quality MPAs – they being large or small, coastal or offshore. In essence, optimize MPAs as a sustainable development solution.

What do you hope will come out of the SDG 14 Ocean Conference in June? Should MPA planners and managers consider attending?

Vestergaard: Hopefully the UN Ocean Conference will stimulate further momentum for tangible actions on MPAs and all ocean-related targets. Gaps and solutions are already being explored in the preparatory process for the conference, along with new types of partnerships that can mobilize varied actors, including governments, NGOs, private sector groups, etc. Hopefully we will see new cross-cutting actions and more coordinated, coherent, and integrated approaches enabling area-based ocean and coastal management for resilience and sustainable development.

Key to a successful conference outcome will be identification of practical and workable solutions. Therefore it would be valuable if MPA planners and managers from many different countries and regions could attend the conference to share their stories, practical experiences, and lessons on MPAs.

One idea being explored in the preparatory process for the conference is a global MPA capacity-building partnership or platform where countries, organizations, NGOs, private sector institutions, MPA experts (ecologists, sociologists, economists), and development planners come together to share new knowledge, effective tools, and practical lessons. For example, this could include ways to stimulate financing of initial MPA start-up costs, offset by longer-term benefits. Ideally it would be a broad interdisciplinary partnership positioning MPAs in wider integrated marine and coastal management and development planning to address SDG 14 and other ocean-related SDGs. UN Environment has already promoted such ideas and we certainly plan to participate very actively in the conference to pursue cross-cutting approaches, working through regional and national cross-sectoral cooperation for the benefit of countries and people.

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“Advice to MPA practitioners: Work to the fullest extent to deliver a fit-for-purpose implementation plan for SDG 14”

Editor’s note: Dan Laffoley is Marine Vice-Chair for the World Commission on Protected Areas (WCPA) and Principal Advisor on Marine Science and Conservation for the IUCN Global Marine and Polar Programme.

MPA News: In what ways are Aichi Target 11 and SDG 14.5 different, and how are these differences relevant to MPAs?

Dan Laffoley: It is welcome that there is indeed now an explicit section with targets for the ocean in the new SDGs. However, it is unfortunate for conservation, including MPAs, that SDG 14’s reference to the CBD’s Aichi Target 11 is so abbreviated, and indeed omits the key term ‘MPAs’. What becomes critical to the debate at the upcoming June conference is the need to see this SDG goal in the wider context of work on, and the specific role of, MPAs and ocean change and impacts. In this sense the goal should perhaps best be taken as a bookmark echoing the pressing area-based conservation issues we now face in relation to climate change, increasing pollution, and the need for much improved and comprehensive sustainable management of marine resources.

What do you hope will come out of the SDG 14 Ocean Conference in June?

Laffoley: I believe that in taking forward the SDG marine conservation target, we should not so much focus on the 10% reference itself, but rather on how to make a proper and effective synergy among all the SDG 14 targets. This for me is the greatest challenge of the Ocean Conference in June: how to design a comprehensive action plan?

The challenge raises the opportunity that lies with the major output expected from the June conference — the Call for Action — to support the implementation of Goal 14. It is therefore perhaps wise to reflect on key issues that should feature in such a Call for Action from the MPA side to ensure that the final agreement is fit for purpose. Such key issues include:

- The need to ensure that SDG implementation is in step with what countries will already be doing on conservation targets. For example, the CBD target (Aichi Target 11) includes MPAs and ‘other effective area-based conservation measures’ and IUCN via the CBD will issue guidance for countries on the latter by the end of 2017. So the implementation of target 14.5 needs to be inclusive of such approaches.

- Using the implementation to help join up the SDG goal to actions across the whole ocean, including marine areas beyond national jurisdiction. Both the United Nations and the UNESCO World Heritage Programme are now looking at better ways to protect these areas, and so implementation should be set within this ‘whole ocean’ context in the Call for Action.

- Taking the opportunity to use the implementation to update policy advisors and decision-makers on the fact that MPAs are the best tool to deliver resilience.* This includes ecological, social, and economic resilience, thanks to the various ecosystem services that MPAs can sustain locally, nationally, regionally, and globally.

- Implementation needs to reflect the calls for greater ambition to tackle increasing ocean challenges. The 10% goal has its origins a couple of decades ago and, whilst the political target hasn’t changed, the ocean certainly has since then — and not for the better. The ocean is now being taken over not just by the expanding footprint of direct human impacts and ‘new’ issues such as plastic pollution, but also by the more massive and indirect footprint of multiple stressors such as ocean acidification, ocean warming, and deoxygenation (each unstoppable by current policies). It is a fact that, as long ago as 2003, IUCN member organizations were already calling for 20-30% strict protection, and by the World Conservation Congress in Hawaii last year this call through resolution [had risen to ‘at least 30%’ strict protection](#). Many of us believe the operative figure should now be 100%: at least 30% strict protection, and the remainder under much improved and truly and comprehensive sustainable use.

- Implementation should have an articulated, adequate, and thought-through financial delivery plan. The time for words without action is over. Simply re-expressing previous words with no revised roadmap to delivery will not do. All too often countries rush to try and meet the 10% target but that is only the start of the process. Initiatives such as IUCN’s [Green List of Protected and Conserved](#)

* Dan Laffoley is co-editor of [Explaining Ocean Warming: Causes, scale, effects, and consequences](#) (IUCN, 2016), in which the role of MPAs in supporting resilience is explored.

[Areas](#) show us the standards and actions needed to deliver effective management. This is perhaps THE moment for leaders to recognize the need to get ahead of the curve of ocean deterioration and commit to action.

- Implementation should go further than just ‘best available scientific information’. I believe we have a global responsibility to current and future generations to explicitly include the need to act with far greater precaution in order to protect us from what we don’t know. Again it is a fact that ocean acidification only became a search term on the internet in 2004, and it can be argued that the ocean has only really started to take center-stage focus in climate discussions within the last couple of years. Only acting on what we know in the ocean won’t be enough to get us out of the fix we have created for humankind. Taking greater care in what we take from the ocean and how we manage our impacts will also be critical aspects of the Call for Action.

What is your advice to MPA practitioners regarding SDG 14?

Laffoley: My advice to MPA practitioners, who can see the changes happening to the ocean, is to work to the fullest extent to deliver a fit-for-purpose implementation plan for SDG 14. If MPA planners and managers wish to attend the June conference, they should consult the website <https://oceanconference.un.org/stakeholderengagement>. Pre-registration will open in late March.

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“We should design a new generation of protected areas where development objectives and ecosystem services are front and center”

Editor’s note: Imen Meliane is regional Vice Chair (North Africa, Middle East, and West Asia) for the World Commission on Protected Areas. She is also an international consultant with the UN Development Programme’s climate adaptation team.

MPA News: Previously [you have described Aichi Target 11 as a “game changer” for conservation](#). Would you say that SDG 14.5 — which similarly calls for 10% of waters to be conserved — is also a game changer?

Imen Meliane: I have described Aichi Target 11 as a game changer for the new provisions it added in the text compared to the previous 2012 target — not so much for the 10% number. Many in the international community focus only on the 10%, so much so that we miss the point of the target.

Aichi Target 11 introduced 4 important concepts that in my view make it a game changer:

- First, it called for the selection of areas of importance for ecosystem services in addition to areas of importance for biodiversity in selecting protected areas. This is an important change to implement because so far we mainly select protected areas on the basis of biological and ecological criteria. Consideration of services to people and socio-economic aspects often comes as an afterthought or when considering management options once the area has been selected. Ecosystem services are by definition related to people and communities, so considering people as part of the system from the start is important. Currently there are no agreed-upon criteria for identifying areas of importance for ecosystem services, and that’s something that deserves attention.
- Second, the target introduced the notion of ‘other effective area-based conservation measures’ (OECMs) to be counted along with formal protected areas. This is in recognition that many areas that offer effective and significant conservation outcomes are currently not considered when counting progress toward the target, mainly because they are not managed by protected area agencies. We are seeing an important debate to attempt to define what should be counted as part of OECMs.
- Third, the target adds the notion of equity to the effectiveness in management, building on the lessons learned in protected areas governance.
- And last, it stresses the importance of embedding the protected areas within a wider landscape and seascape management.

These four elements together make for a strong protected areas target that enables protected areas to recognize and contribute to the development of communities and nations. I see SDG 14 building on that. It is important to read the SDG 14 intention to “Conserve and sustainably use the oceans, seas and marine resources *for sustainable development*.”

We have provided a lot of lip service to the idea that MPAs work for people, with tourism, fisheries, and other direct and indirect socio-economic benefits. But the opportunity I see (and certainly want to seize in the region where I work) is that we can and should design a new generation of protected areas where development objectives and ecosystem services are front and center. We may not select the same pristine areas with high biodiversity indices; instead we may end up choosing moderately degraded areas because the benefits to people are greater. Likewise, there may be areas where management could involve more active restoration or managed use in return for conservation outcomes that are similar to (or even greater than) less actively managed areas.

Aichi Target 11 and SDG 14.5 could be viewed as more like ‘sticks’ than ‘carrots’: if some governments don’t meet those targets, they may be shamed by NGOs. If your job were to convince governments that those targets are actually carrots rather than sticks, what would you say?

Meliane: I think we need to be understanding to the challenges of some governments before naming and shaming, which is a very northern approach that is often lacking depth of analysis and understanding of development challenges. I sat near a couple of ministers from countries where the MPA coverage was significantly low and asked them about the challenges they face in achieving the Aichi target. These were places where, if lucky, they might have 2-3 officers in their entire ministry dealing with protected areas country-wide, due to budget limitations and other more urgent priorities, as well as areas with crowded coastlines and intensive use of the maritime space. The ‘easy-fix’ solution of setting large offshore MPAs was simply not an option. I have spoken to other ministers about how they defend their protected areas budget in countries where the priorities are centered around dwindling economies, high unemployment, migration, and terrorism. So the job I see us doing as experts and NGOs is how to support these governments with designing a system of protected areas and OECMs that deliver on addressing these issues *in addition to* delivering important conservation outcomes — instead of naming and shaming the governments.

In your WCPA region of North Africa, Middle East, and West Asia, why should MPA practitioners on the ground pay attention to the SDGs?

Meliane: In our region, we set a priority to position MPAs and protected areas more generally as part of a strategy to deploy “nature-based solutions” to address societal challenges, which is largely responding to the SDGs. We want to take the lead in developing criteria for selecting areas of importance for ecosystem services, and develop guidance for designing and managing protected and conserved areas that deliver benefits to people using economic and non-economic metrics that speak to decision-makers.

Developing the criteria and metrics, and focusing on the design elements, are an important first step because we cannot afford to just pay lip service and say MPAs deliver certain benefits based on a few cases. There is a certain mistrust in the development community from positioning MPAs as a panacea to several problems — from food security to climate change — when often they are designed for other purposes and in reality deliver minimally on development challenges. We need to dig deeper and be flexible in leaving aside the traditional image of MPAs.

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“By mentioning the SDGs and the ways that MPA establishment can help advance the goals, MPAs become mainstreamed”

Editor’s note: Tundi Agardy is President of Sound Seas, a global consultancy on coastal and ocean policy and management. She is also contributing editor to [Marine Ecosystems and Management \(MEAM\)](#), an affiliated newsletter of MPA News.

MPA News: The Sustainable Development Goals may be a new concept for most MPA practitioners. Are there ways that savvy MPA planners or managers can leverage the SDGs (14.5 or otherwise) to help their MPAs?

Tundi Agardy: There’s no question that recognizing SDGs in any rationale for MPAs not only elevates the laudable sustainable development goals (by bringing a discussion of the goals to what might be new audiences) but also increases the chances that MPAs will be accepted and supported. By mentioning the SDGs and the ways that MPA establishment can help advance the goals, MPAs become mainstreamed — moving from a mere conservation tool to a viable tactic for achieving sustainability.

In general terms, this means that MPAs can be taken more seriously. But it can also mean that real opportunities for political and financial support for MPAs can be created. The UN agencies have dedicated funding streams to support the SDGs — not just UNEP, UNDP, and UNESCO, but also programs that have not to date been major players on the marine front, like the UN Conference on Trade and Development (UNCTAD).

Finance to support movement toward the specific targets can come from three arenas: public concessional finance, market-related lending, and private sector finance. It is in the latter that the really exciting new opportunities to finance MPA planning and implementation may lie. Much of the world’s attention on articulating common goals and

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More resources on the SDGs and MPAs

[The Ocean Conference: UN Conference to Support the Implementation of Sustainable Development Goal 14](#) — 5-9 June 2017, New York City (website)

[Ocean Action Hub](#) (website) — to facilitate multi-stakeholder engagement as part of the preparatory process for The Ocean Conference

[UN Sustainable Development Knowledge Platform](#) (website)

[Protected Planet Report 2016](#). UNEP, WCPA. 2016

[Achieving the Sustainable Development Goal for the Oceans](#) (policy brief). IASS Potsdam, IDDRI, and TMG. 2017

[Our Opportunity to Halt the Ocean’s Decline](#) (blog post). Peter Thomson, President of UN General Assembly 71st Session. 19 January 2017

finding ways to achieve them has led to strategies to incentivize private-sector engagement. This will only benefit MPAs, the oceans, and the planet. [Editor's note: For insights on how MPA managers can access private investment, see our January 2017 article "[The \\$400-Billion Potential for Private Investment in Conservation](#)".]


There is another way that the SDGs and MPAs align. Some MPAs can provide a means for demonstrating how [each of the seven targets and three additional initiatives under SDG 14](#) can be accomplished. Although the SDGs pertain to nations, if

a nation can demonstrate attainment (or progress toward attainment) of all the targets under SDG 14, it will be better positioned to receive development aid and international investment for coming to scale — above and beyond what it can accomplish in protected areas.

Only one of the 17 SDGs pertains specifically to the ocean. But several SDGs are impacted by how we use the ocean, including goals on poverty, hunger, inequality, sustainable consumption, and others. If you were responsible for convincing government decision-makers that they should not only meet the SDG targets but also embrace the ocean as a significant contributor to many of them, how would you make your case?

Agardy: The SDGs represent the culmination of many years of serious thinking about ways to lift large segments of humanity out of poverty while not overloading the natural systems that support us all. With detailed targets and corresponding measurable indicators, they represent a vast improvement over the (largely failed) [Millennium Development Goals](#), which lasted from 2001-2015. While many of the SDG targets are still too ambitious and thus probably doomed to fail, if nations recognize the elements of true sustainable development, they can move consciously toward a future with fewer unexpected shocks and unforeseen trade-offs.

If I have any beef with SDG 14, it is that the focus is still on economic growth over a more holistic view of human well-being. Many of the targets have to do with increasing production/consumption/revenues – but nowhere in SDG 14 is the idea of resolving conflicts among uses specifically mentioned. Nor is there an overt effort to deal with the significant issue of large-scale industrial users and corporations forcing out small businesses, traditional users, and those who rely on oceans for subsistence.

To reach true sustainability, coastal countries will not only need to create management regimes that allow for ecosystem-based management (a prerequisite for achieving most of the targets under SDG 14), but they will also have to give serious consideration to how to effectively include oceans in strategies to attain all the other goals, especially ending poverty ([SDG 1](#)), reducing hunger ([SDG 2](#)), maintaining health ([SDG 3](#)), providing clean water and sanitation ([SDG 6](#)), providing affordable clean energy ([SDG 7](#)), creating jobs ([SDG 8](#)), supporting innovation ([SDG 9](#)), reducing inequalities ([SDG 10](#)), creating sustainable communities and cities ([SDG 11](#)), promoting responsible production ([SDG 12](#)), and responding to climate change ([SDG 13](#)). It is no exaggeration that it would be folly for coastal countries to attempt to move toward any of these goals without having oceans and ocean uses be part of the equation. To do so would result in missed opportunities for sustainable development that improves human well-being of its citizens. 

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The SDG 14 targets

14.1. By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

14.2. By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans

14.3. Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

14.4. By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

14.5. By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information

14.6. By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation

14.7. By 2030, increase the economic benefits to Small Island Developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture, and tourism

14.A. Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission [Criteria and Guidelines on the Transfer of Marine Technology](#), in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular Small Island Developing States and least developed countries

14.B. Provide access for small-scale artisanal fishers to marine resources and market

14.C. Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of [The Future We Want](#)

Perspective:

Mexico designates three large multiple-use MPAs to protect marine life and fishing communities

By Juan E. Bezaury-Creel, David Gutiérrez-Carbonell, and César Sánchez-Ibarra

On 7 December 2016, during the 13th Meeting of the Parties to the Convention on Biological Diversity (COP13) held in Cancún, the Mexican Government designated three new MPAs totaling 647,015 km². All three sites are multiple-use biosphere reserves, with some zones that are strictly protected (no-take) and others that are sustainably managed.

The three MPAs

The **Baja California Pacific Islands Biosphere Reserve**, covering 11,612 km², was designated off the west coast of the Baja California Peninsula. After an 11-year multi-stakeholder consultation and negotiation process, this new biosphere reserve represents a substantial effort to protect Mexico's largest gap in island conservation through multiple-use zoning. The zoning covers not only islands (701 km²) but also a large portion of their surrounding waters (10,911 km²). These waters are critical both to an array of sea life (fish, marine mammals, seabirds) and to fishing cooperatives who depend on local fishing grounds for their livelihoods.

Zoning includes 17 strictly protected core zones: 16 of them are terrestrial while the one marine core zone covers 0.8 km². Multiple-use buffer zones cover nearly all the rest of the MPA. In these buffer zones, important commercial fisheries will be allowed to continue for lobster (*Panulirus* spp.), abalone (*Haliotis* spp.) and sea urchin (*Strongylocentrotus* spp.).

The new biosphere reserve includes six archipelagos: Coronado, Todos Santos, San Jerónimo, San Benito, Cedros and Bahía Magdalena, comprising a total of 21 islands and 97 islets. While all of the islands host important bird colonies, the San Benito Islands have the greatest abundance of seabirds in the entire Eastern Pacific Ocean: more than 2 million birds of 13 different species congregate annually to breed there. Northern elephant seals (*Mirounga angustirostris*) and Guadalupe fur seals (*Arctocephalus townsendi*) have also naturally recolonized San Benito East Island.

The **Mexican Caribbean Biosphere Reserve**, a 57,541-km² MPA of which nearly all is marine (57,255 km²), was designated off the eastern coast of the Yucatan Peninsula in the Caribbean Sea. Designation followed an intensive seven-month public consultation process, mainly involving stakeholders from the fisheries and tourism sectors. This biosphere reserve, together with the marine portions of 12 other preexisting federal MPAs, integrates a 63,825-km²

marine protection and sustainable use complex, including nearly half the length of the 1000-km Mesoamerican Reef, the largest reef system in the Western Hemisphere. Coral reefs, coastal wetlands, and deep-sea habitats will be permanently conserved and sustainably managed within this multi-use MPA.

Zoning includes three strictly protected core zones covering 19,326 km², of which 100 km² corresponds to coastal habitats and 19,226 km² to the deep-sea marine area. The deep-sea zoning starts 100 meters below sea level and extends to the sea floor; fishing and mining activities are not permitted in this zone. A 38,214-km² multiple-use buffer zone will allow important commercial fisheries for spiny lobster (*Panulirus argus*), queen conch (*Strombus gigas*), shrimp (*Sicyonia brevirostris*, *Farfantepenaeus* spp.) and finfish species. Regionally important tourism activities — including snorkeling and diving on coral reefs, sport fishing, and viewing of aggregations of whale sharks (*Rhincodon typus*), bull sharks (*Carcharhinus leucas*) and cownose rays (*Rhinoptera bonasus*) — will also be allowed. Bottom trawling for shrimp will be authorized in a limited area in the northeastern portion of the continental shelf. Mining of minerals is prohibited throughout the MPA. (As a result of Mexico's 2014 Energy Reform, exploration and extraction of oil is not permitted in any Mexican protected area.)

The **Deep Mexican Pacific Biosphere Reserve** is a 577,862-km² deep-sea multi-use MPA, designated from 800 meters below the sea surface to the sea floor in Mexico's Pacific waters. Designed to protect fragile seabed ecosystems, this biosphere reserve is currently Mexico's largest protected area and the 12th-largest MPA worldwide. Mining and fishing will not be allowed in the MPA's 15 strictly protected core zones that cover 187,771 km². In the MPA's 390,091 km² of buffer zones, no mining and only fishing activities that do not use bottom-trawling gear will be permitted. (In the waters above this MPA, a *Mysticeti* and *Odontoceti* Refuge Area, designated in 2002, protects all large whales in Mexico's EEZ, while the economically important tuna fishery is managed by the National Fisheries Commission [CONAPESCA] within the framework of the Inter-American Tropical Tuna Commission [IATTC].)

This MPA protects the Tehuantepec Trench (Mexico's deepest point at 6721 meters below sea level); Mexico's highest concentration of seamounts, including the *Mathematicians Seamounts*; the lower reaches of the Banderas, Petacalco-Lázaro Cárdenas, and Ometepec grand marine canyons; the geologically active East Pacific Rise, where new marine floor is constantly created by the presence of hydrothermal vents; and *deep sea habitats surrounding the core and buf-*

Editor's note:

Juan E. Bezaury-Creel is with The Nature Conservancy's Mexico and Northern Central America Program. David Gutiérrez-Carbonell and César Sánchez-Ibarra are with the Comisión Nacional de Áreas Naturales Protegidas (CONANP), Mexico's national protected areas commission.

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fer areas of the Revillagigedo Archipelago, already included on the UNESCO World Heritage list.

New MPAs in a time of budgetary constraints

Concerns have been voiced that more than tripling Mexico's protected area coverage at a time of serious budgetary constraints for management will drain resources for existing protected areas. Some have suggested this indicates these MPAs were created only in order for Mexico to meet Aichi Target 11.

However, while the national budgetary crisis is certainly real and worrisome, it should be noted that only the Baja California Pacific Islands and the coastal portion of the Mexican Caribbean biosphere reserves will require immediate on-the-water management efforts. Currently protecting the deep-sea portions of them will only require focusing existing surveillance activities of the EEZ by the Mexican Navy and a

relatively small increase in administrative tasks — since no public or private stakeholders currently use resources from these deep zones. Precisely this situation is what makes their establishment more than timely. Why wait for conflicts to emerge in order to create MPAs?

It is encouraging to see Mexico adopt measures that will protect the deep ocean. These measures are implementing United Nations General Assembly resolutions on deep-sea protection, such as Resolution [61/105](#), and support similar measures taken by the European Union, individual countries, and regional fisheries management organizations around the world. 

For more information:

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MPA Science Corner

Recent open-access articles on MPA-related science and policy

• **Article:** "[Size matters: Predator outbreaks threaten foundation species in small Marine Protected Areas](#)", PLOS ONE 12, e0171569 (2017)

Finding: Compared to larger MPAs, small coral reef MPAs may be more prone to outbreaks of predatory crown-of-thorns starfish due to a variety of factors. The authors recommend that an understanding of predator dynamics as a function of habitat size, type, and fragmentation should be incorporated into MPA design and management.

• **Article:** "[Small Marine Protected Areas in Fiji Provide Refuge for Reef Fish Assemblages, Feeding Groups, and Corals](#)", PLOS ONE 12, e0170638 (2017)

Finding: Even small MPAs show the ability to benefit reef fish populations while also enhancing ecosystem processes that are critical to reef resilience, including coral recruitment and herbivorous grazing.

• **Article:** "[Marine Reserve Targets to Sustain and Rebuild Unregulated Fisheries](#)", PLOS Biology 15(1): e2000537 (2017)

Finding: For coral reef areas in which fisheries are unregulated, placing 20-30% of the fished habitats in no-take areas is unlikely to harm the fisheries even if most fish populations there are still healthy, and will provide greater potential to rebuild depleted fisheries and protect biodiversity than protecting a smaller amount of area (e.g., 10%).

• **Article:** "[Biodiversity of benthic macroinvertebrates on hard substrates in the Currais Marine Protected Area, in southern Brazil](#)", Biota Neotropica 16 (2016)

Finding: This study of a 14-km² MPA in the southern Brazilian state of Paraná found 176 taxa of benthic invertebrates, of which 58 were first records for the state of Paraná. The remarkable number of new records highlights the relative lack of biodiversity studies in the area, and also the unexpectedly high biodiversity of the site.

For a free, weekly list of the latest publications on ocean planning and management, including MPAs, [subscribe to the OpenChannels Literature Update here](#).

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Notes & news

Canada designates MPA to protect globally unique glass sponges

On 16 February, the Government of Canada designated a 2410-km² MPA along its Pacific coast to protect several globally unique and ancient glass sponge reefs. The glass sponges have mineral skeletons made of silica (hence their 'glass' name) and their reef structures are estimated to be 9000 years old. Glass sponge reefs of this size — once abundant during Earth's Jurassic Period — were believed by scientists to be extinct before these colonies were discovered off Canada in 1987.

The MPA's full name is the Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs Marine Protected Area. It comprises three discontinuous areas that each encompass a distinct reef site. Within each area are different management zones with varying levels of protection, including a Core Protection Zone around each reef in which all fishing is off-limits. Limited fishing will be allowed in the other zones. Local fishing groups have honored a voluntary closure around the reefs since 2000.

The Government [press release on the new MPA is here](#). Regulations that were proposed for the site in 2015 [are here](#). Canada first identified the reefs as an Area of Interest for possible MPA designation in 2010.

New multi-use MPA in Chile

On 31 January, Chile designated the Mar de Juan Fernández Coastal Marine Protected Area of Multiple Uses, an 11,000-km² site that includes deep-sea corals, sponge habitats, and migratory routes for sea turtles and marine mammals. The MPA includes commercially fished areas as well as several smaller marine parks in which fishing will be limited. For media coverage see [this](#) (English) and [this](#) (Spanish).

Interconnected system of marine parks finalized in Western Australia

With its designation in December 2016 of the 18,500-km² North Kimberley Marine Park, the government of the state of Western Australia has completed a new interconnected system of marine parks and reserves that covers a total of 30,000 km² of coastal waters, including 1000 islands. All together, the new system is called the Great Kimberley Marine Park. The system will be jointly managed with traditional owners. The Western Australian Government [press release on the North Kimberley Marine Park designation is here](#).

Report on harnessing ecological connectivity for more effective MPA planning and management

The US Marine Protected Areas Federal Advisory Committee has produced a report on using ecological connectivity to make MPAs more effective and marine ecosystems more resilient. The publication analyzes the science on marine ecological spatial connectivity; suggests guidelines for incorporating connectivity in MPA planning and management; and recommends actions by US ocean agencies to support these guidelines. The 68-page report *Harnessing Ecological Spatial Connectivity for Effective Marine Protected Areas and Resilient Marine Ecosystems: Scientific Synthesis and Action Agenda* [is available here](#).

A webinar on the report's findings and recommendations will be held on 9 March and will be co-hosted by MPA News, the US National MPA Center, and the EBM Tools Network. [For more information or to register, click here](#).

From the MPA News vault:

Features and news items from yesteryear

Five years ago: [March-April 2012](#)

- The MPA Math: How to Reach the 10% Target for Global MPA Coverage
- MPA Perspective: Key Lessons Learned in the Management of MPAs and Marine Natural Resources

Ten years ago: [February 2007](#)

- Educating Stakeholders about MPAs: Practitioners Use an Array of Methods
- MPA Perspective: Aligning the Interests of Anglers and Conservation Groups on MPAs

Fifteen years ago: [February 2002](#)

- Managing Water Quality in MPAs: How Practitioners Are Handling the Challenges
- MPA Perspective: Advice for Promoting Participation of Authorities and Stakeholders in MPA Planning

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To comment on any of these Notes & News items or the MPA Poetry Corner:

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MPA Poetry Corner

You May Call Me Protected

By Peter Stoett

You may call me “protected” and
poster me on your conscience-soothing
conservation trophy wall.

You may consider me a saved relic
here behind invisible liquid lines,
rescued from greed and negligence.

My coral safe from tourists’ stupid feet;
my silver fish spawning and schooling;
my sharks well-fed, and my gentle giant
whales resting in wise contemplation;
my waters silent but for postcard waves,
the yeaming calls of marine lust
and the lurking echoes of feasting seabirds.

You may expect my timeless gratitude
and celebrate my political isolation
from the rest of the universal ocean
(the one that keeps your hearts beating).

Yet I feel my coral bleaching
as acid eats away its brittle skin, and
crustaceans scurry for safety from my water,
once my gift of life, now a blanket of danger.
I digest litter delivered by foreign currents,
plastic choking my arteries, starving my birds,
nanoparticles permeating my plankton.
Invading species and terrible storms visit often.
Sharks flee distant fin markets and
whales enter gasping from fires afar.
My sediment is soaked in global grime.
Fish are adapting and evolving too slowly as
my water warms and rises, confusing me.
My coastal people grow hungry, deprived of
my riches as you dither with your endless
photographic deliberation
(and fatal deliberate procrastination).

Am I “protected”, or just dying
a little slower than my blue brethren?

*About the poet: Peter Stoett is Professor of
Political Science and Director of the Loyola
Sustainable Research Center at Concordia
University, in Canada.*

Note from the editor of Poetry Corner, Anna Zivian (azivian@oceanconservancy.org):

“For people who work on MPAs, this month’s poem may at first glance seem disheartening. I see it rather as presenting a challenge: encouraging consideration of multiple stressors when designing MPAs, and demanding a focus on broad, ecosystem-based management. I am interested in how you view it, and would love your responses, whether in prose or poetic form.”