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International news and analysis on marine protected areas

Inside *Operation Phakisa*, South Africa's blue growth initiative that is fast-tracking a new MPA network

In February 2016, the South African Government announced its proposal to designate a network of 22 new MPAs in the nation's waters. The proposed network is newsworthy in itself: if designated, it would increase South Africa's MPA coverage from 0.05% of its marine waters to more than 5% in one fell swoop. But it represents more than just that. Namely, it is one of the first outputs of an ambitious program to transform the way that all of South African government works.

Called Operation Phakisa — for "hurry up" in the Sesotho language — this national process is based on the concept of Big Fast Results. The concept involves applying an accelerated and highly focused research and development program to improve governance and grow the national economy. (It was pioneered by the Malaysian government to address poverty and unemployment in that nation.) For South Africa, its Operation Phakisa is focusing first on the marine sector. It is looking to "unlock" the nation's ocean economy and encourage blue growth.

Blue growth can be a loaded term: some nations that adopt it as a goal seem to focus solely on the growth part, while others balance the growth with protecting the blue. For South Africa, the latter balance is a goal. Along with proposing the MPA network, the nation has proposed a framework for a marine spatial planning to integrate all maritime industries, including offshore oil and gas. Both proposals are undergoing public consultation right now (for links, see For More Information on page 2).

Kerry Sink is Marine Program Manager at the South African National Biodiversity Institute (SANBI). She led the nation's Offshore Marine Protected Area Project and the National Marine Biodiversity Assessment, which together with finer-scale plans formed the spatial database to plan the proposed network of MPAs. She was a member of a core team that met for six weeks straight in what was called the Phakisa Ocean Governance and Protection Lab, led by the Department of Environmental Affairs. The Lab planned the MPA network with all the necessary decision makers on hand. Sink is now leading a technical team using GIS and conservation planning

software to refine the proposed MPA network, while also traveling South Africa's 3000-km coastline to facilitate public comment on the proposed MPAs.

- MPA News: This is likely the first time anywhere that the planning of an MPA network has been the first output of a national overhaul of governance. What are the main goals of Operation Phakisa for South Africa's oceans, and what is the significance of the 22 proposed MPAs in achieving those goals?
- Kerry Sink: Operation Phakisa is a government initiative to fast-track the implementation of solutions to critical growth issues through detailed planning, dedicated delivery, and collaboration. For the oceans component, the main goals include ambitious targets to increase the contribution of marine sectors to South Africa's Gross Domestic Product and the creation of at least 800,000 new jobs. The three focus areas for economic development include marine transport and manufacturing, mariculture, and oil and gas.

This blue growth needs to be sustainable, and therefore a fourth focus is ocean governance and protection. The representative MPA network is one of ten initiatives from this focus area. Other initiatives include the development of new integrated enforcement and compliance arrangements, Marine Spatial Planning and new research to support sound ocean decision-making. The 22 proposed MPAs and an additional 5% of focus areas identified for future protection (an indicator of further progress from the ocean research initiative) are key aspects of sustainable and integrated ocean development.

The leader of our initiative, Mr. Xola Mkefe of the Department of Environmental Affairs, explains that Operation Phakisa is like a new four-lane highway: our MPAs and new spatial management measures are the safe crossings, white lines, and safety features on that highway to ensure existing ocean assets and services are maintained.

 MPA News: In what ways are the public consultation and designation of the MPAs under Operation Phakisa different than they previously were under regular governance?

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MPA News

EDITOR-IN-CHIEF: John B. Davis

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University of Washington
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Channel Islands National
Marine Sanctuary

CORRESPONDENCE: MPA News

School of Marine &
Environmental Affairs
University of Washington
3707 Brooklyn Ave. NE
Seattle, WA 98105, USA.
mpanews@u.washington.edu
Tel: +1 425 788 8185

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- Sink: Key differences under Phakisa include a national roadshow to support consultation, a longer than usual public comment period, and the ambitious network approach. Also these MPAs will be declared under South Africa's Protected Areas Act, whereas the previous MPAs were established originally under the Marine Living Resources Act (MLRA) and later transferred to the Protected Areas Act. The Protected Areas Act has a more rigorous public consultation process.
- MPA News: So although the planning of the network has been fast-tracked, it still involves a more extensive public consultation process than the previous system?
- Sink: Yes. The MLRA technically had no formal requirements for consultation within the Act, although some previous MPAs involved 30-day comment periods. In contrast, the Phakisa proposed network has a 90-day comment period, as well as the national roadshow. I think the main difference, though, is more in terms of international good practice in stakeholder engagement that we drew from in designing this network. Most of the areas now proposed for protection emerged from a process that included stakeholder engagement from the outset including collaborative objectives, shared data, review of maps and data prior to analyses, review of results, revised analyses, and intense engagement to support practical implementation.
- MPA News: That has been a lot of work in a short span of time.
- Sink: Our team is very tired! We are, however, inspired by the opportunity to advance ocean protection. Phakisa provided a first opportunity for integrated planning because the relevant departments were all available in the lab, and priority sharing, compromises, and detailed plans were undertaken in lab with ongoing high-level support. Our new MPAs were designed to advance ecosystem representation to 95% of habitat types, protect the last good bits of

threatened ecosystems in places where they are still in good condition, take care of threatened species, and support bycatch management and resource recovery. Ecologically and Biologically Significant Areas, including key areas for spawning, nursery and foraging, are also included.

Safeguarding such important ocean areas helps unlock development by creating certainty, maintaining existing ecological infrastructure (healthy ecosystems delivering services), and streamlining environmental authorizations in the development context.

- MPA News: What do you anticipate is the timeline for designation of the 22 MPAs?
- Sink: Comments on the proposed network close on 17 May 2016 and it will take a few months for stakeholder responses to be collated and considered, plans to be revised, and recommendations formulated. Our technical team has been requested to submit final recommendations regarding the network by December this year. It is anticipated that the MPAs may be designated as soon as March 2017 but this will depend on the outcomes of the current formal stakeholder consultation process.

For more information:

Kerry Sink, SANBI. Email: K.Sink@sanbi.org.za

Operation Phakisa website:

http://www.operationphakisa.gov.za/Pages/Home.aspx

Department of Environmental Affairs notice on proposed MPA network, including public consultation: https://oct.to/ZZJ

Draft of marine spatial planning bill, with note on public consultation: https://oct.to/ZZ3

To comment on this article: http://openchannels.org/node/13218

Upcoming webinars on OpenChannels.org

- Management on the Move: Making EBM and MSP More Dynamic, with Daniel Dunn, Sara Maxwell, and Alistair Hobday
 May 5 at 7 pm UTC / 3 pm US EDT / 12 pm US PDT
- Project Eyes on the Seas
 With Mark Young of Pew Charitable Trusts
 May 12 at 5 pm UTC / 1 pm US EDT / 10 am US PDT
- Alternative Livelihood Opportunities for Coastal Communities in the Eastern Caribbean
 June 23 at 5 pm UTC / 1 pm US EDT / 10 am US PDT

For more information on these or other upcoming events:

https://www.openchannels.org/upcoming-events-list

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The 'other roles' of MPAs, part 2: How MPAs can help address marine litter

The political spotlight that often shines on MPAs has fostered a view that they pertain only to addressing the effects of fishing, as that is the role that attracts the most media attention. But that view sells MPAs short. In truth, MPAs can play valuable roles in addressing a variety of non-fishing-related threats facing the oceans.

This year MPA News is helping to shed more light on these roles. We started in our last issue by showing how MPAs can help address climate change ("How MPAs can help mitigate impacts of climate change via coastal blue carbon, 'fish carbon', and more", MPA News 17:2). In this issue, we briefly examine how MPAs can address marine litter.

Note: This topic was the feature article in our November-December 2011 issue, "Marine debris and MPAs: Managing the impacts of litter on marine ecosystems" (http://mpanews.org/MPA123.htm). That article described:

- How Caribbean MPAs have developed best practices for fighting litter and educating stakeholders;
- How Papahānaumokuākea Marine National Monument (US) is leading MPAs in capturing derelict fishing gear; and
- How MPAs in Sabah, Malaysia, have discouraged the use of plastic bottles by visitors.

How multiple Caribbean MPAs are fighting marine litter

For a fresh update on how MPAs in the Caribbean are continuing to address the marine litter problem, MPA News reached out again to Emma Doyle of the Gulf and Caribbean Fisheries Institute (GCFI), which is working on marine litter issues with a network of 27 MPAs in 10 Caribbean countries. "Several Caribbean MPAs serve as effective cornerstones for education programs and for community involvement in marine litter reduction," says Doyle. She lists several examples:

- Multiple Caribbean MPAs have collaborated on the International Coastal Cleanup (a global annual beach cleanup event), sometimes taking a local lead in organizing the event, other times assisting with logistics to make beach access possible for cleanups.
- Building on strong community support for cleanup events, Hol Chan Marine Reserve and Bacalar Chico Marine Reserve — both in Belize — have developed a school-based bottle return and recycling program for nearby communities.

- Montego Bay Marine Park in Jamaica has been testing practical waste collection initiatives to address land-based sources of marine pollution, both on land (with bins and skips provided to communities, and collection coordinated with the waste management authority) and in the water (with floating booms to collect waste coming directly from gullies).
- The Exuma Cays Land and Sea Park in The Bahamas developed a sustainable tourism model based on stakeholder consultation with local communities, and the amount of solid waste created and managed is monitored and managed adaptively in the model.
- Many MPAs in the region are closely engaged with regional biodiversity networks such as the Wider Caribbean Sea Turtle Conservation Network and Birds Caribbean, which together highlight the negative impacts of marine litter on biodiversity in the region.
- The Junior Ranger program run by Bonaire National Marine Park and STINAPA (Bonaire's national parks foundation) combine class- and laboratory-learning with outdoor activities and cleanups on little-visited beaches that are important to threatened biodiversity.

To comment on this article: http://openchannels.org/node/13219

For more information:

Emma Doyle, Gulf and Caribbean Fisheries Institute (GCFI). Email: emma.doyle@gcfi.org

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Perspective: Re-centralization of marine resource management in Indonesia, and its implications for MPAs

Editor's note:

Handoko Adi Susanto is Regional Development Officer for Rare Indonesia, an NGO.

For a graph showing the progress in local MPA coverage in Indonesia from 2004 to 2015: https://oct.to/ZZq

To comment on this article: http://openchannels.org/ node/13220

By Handoko Adi Susanto

In 2014 at the end of his term, Indonesia's President S.B. Yudhoyono passed a law that changed the roles of local and provincial governments in marine resource management. Under prior law, district (i.e., local) governments had held authority to manage marine resources out to four nautical miles from the coastline, with provincial governments then managing from the 4-nm line to 12 nm.* But under the new law, Law No. 23 of 2014, that local authority was transferred to the provincial level. As a result, provincial governments now have authority from the shore to 12 nm — including for exploration, exploitation, conservation, marine spatial planning, and other management of marine resources — and local governments have none.

Impact of Law No. 23/2014

Currently, Indonesia has established 17.30 million hectares (173000 km²) of marine protected areas, or 82% of the total commitment of the Government of Indonesia to establish 20 million hectares by 2020. Of those MPAs, about 42% or 7.26 million ha were established through districts' initiatives in the form of local MPAs. The local MPAs were initiated and managed by district government, while the rest have been managed centrally through the Ministry of Forestry and Environment and the Ministry of Marine Affairs and Fisheries. The latter Ministry also provides assistance and technical guidance to every local MPA, especially on how to manage the areas effectively to benefit the local community.

The withdrawal of district authority in managing marine resources has implications for the planning and management of local MPAs. First, effective management has become more challenging. Capacity-building programs by many actors — including governments and NGOs — have been focused to this point at district level. At the provincial level, there is currently a lack of human resources capacity to manage existing (local) MPAs. In addition, the distance from provincial governments' offices to local MPAs is significantly farther than from local government offices, thus making management more expensive.

Second, the legal existence of local MPAs is threatened. With authority on marine conservation and spatial planning now only at provincial and national levels, any decrees of Regents or Mayors on coastal and marine areas are no longer valid. For those local MPAs that are fortunate to be considered as important areas for the provinces or central government, they will likely be designated as provincial or national MPAs. The rest of the local MPAs will be in limbo.

Third, local MPAs that have been reserved by the Regent/Mayor will have no management. Currently, management of each local MPA is handled by the District Agency of Marine and Fisheries. Under the new law, the district agency no longer has that authority. Furthermore, District Government is no longer allowed to request budgets for marine conservation. It is possible that the District Agencies for Marine and Fisheries will be dissolved.

Fourth, progress toward achieving the 20 million-ha target for MPA coverage in Indonesia is likely to be hampered. There is only one province, Southeast Sulawesi, that has established a provincial MPA — it is 10,371 ha and was designated in 2013. So far there has been little interest from other provinces to develop an MPA. There is a need for efforts from the central Ministry of Marine Affairs and Fisheries and marine conservationists to convince provincial governments to allocate part of their marine territories for conservation areas to sustain their fishery resources.

Alternative solutions

1. Raise the status of local MPAs to a higher level.

Local MPAs, which currently have been reserved by Regent/Mayor, should be strengthened through the provincial governor's provision in the new law so that their existence is guaranteed. When a local MPA is seen to have a national strategic value or high conservation value, its status could be upgraded to a national MPA.

Furthermore, there should be a tripartite meeting among the central, provincial, and district governments to agree to lift up local MPAs into provincial or national level interest. District government should explain the values and current management status of the protected areas that have been reserved, and enlighten the importance of keeping them as conservation areas.

2. Combine several local MPAs through a decree of the Governor. In cases where several local MPAs exist in one province, the provincial Governor could invite and discuss with all those districts to lift up those MPAs

^{*} The central government has authority to establish, for the national level interest, special areas such as free trade areas, forest/nature/cultural reserves, and marine parks out to 200 nm from shore and within provincial/ district waters.

into a provincial protected area. Hence, one Governor's decree could strengthen several district MPAs.

- **3. Delegate provincial MPA management.** To deal with the challenge of distance, provincial governments may delegate management of these MPAs to district governments. This approach could be possible in the form of Assistance Duty (TP *Tugas Pembantuan*) or other mechanisms. The Assistance Duty can occur after the MPA status is elevated to provincial level.
- **4. Establish a network of MPAs.** Local MPAs that have a biophysical linkage with others should be managed as MPA networks, a joint management of several

individual MPAs. Related to this approach, capacity building of management staff at the provincial level is needed, specifically for ecosystem-based MPA management and for creating a good coordination mechanism with the districts.

In conclusion, a change of authority in managing marine resources makes many people nervous. In addition to the alternative solutions described above, intensive communication of the Law 23/2014's material is needed so that more parties will become aware of the changes. Lastly, government regulations as a derived law are also crucial so that the questions and concerns of many parties could be answered.

For more information:

Handoko Adi Susanto, Rare Indonesia, Bogor, Indonesia. Email: hsusanto@rare.org

Perspective: Report on the Think Tank on Human Dimensions of Large Scale MPAs

By Patrick Christie and Nai'a Lewis

Although the median size of MPAs worldwide is less than two square kilometers, it is the very large MPAs — those larger than about 250,000 km² in area — that account for a majority of conserved ocean area globally.

Due to the size of these large scale MPAs (LSMPAs), they can impact multiple communities and stakeholder groups. As well, even when they are initiated by local communities or NGOs, they must still be established by national governments. The process overall can feel top-down and, if not handled appropriately, can leave stakeholders feeling alienated. These factors, among others, can make it easy to characterize LSMPAs as being designated primarily for political gain, and as a conservation model that disenfranchises local communities and indigenous people.

In February of this year, site managers, social scientists and other experts gathered to examine how the human dimensions of LSMPAs can be addressed more effectively. That started with the structure of the meeting itself.

Placing the voices of people and communities at the fore

The Think Tank on Human Dimensions of Large Scale Marine Protected Areas (or HDTT) — held 8-10 February 2016 in Honolulu, Hawaiʻi — was a meeting of the minds, with 125 participants from 17 countries. These included site managers and staff from 10 of the world's largest MPAs, as well as dozens of marine policy specialists and research professionals from academic institutions worldwide. Attendees also included representatives of governments, NGOs,

indigenous and traditional communities, industry, and the next generation of marine management and research professionals, including graduate students and post-doctorate researchers.

The HDTT opened with Native Hawaiian chant and hula to honor the host culture and people, welcome participants, and create an atmosphere of inclusiveness and mutual respect. The first formal session of each day featured a panel of site managers, social scientists, and conservation practitioners to address critical management topics. Subsequent sessions included 'ignite talk' presentations - which addressed trends in ocean governance, economic, cultural and legal considerations of LSMPAs, and food security in a speed round format – and small group exercises. The latter allowed participants to evaluate human dimension (HD) knowledge gaps, identify priority research needs, and share and discuss relevant LSMPA experiences and best management practices and suggestions. On the final day, participants enthusiastically decided to establish a community of practice (CoP) around HD for LSMPAs with statements of commitment being offered from 12 academic, NGO and government institutions. A subset of participants began drafting a code of conduct to ensure that the actions of the CoP would reinforce and enhance bestpractice standards.

Diverse and sometimes contradictory perspectives were respected throughout the design, planning and implementation phases of the HDTT. The partnership remained committed to honoring the spirit of human dimensions – placing the voices of people and communities at the fore to identify and develop strategies that address the needs of people and place simultaneously.

Editor's note:

Patrick Christie is professor of marine affairs and international studies at the University of Washington.
Nai'a Lewis is coordinator of Big Ocean, the peer-learning network for managers of large scale MPAs:
www.bigoceanmanagers.org

Findings on best practices, a shared research agenda, code of conduct, and goals of a community of practice were outcomes of the HDTT, and have been organized into an overarching framework. That framework is now being reviewed by HDTT donors and participants and then will be disseminated broadly.

Why was the HDTT important?

- (a) The HDTT organizing partners* all had a keen desire to do HD work. We felt it was important to identify common interests and to leverage the resources of all parties to create a collaborative output greater than what any one institution could develop independently.
- (b) The HDTT partnership saw this as the first systematic, broad initiative to formally address HD for LSMPAs in a way that could affect real world change, namely by incorporating the perspectives and expertise of researchers, practitioners and community. Our goal is to increase the success of LSMPAs, and marine resource management and conservation generally, through an increased understanding of how people and organizations interact with LSMPAs and related management tools.
- (c) For social scientists and managers who wish to play constructive roles in addressing the interesting and complex challenges of LSMPAs, the HDTT created an important starting point. Tools and

services can now be developed to assist nations in drafting more effective policies, and management teams can begin to develop and implement activities that consider human communities systematically and respectfully from the earliest stages of the LSMPA design process.

What do we see as immediate next steps?

- (a) Further develop the HD of LSMPA Framework
- (b) Support development of the HD of LSMPA Community of Practice
- (c) Publish several key articles and guidelines to engage the conservation community more broadly
- (d) Identify and pursue the most relevant proposed research activities from the HDTT
- (e) Complete planning for a follow-on workshop at the World Conservation Congress (1-10 September 2016)
- (f) Assess whether engaging with Chilean colleagues (in conjunction with IMPAC4 in 2017) to host a combined Biophysical / HD Think Tank is feasible
- (g) Engage interested parties to constructively and enthusiastically support this effort. Please contact: naia@bigoceanmanagers.org (Big Ocean) and hdmpas@uw.edu (University of Washington)

* Workshop co-organizers came from a diversity of implementation and academic institutions including Big Ocean, the United States National Oceanic and Atmospheric Administration (NOAA) Office of National Marine Sanctuaries, the University of Washington, the University of British Columbia, Colorado State University, the University of Guelph, and the University of Victoria. HDTT title sponsors included NOAA, the Pew Charitable Trusts, the National Geographic Pristine Seas project, the Social Sciences and Humanities Research Council of Canada, and Conservation International.

HDTT leads included the authors of this piece as well as 'Aulani Wilhelm (Conservation International), Nathan Bennett (University of British Columbia and University of Washington), Rebecca Gruby (Colorado State University), Noella Gray (University of Guelph), Natalie Ban (University of Victoria, Sue Taei (Conservation International), Jon Day (James Cook University), Alan Friedlander (University of Hawaii), and Jacqueline Evans (Cook Islands Marine Park / Marae Moana)

Notes & News

Seeking marine nominations: 2016 Packard Award and Kenton Miller Award

Nominations for marine candidates are strongly encouraged for two global awards celebrating exemplary achievement in protected areas. Both awards are presented by the IUCN World Commission on Protected Areas (WCPA), and winners will be announced at the World Conservation Congress in Hawaii in September this year.

The nomination deadline for each award is **30 April 2016** (please disregard the 31 March deadline posted on the award websites):

• The biennial Fred Packard Award celebrates individuals and organizations for outstanding service to protected areas — those who have gone beyond the call of duty for marine or terrestrial sites. The award includes a certificate and, under some circumstances, a cash prize. For selection criteria, past awardees, and the nomination form, go to https://oct.to/ZZS

To comment on this article: https://openchannels.org/

note/13221

• The biennial Kenton Miller Award celebrates innovation in protected area management. The award includes a certificate and US \$5000 cash prize. For selection criteria, past awardees, and the nomination form, go to https://oct.to/ZZT

Ecuador designates no-take MPA around northern Galápagos Islands

With the goal of protecting shark species, Ecuador has designated a 38,000-km² no-take MPA around the islands of Darwin and Wolf in the Galápagos Islands. Darwin and Wolf are the northernmost islands in the Galápagos archipelago. Prior to the new designation, small-scale local fishing cooperatives were allowed to fish around Darwin and Wolf, and the waters were not included in the neighboring Galápagos Marine Reserve, a World Heritage site. Now such fishing is off-limits and the new no-take area is part of the larger reserve.

The entire Galápagos Marine Reserve is off-limits to industrial fishing. However, most of it — aside from Darwin and Wolf — remains open to smaller-scale artisanal fishing.

According to scientific studies of the area, the waters around Darwin and Wolf hold among the highest abundances of sharks in the world.

For more information, go to https://oct.to/Zky and https://oct.to/ZkF

UN committee holds first round of negotiations on high seas conservation

The first of four rounds of UN negotiations to develop a legally binding instrument for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction concluded on 8 April. Held in New York City, the round of negotiations was a productive first step, according to participants.

"Governments came ready to proactively and constructively discuss the need for a global regime to establish high seas marine protected areas and reserves and environmental impact assessments," said Elizabeth Wilson, director of international ocean policy at The Pew Charitable Trusts.

Peggy Kalas, coordinator of the High Seas Alliance (highseasalliance.org), said, "This seminal PrepCom [preparatory committee] was a very positive start to the two-year process that we expect to lead to a formal treaty conference in 2018."

Last year, IUCN high seas advisor Kristina Gjerde told MPA News that the ideal outcome of the process would be a science-driven agreement with overarching objectives of a healthy and resilient global ocean beyond national boundaries. "This would include an ecologically representative and well-connected system of MPAs based on the UN Convention on Biodiversity's Aichi target 11 — which calls for at least 10% of marine and coastal areas to be protected through such a system by 2020," said Gjerde. "It would also include ecosystem-based and precautionary management for all human activities likely to affect marine biodiversity and ecosystems beyond national jurisdiction." (http://mpanews.org/MPA142.htm#Gjerde)

For more information, go to https://oct.to/Zkt

Pushing toward the 10% target for global MPA coverage

The Ocean Sanctuary Alliance (OSA), a partnership of diplomats and MPA experts, convened a conference in March 2016 to support the protection of 10% of coastal and marine areas by the year 2020. Although the 10%-by-2020 target — or 10x20, as OSA calls it — is already agreed to under the UN Convention on Biological Diversity, global MPA coverage remains below 5% with just four years to go.

The March conference, held in Rome and coorganized with the Government of Italy and the UN Environment Programme, produced a formal call to action. Among other items, the actions include helping nations with capacity building for MPAs, and developing new tools to identify, design, finance, and govern MPAs and MPA networks. Nations with representatives in leadership roles in the OSA include The Bahamas, Italy, Kenya, Palau, and Poland, among others. For more information on the OSA or the call to action, go to www.oceansanctuaryalliance.org or www.ucl.ac.uk/mpag/docs/OSA10X20Conference.pdf

Higher MPA coverage targets in the news

While governments make gradual progress toward the global target of 10% marine protection set by the UN Convention on Biological Diversity for 2020, more ambitious MPA coverage targets have been in the news lately:

• A new study in the journal *Conservation Letters* suggests that setting aside at least 30% of the global ocean in MPAs will be necessary to meet several environmental and socio-economic objectives, including benefiting fishermen and other stakeholders. The study based its conclusions on an analysis of 144 MPA studies. "The UN's 10% target appears insufficient to protect biodiversity, preserve ecosystem services and achieve socio-economic priorities," write the authors. The abstract of the study

In the next issue of MPA News...

- Best practices in conflict resolution for MPA design processes
- How MPAs can play a role in reducing land-based runoff of sediments
- New tips for how coral reef MPAs can reduce the threat of bleaching

To comment on any of these Notes & News items: https://openchannels. org/node/13222 "Effective coverage targets for ocean protection" is at https://oct.to/Zkv

• A new book by biologist and two-time Pulitzer Prize winner Edward O. Wilson proposes that, in order to save global biodiversity, 50% of both the ocean and land should be set aside in no-take reserves. An interview with Wilson on his book *Half Earth: Our Planet's Fight for Life* is at https://oct.to/ZZk

First global map of EBSAs released

The first global map of Ecologically or Biologically Significant Marine Areas (EBSAs) was released in March 2016. The result of four years of research and workshops under the aegis of the UN Convention on Biological Diversity, the map identifies 203 sites and comprises areas in all oceans and large marine ecosystems, including on the high seas. EBSAs are considered the most critical areas in terms of supporting the healthy functioning of oceans. EBSA status does not automatically lead to formal protection of these sites, but the identified EBSAs are expected to provide a basis for various MPA-planning processes worldwide. For more information on the EBSAs, go to https://www.cbd.int/ebsa

New resort opens in Tanzanian marine reserve: villa at \$10,000 per night

Thanda Island (thandaisland.com), an 8-ha private beach property within southern Tanzania's Shungi Mbili Island Marine Reserve, is opening in April 2016. Encircled by a coral reef and powered by solar energy, the resort is for clientele who desire privacy and conservation, and for whom price is no concern. The cost to rent its five-bedroom villa is US \$10,000 per night.

From the MPA News vault: Features and news items from yesteryear

Five years ago: Mar-Apr 2011 (MPA News 12:5)

- The Great Barrier Reef Structural Adjustment Package: How It Grew Out of Control, and Its Implications for Future MPA Processes
- High Seas Closures in the Western Tropical Pacific: A Step Forward for MPAs in International Waters

Ten years ago: March 2006 (MPA News 7:8)

- Use of Volunteers in MPA Management: Opportunities, Challenges, and Advice
- Managing Recreational Fishing in MPAs through Vertical Zoning: The Importance of Understanding Benthic-Pelagic Linkages

Fifteen years ago: March 2001 (MPA News 2:8)

- Creating Self-Financing Mechanisms for MPAs: Three Cases
- Citing Benefits of No-Take Areas, Scientists Call for New Networks of Marine Reserves

For these and all other issues of MPA News, go to www.mpanews.org/issues.html

MPA Science Corner

• Article: "Integrating simultaneous prosocial and antisocial behavior into theories of collective action", Science Advances, 4 March 2016. https://oct.to/ZZU

Finding: MPAs can change the social structure of their associated human communities, inciting more cooperation and more competition among community members. If these are in balance, better conservation can result.

• Article: "Marine reserve recovery rates towards a baseline are slower for reef fish community life histories than biomass", *Proceedings of the Royal Society B*, 23 December 2015. https://oct.to/ZZw

Finding: Large, permanent no-take reserves — and as much as a century of protection — may be necessary for the recovery of slow-growing reef fish species

 Article: "Marine protected areas and children's dietary diversity in the Philippines", Population and Environment, March 2016. https://oct.to/ZZi

Finding: In the Philippines, the nearness of an MPA is positively associated with dietary diversity for children, an indication of good health. The association could be due to multiple factors.

Guide on improved funding of protected areas

The UN Development Programme (UNDP) has released a guide to improving the budgeting and long-term funding of national protected area systems. Drawing lessons from Chile, Guatemala, and Peru, the guide walks readers through budgeting processes and performance indicators. It also advises on cost-reduction strategies, effective communications, and more.

The Guide to Improving the Budget and Funding of National Protected Area Systems is available at https://oct.to/ZZZ

Journal temporarily offers its most popular articles for free, including several on MPAs

The 20 most popular articles of *Coastal Management* journal since 2014 are currently available free of charge, until 31 May 2016. Ordinarily the journal requires an annual subscription or a per-article fee for access. The available articles include five that are specifically on MPAs, including three pertaining to MPAs in the Coral Triangle region. To view the articles, go to https://oct.to/ZZ4