

## See you at the International Marine Conservation Congress in Glasgow!

Dear reader,

A few quick notes as we go to press....

### • Presentation at IMCC

MPA News and its sister site OpenChannels.org will be featured in the workshop "Science to Action: How to Make It Happen" at the International Marine Conservation Congress this August in Glasgow, Scotland ([www.conbio.org/mini-sites/imcc-2014](http://www.conbio.org/mini-sites/imcc-2014)). We will highlight how the two projects are serving practitioners (44,000 users of OpenChannels and counting!) and provide demonstrations of our online event capabilities, including everything from webinars to text-based chats to training workshops. If you're at IMCC, please stop by and say hello!

### • The MPA List

Have you joined the MPA List yet, our new email discussion list for the MPA community? It provides an easy way for practitioners to talk with one another and share knowledge, and is the first dedicated email discussion list for the MPA community in over a decade.

We hope to see it grow to be a thriving forum. To join the MPA List, visit <http://openchannels.org/community/mpalist> and fill out the very brief form.

### • Upcoming events on OpenChannels

- A Cultural Resources Toolkit for MPA Managers, 11 September
- Using SeaSketch for Collaborative Design of Ocean Management Plans, 25 September
- A Guide to Tools for Landscape Conservation Planning, 21 October

For more background on these and other OpenChannels events, including times, go to <http://openchannels.org/upcoming-events-list>.



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OpenChannels is funded by the Gordon and Betty Moore Foundation.

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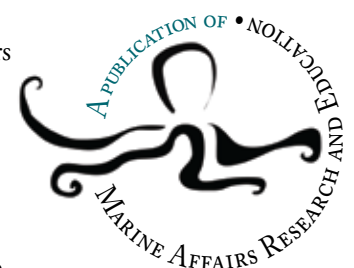
## Innovative ideas in enforcement: What the future of MPA surveillance could look (and even sound) like

In April 2014, the technology company Google hosted a unique meeting at its headquarters in California. Involving several dozen scientists, technology engineers, conservationists, and politicians, it was a two-day discussion on the future of ocean surveillance. Presentations covered such technologies as drones and satellite-tracking systems for vessels, and included occasional nods to Google's own enterprises. The latter included futuristic concepts like Project Loon, Google's proposed global network of high-altitude balloons for collecting and relaying data. (The website for the meeting is [www.oceanagenda.org/home](http://www.oceanagenda.org/home). A blog post by an attendee, Mimi D'Iorio of the US National MPA Center, is at <http://openchannels.org/node/6571>.)

MPA News attended the meeting, where there was a real sense that technological surveillance of the ocean, including for MPAs, may be approaching a tipping point. Sensors are becoming smaller, cheaper, and more sophisticated. The use of drones for surveillance, by air or water, is becoming more common. We may soon see a future in which an abundance of inexpensive tech tools shifts the effective balance of enforcement in many MPAs from the offenders to the defenders.

That being said, enforcement is not always about technology to detect violations. Strategy and policy are often just as important: deciding how to fine or otherwise penalize violators, for

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example, can play a crucial role in encouraging better behavior. In this issue, MPA News hears from experts

on several innovative approaches to MPA surveillance and enforcement — technological and otherwise.

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## A. Using sound to detect the presence of violators in an MPA

[Editor's note: Margo Edwards is director of the Center for Island, Maritime, and Extreme Environment Security (CIMES) — one of 12 Centers of Excellence funded by the US Department of Homeland Security. It is based at the University of Hawaii ([www.cimes.hawaii.edu](http://www.cimes.hawaii.edu)).]

**By Margo Edwards**

### On passive acoustics as a surveillance tool:

Passive acoustics is the act of listening for, and analyzing, particular sounds. It has been around since Leonardo da Vinci, who put a tube in seawater and listened for vessels. Our listening tools today are obviously more sophisticated than his but the intent is the same: we can monitor sound to detect when a vessel is nearby, as well as what kind of vessel it is and whether it is doing something it should not be doing.

The main challenge of passive acoustics, even with today's advanced tools, is the signal-to-noise ratio. How do you detect the difference between the signal you are looking for — such as the presence of an illegal fishing vessel — and the noise of the surrounding ecosystem? MPAs have a lot of noise, with waves and various animal sounds. Snapping shrimp, for example, are a common noisemaker in the ocean, generating a crackling sound at an acoustic frequency of 12 kHz. However, researchers at CIMES have discovered that snapping shrimp actually make different sounds when a vessel travels nearby. So what we had thought was just noise can actually be a signal. Knowing this: if we are looking for, say, the presence of a 25-foot fishing vessel in an MPA, we can listen not only for a frequency at which we know 25-foot boats operate, but also for reactions of the shrimp and the ecosystem in general.

### On how soon passive acoustics systems could be used by MPAs:

Passive acoustics systems aren't perfect at this point, but I expect they will be a valuable part of MPA surveillance in the future. Think of them as the sentinels of MPAs. They will listen, compare their data to other sources (such as data from automatic identification systems on ships), and raise red flags when someone is somewhere he or she should not be. To protect these systems, it will be important to make the devices mobile and camouflaged so violators can't tamper with them.

There does need to be more investment in determining how effective these systems are in various environmental conditions, like rain or crashing waves. And because the acoustic profile of each area of the ocean is unique, each system will need to be tailored to its specific place. You can't simply take what you learn in Hawaii and apply it to Kiribati or Palau, for example. There will also be a time lag as the prosecution side of passive acoustics — basing a conviction on a vessel's acoustic "thumbprint" — will need to catch up to the science side.

But I think that in the next five to ten years, we could have a workable system tailored to an area, even a very large MPA. The fact is, you don't have to be on the lookout across every meter of a site. Look at historical vessel traffic patterns, and at ship tracks from vessels' automatic identification systems. Then set up your listening posts in the areas you expect people to visit.

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## B. Global monitoring of fishing vessels, and outsourcing your MPA's surveillance needs

[Editor's note: Tony Long is director of the Ending Illegal Fishing Project, an initiative of The Pew Charitable Trusts ([www.pewtrusts.org/en/projects/ending-illegal-fishing-project](http://www.pewtrusts.org/en/projects/ending-illegal-fishing-project)). Long describes the project as "a system that would enable even the most resource-poor fisheries enforcement official to have access to accurate information from a central reliable source, such as to permit or deny port entry or begin legal proceedings." Previously Long served 27 years in the British Royal Navy, where he reached the rank of commander.]

**By Tony Long**

### On his goal of unique identification for all large fishing vessels (greater than 79 feet in length):

This goal is very likely achievable within 5-10 years. We have already seen six regional fisheries management organizations (WCPFC, CCAMLR, IOTC, SPRMO, ICCAT and IATTC) adopt the IMO number as mandatory in their regions, and we are encouraging other RFMOs to adopt this measure. Being able to identify fishing vessels through their IMO numbers is a vital first component to any system

of effective monitoring, both inside and outside of MPAs. [Editor's note: IMO stands for International Maritime Organization, the UN agency for the safety and security of shipping. An IMO number is an ID number unique to each ship.]

### On the project's progress and what it means for MPAs:

We are seeing success in several areas, beyond just the adoption of IMO numbers. There has been acceleration in the number of countries ratifying or pledging to ratify the UN Port State Measures Agreement ([www.fao.org/fishery/psm/en](http://www.fao.org/fishery/psm/en)). This is a cost-effective way of stopping illegal fish entering the market; the more countries ratify it, the better the effect of the regulation. Add to this better tracking of fishing vessel activity and you have three key elements in place: the vessel is properly identified, its track can be verified, and it offloads in a "responsible port".

The important fact here for MPA managers is that, as retailers demand more transparency in the purchase of fish from net to plate, where a vessel cannot show an 'honest track' then the catch from that vessel will not be accepted by the retailer. This means vessels that enter an MPA and turn off their vessel tracking system will be seen as 'suspicious' when they are unable to show their activity in full. And on the flip side, the good vessels will be able to show their activity in full and make their catch of premium interest to the buyers [because it is legitimately caught, recorded, and transferred] – the net result being fewer vessels abusing MPAs.

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## C. Applying economics to the enforcement of your MPA

[Editor's note: Linwood Pendleton is an environmental economist and a senior scholar of Ocean and Coastal Policy at Duke University's Nicholas Institute for Environmental Policy Solutions. He is also International Chair of Excellence at the European Institute for Marine Studies.]

### By Linwood Pendleton

#### On why the concept of optimality should apply to MPA size and enforcement:

We should apply more thought to the costs and benefits of increasing or decreasing the size of each MPA — finding the MPA's optimal size and shape. We tend to use jurisdictional boundaries, social boundaries, or biological boundaries for MPAs. But we don't apply the careful economics needed to see whether there is a best size that fits the site's enforcement goals. Managers should ask themselves, what is the optimal level of enforcement? How many patrol boats do I want to have out there? What is the optimal fine for offenses? These questions are inter-related. You can't put a ranger in every square kilometer of the ocean,

#### On a new service for MPAs that lack surveillance capacity:

Many MPA managers do not have the capacity or expertise to monitor the vessel activity in their MPA. This is why Pew is working on a Virtual Watchroom service, which will provide customers with a regular report of fishing and related vessel activity in their marine protected areas. This will draw on any tracking systems made available to it, and the systems can be customized to each site. Knowing the specifics of where and when illegal fishing might be occurring in their MPAs will enable managers to better focus patrol and enforcement resources on vessels and areas of greatest interest.

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for example, but if the fine is big enough you don't have to.

#### On how to determine the optimal fine for an MPA:

First you need to know how large the fine has to be so that the cost of the fine is greater than the benefit from fishing within the MPA. Then, since the probability of getting caught is less than 100%, you need to try to make some assumptions about the probability of getting caught under different enforcement scenarios. As the probability of getting caught goes down, the fine needs to go up. We call the probability of getting caught multiplied by the fine the 'expected fine'. So the expected fine needs to be greater than the benefit.

Of course, the other tradeoff the MPA manager has to consider is the cost of enforcement. The costs of enforcement depend on the size and shape of the MPA as well as the seasonality of illegal activity. Enforcement that yields a higher probability of getting caught usually costs more. So lower cost enforcement would mean lower probability of getting caught, which would mean a higher fine.

## Burning the gear of MPA offenders

Carl Gustaf Lundin is director of the IUCN Global Marine Programme. At the Third International MPA Congress last October, Lundin described a community-managed no-take MPA in Mozambique that takes immediate action against violators:

"I had the opportunity to visit a marine protected area in Mozambique called Vamizi Island. The local community has set aside a no-take fisheries reserve around the tourism area, and the reef is very healthy and the fish populations are doing very well. The no-take zone is policed by the community itself and there is only a small amount of illegal fishing.

"When the MPA rangers have caught someone, they burn the offender's gear publicly in the village and make a show of it. This serves two purposes: it shames the offender in front of the local community, and of course keeps the offender from using the fishing gear again. In addition, if anyone is caught three times, he is sent off the island and can't come back. This applies both to migrant fisherfolk and to Vamizi Island residents.

"So even though the enforcement is all done by the community itself, there is a certain amount of sanction associated with it. It's an interesting model."

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## Other sources of information on MPA enforcement and surveillance

- “Maritime domain awareness – How technology is improving compliance and enforcement of MPAs”, a blog post by Mimi D’Iorio, NOAA National MPA Center. May 2014. <http://openchannels.org/node/6571>
- “Is a vast marine sanctuary any use if you can’t police it?” A discussion among OpenChannels readers on MPA enforcement capacity, particularly for very large MPAs. <http://openchannels.org/comment/4523>
- “Efficient enforcement for effective MPA management”, May 2014 issue of MedPAN’s Science for MPA Management newsletter. <http://bit.ly/MedPANenforcement>
- “Advances in MPA enforcement and compliance: Practitioners describe cutting-edge techniques and tools”, MPA News 14:5
- “MPA enforcement: How practitioners are developing new tools, strategies, and partnerships”, MPA News 11:5
- “Experiences in MPA enforcement, part II: More tools and strategies”, MPA News 11:6

### On the social impact of fines:

While there is an economic optimum for setting fines, I think it is even more important to recognize that: a) a draconian fine would alienate the fishing community and might be seen as unjust (unless, say, the illegal fishers are foreign fishing vessels) and b) there are non-enforcement reasons to have rangers and park personnel on the water.

I think the social impact of the fines can be managed by having a rapidly increasing scale for fines for repeat offenses. You also can have fines that vary within an MPA — say, highest fines for strict no-take areas and

lower fines elsewhere. Because of the increased costs of enforcement near the boundaries of MPAs, I think one could also increase the fines in these areas.

So, to wrap up, the MPA manager can adjust the where/when/how much of fines, the probability of being caught, and the factors that affect the effectiveness and cost of enforcement. Because these factors also have to be weighed in a social context, it is good to discuss the tradeoffs publicly and to consider an adaptive approach to finding the schedule of fines that work best.

**For more information:** Linwood Pendleton, Duke University, North Carolina, US. Email: [linwood.pendleton@duke.edu](mailto:linwood.pendleton@duke.edu)

## D. Progress on developing the International Centre for Compliance Management in MPAs

[Editor’s note: John Knott is a Canberra-based consultant who over the past 15 years has worked closely with the Great Barrier Reef Marine Park Authority (GBRMPA) to develop all aspects of the park’s compliance management model. In partnership with GBRMPA Compliance Manager Reg Parsons, Knott is now establishing an International Centre for Compliance Management in MPAs (profiled in MPA News 14:5, “Advances in MPA enforcement and compliance”). Among the Centre’s first programs is a free, four-day compliance management workshop this November.]

### By John Knott

#### On the successful GBRMPA compliance management model:

In the GBRMPA, the business processes, theoretical models, templates, systems, manuals, standard operating procedures, guidelines, and a comprehensive training framework — all specific to the needs of the MPA — have been developed and continuously improved over a period 15 years. We have developed an outstanding intelligence unit and refined our measurement regime, and we produce comprehensive reports on weekly, monthly, and quarterly bases. The unit has been externally reviewed and evaluated by a number of national and international bodies and has been recognized as best practice.

#### On the International Centre for Compliance Management:

What we aim to offer MPAs through the Centre is an effective blueprint for building compliance management capacity. As part of the training, participants will be provided with a full set of documentation that they will modify to suit the particular context of their MPA. All tasks in the training will be grounded in the practical work of planning, setup, management, operations, evaluation, and continuous improvement of a compliance management unit. Graduates will

also have access to ongoing mentoring afterward as needed.

In our experience, an effective compliance management unit requires first-class leadership and a range of other skills in addition to the technical compliance management skills. To this end we are also developing a framework of dedicated competencies with supporting training and qualifications — on everything from risk management and governance to stakeholder management and communications.

#### On the free compliance management workshop this November:

Prior to the World Parks Congress this November, the Centre is providing a four-day compliance management workshop in Townsville, Queensland, Australia. We will offer selected managers (representing all global regions) an informative, hands-on experience. Each participant will return to country with a detailed capacity-building plan for his or her MPA, as well as a thorough grounding in the principles of compliance management.

There is no fee for the workshop. The only cost will be for participants to cover their travel and accommodation costs. Workshop participants will be able to continue on to the World Parks Congress in Sydney if they wish. We have already received expressions of interest from 12 people from various countries, and can accept a total of 25. A flyer on the workshop is at <http://mpanews.org/complianceworkshop.pdf>. For further on the workshop, please contact Reg Parsons at [reg.parsons@gbbrmpa.gov.au](mailto:reg.parsons@gbbrmpa.gov.au).

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<http://openchannels.org/node/7297>

# World Heritage Committee delays decision on Great Barrier Reef “danger list” status to 2015

At its annual meeting in June 2014, the UNESCO World Heritage Committee decided to delay a decision on whether to add the Great Barrier Reef to its list of World Heritage in Danger, opting instead to have Australia submit an updated report on the state of the site’s conservation by February 2015.

A year ago, the committee expressed continued concern to the Australian and Queensland governments over the level of coastal development adjacent to the reef (MPA News 15:1). Amid this development is a government plan — approved by the Great Barrier Reef Marine Park Authority but questioned by the World Heritage Centre — to dump three million cubic meters of dredge spoils inside the marine park area (<http://bit.ly/abbotpointdecision>).

The dredge spoils would be produced during the significant expansion of a coal export terminal at Abbot Point, next to the park. The World Heritage Centre has said the government’s dredge plan disregards less harmful disposal options. In effect, with the delay of a decision by the World Heritage Committee, the Australian and Queensland governments have one more year to show they are not proceeding with the dredge disposal plan as offered.


Meanwhile, new studies from John Cook University in Queensland indicate that dredging — and particularly its associated sedimentation and turbidity — leads to increased disease in corals ([www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0102498](http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0102498)), and that hydrocarbons from coal in Great Barrier Reef waters are already approaching international benchmarks for toxicity to marine life (<http://dx.doi.org/10.1016/j.ecss.2014.04.001>).

## World Heritage showing its influence

The prestige associated with having a World Heritage site provides an incentive for governments to ensure their sites do not become degraded. In cases where threats to a site’s heritage values begin to overwhelm management, the World Heritage Committee can place the site on its World Heritage in Danger list, which helps attract international and national support for the site’s conservation. The list can also be used as a way to encourage governments to take action against threats that are under their control.

“The World Heritage Centre holds nations accountable for their conservation actions,” says Fanny Douvere, coordinator of the Marine World Heritage Programme. “We are unique in that we apply real science-based monitoring and evaluation systems,

embedded in a nearly universally ratified international legal mechanism.”

An indication of the World Heritage Centre’s influence was apparent earlier this year. Deutsche Bank, a global financial services firm, was considered a likely funder of the coal terminal expansion next to the Great Barrier Reef. But in May, the bank backed away from the project, citing the lack of consensus between the Australian Government and the World Heritage Centre on whether the expansion plan would harm the reef. HSBC, another global bank, has also announced it will hold off on involvement in the port expansion until there is World Heritage support. 

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**To comment on this article:**  
<http://openchannels.org/node/7299>

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## Building successful endowments to support MPAs: Malpelo and the Mesoamerican Reef

In the May-June 2014 issue of MPA News, we examined cases in which MPAs have worked to make their financing more sustainable (MPA News 15:5). The article focused in particular on the value of diversifying funding streams. By generating revenue from multiple sources rather than just one or two, MPAs can reduce the risk should one of the streams dry up, such as during periods of government budget cuts.

Another way of making financing more sustainable is through endowments. The funds in an endowment are invested and the earnings on those invested funds can be spent on an MPA’s program activities. Meanwhile the capital in the investment remains there, serving to generate additional income each year. While no investment tool is risk-free, endowments can provide a level of financial sustainability for MPAs that is hard for other revenue sources to match. (MPA News covered endowments in our 9:10, 9:11, and 13:6 issues.)

On our sister site OpenChannels.org, we profile the creation and management of two endowments that are supporting MPAs: the Mesoamerican Reef Fund (MAR Fund), which supports the conservation of marine resources in Central America, and Fondo Acción’s Malpelo endowment, which supports management of the 8600-km<sup>2</sup> Malpelo Fauna and Flora Sanctuary of Colombia, a World Heritage site. For these profiles, go to <http://openchannels.org/node/7298>. 

# US President Obama proposes 2 million-km<sup>2</sup> no-take area in Pacific


On 17 June, US President Barack Obama proposed a significant expansion of the Pacific Remote Islands Marine National Monument, which currently covers 225,000 km<sup>2</sup> around multiple US-governed islands and atolls in the south-central Pacific (Howland, Baker, and Jarvis Islands; Johnston, Wake, and Palmyra Atolls; and Kingman Reef).

The plan would involve expanding the MPA to roughly 2 million km<sup>2</sup> (782,000 sq miles), which could make it the largest MPA and largest area off-limits to commercial fishing in the world. The expansion would move the MPA's boundaries seaward from each of the islands and atolls: instead of 50 nm from shore, the boundaries would be 200 nm. The enlarged area would encompass more than 200 sea-mounts that are in nearly pristine condition.

The Pacific Remote Islands monument is currently off-limits to commercial fishing and that ban would continue under Obama's expansion proposal. Recreational fishing is permitted inside the monument, although it is rare due to the MPA's remoteness ([www.fpir.noaa.gov/SFD/pdfs/Compliance\\_Guide\\_Monuments\\_Fishing\\_8-1-13.pdf](http://www.fpir.noaa.gov/SFD/pdfs/Compliance_Guide_Monuments_Fishing_8-1-13.pdf)).

Obama's proposal is now slated to undergo a public comment period, after which the geographic scope and regulations of the expanded MPA could change. The President does not need approval from Congress for the expansion. He would declare it under his executive power to designate national monuments. Former President George W. Bush used his executive power to designate the current MPA in 2009 (MPA News 10:7).

In May 2014, scientists from Marine Conservation Institute (a US-based NGO), the National Geographic Society, and the University of Hawaii delivered a report to the Obama Administration laying out a scientific basis for expanding the Pacific Remote Islands Marine National Monument ([www.marine-conservation.org/media/filer\\_public/filer\\_public/2014/06/17/primnm\\_expansion\\_report.pdf](http://www.marine-conservation.org/media/filer_public/filer_public/2014/06/17/primnm_expansion_report.pdf)). Marine Conservation Institute was also instrumental in former President Bush's designation of the current MPA five years ago.

The Obama Administration fact sheet on the expansion proposal is at [www.whitehouse.gov/the-press-office/2014/06/17/fact-sheet-leading-home-and-internationally-protect-our-ocean-and-coasts](http://www.whitehouse.gov/the-press-office/2014/06/17/fact-sheet-leading-home-and-internationally-protect-our-ocean-and-coasts) 

To comment on this article: <http://openchannels.org/node/7300>

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## NGO aims to build “voice” for high seas, including support for MPAs and a UN Sustainable Development Goal

The TerraMar Project, a US-based NGO, is on a mission to build an engaged, global community in favor of high seas conservation — a “voice for the high seas.” Founder and President Ghislaine Maxwell notes that the UN Convention on the Law of the Sea grants shared ownership of the global marine commons to all humankind. TerraMar's programs — including social media friendly initiatives to “claim” a favorite ocean parcel or to publicly pledge one's love for the ocean, among other initiatives — are designed to help spread the word about this shared ownership to the general public.

“Until now there has been no way for people to connect to the high seas as individuals or to have their views heard,” says Maxwell. “We aim to be a catalyst that enables this ocean community.”

Part of the TerraMar message is that MPAs need to be a significant element in high seas management. TerraMar also supports the adoption of a UN Sustainable Development Goal for the oceans. MPA News asks Maxwell about these positions, below.

**Among the main outcomes of the Rio+20 Conference in 2012 was the agreement by UN member states to develop a set of Sustainable Development Goals (<http://sustainabledevelopment.un.org>). The process to develop such goals is happening now. What would an ocean-specific Sustainable Development Goal entail, and why do you feel it is important?**

**Maxwell:** The ocean should be managed sustainably. Having a goal in support of this, and agreed upon by the UN, would elevate the ocean and its importance globally. As with the Millennium Development Goals that were set 15 years ago ([www.un.org/millenniumgoals](http://www.un.org/millenniumgoals)), the Sustainable Development Goals will unite public funds with private philanthropic efforts, raise awareness, and steer national and international policy. An example of the impact of the Millennium Development Goals is malaria: as a focus of the goals, the mortality rate for malaria has declined by 44% and nearly all countries have greater access to malaria mitigation equipment. These improvements are due to the public and private


### For more information:

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effort put into inoculation and prevention, ultimately involving the likes of Bill Gates and Bill Clinton.

**TerraMar supports the idea of “more and expanded MPAs.” In what particular ways would you like to see an engaged ocean community work to achieve this MPA goal?**

**Maxwell:** Although MPAs are not the only tool for ocean sustainability, they are an important one. The goals of MPAs should be to create a more productive

ocean, produce more fish, and ultimately create more jobs. We support the idea of designating the high seas — which comprise 64% of the world ocean — as a no-take MPA. Only a tiny percentage of legally harvested fish is caught in international waters, but millions of tons of fish are illegally harvested there. Once consumers understand where their fish come from and how they are caught, they can speak up for a change in governance, and can also vote with their checkbooks. 

**To comment on this article:**  
<http://openchannels.org/node/7301>

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## Notes & News

### Scotland designates 30 new MPAs

In July, Scotland announced its designation of 30 new marine protected areas. The spate of designations is aimed at protecting a range of habitats and species while allowing sustainable use of the sea where possible, including fishing. All together, the new MPAs cover 12% of Scotland’s waters, and include seamounts, cold water coral reefs, and other habitats.

Fisheries management measures for the 30 sites will be developed over the next two years. In the meantime, three fishing associations — the Scottish Fisherman’s Federation, the Scottish Creel Fisherman’s Federation, and the Western Isles Fisherman’s Association — have announced their own voluntary conservation measures for portions of three of the new MPAs. The voluntary measures limit the use of certain gear types, and focus on features requiring recovery. The voluntary measures will be replaced by statutory provisions as part of the eventual management implementation program.

Information on the 30 new MPAs is at <http://news.scotland.gov.uk/News/New-protection-for-Scotland-s-seas-f1e.aspx>

The voluntary measures implemented by the three fishing associations are described at [www.scotland.gov.uk/Topics/marine/marine-environment/mpanetwork/MPAMGT/Voluntary](http://www.scotland.gov.uk/Topics/marine/marine-environment/mpanetwork/MPAMGT/Voluntary)

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### In US, process to nominate national marine sanctuaries becomes community-based

In response to public requests for new national MPAs from communities around the US, the National Oceanic and Atmospheric Administration (NOAA) has announced a revised site-nomination process for the National Marine Sanctuary Program. In addition to reactivating site nominations in general (a process deactivated since 1995), the new process gives a voice to communities that want to provide long-term protection for their preferred marine places.

The new Sanctuary Nomination Process, unlike its predecessor the Site Evaluation List (SEL), focuses on a bottom-up approach to consideration of national marine sanctuaries. With the SEL, NOAA and appointed science panels were responsible for identification of potential sites — a top-down process. In contrast, the Sanctuary Nomination Process relies on diverse community interests coming together around the common goal of a new MPA. The new nomination process will result in an inventory of areas NOAA will then consider for national marine sanctuary designation, taking into account input and support from various interests and organizations, as well as the proposed area’s national significance and other factors.

Information on the new nomination process is at [www.nominate.noaa.gov/rule.html](http://www.nominate.noaa.gov/rule.html) and <http://openchannels.org/node/6981>

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### Journal issue on advancing governance of areas beyond national jurisdiction

A new issue of the journal *Marine Policy* focuses on the improved protection and sustainable use of marine areas beyond national jurisdiction (the high seas). Containing 14 articles, it highlights the current state of affairs in high seas governance, gaps, and ways forward.

The papers are intended to contribute to ongoing discussions at the UN on how biodiversity on the high seas should be better protected. The special issue puts forward options ranging from regional initiatives, better global institutional cooperation, and the establishment of integrated marine reporting and indicators through the UN’s sustainable development goals. Also discussed are medium- and long-term solutions such as the establishment of overarching legal principles for high seas governance, and the development of a comprehensive new legal agreement under the UN Convention on the Law of the Sea.

The articles are published as part of *Marine Policy* Vol. 49, at [www.sciencedirect.com/science/journal/0308597X/49](http://www.sciencedirect.com/science/journal/0308597X/49)

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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 is provided in part by a grant from the David and Lucile Packard Foundation.

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## Two publications on Caribbean: one on decline of coral reefs, one on managing for resilience

Two new reports examine the status of the Caribbean marine ecosystem:

\* *Status and Trends of Caribbean Coral Reefs: 1970-2012* shows a dramatic reduction in the region's coral cover: more than 50% has been lost since the 1970s. The report concludes that while climate change has been a factor, well-managed reefs have bounced back, suggesting that climate change is not the main determinant of current Caribbean coral health. According to the authors, various management actions (e.g., restoring parrotfish populations, protecting sites against overfishing, controlling excessive tourism) could help more reefs recover and make them more resilient to future climate change impacts. Published by the Global Coral Reef Monitoring Network, IUCN, and the UN Environment Programme, the report is available at [www.icriforum.org/caribbeanreport](http://www.icriforum.org/caribbeanreport)

\* *Towards Reef Resilience and Sustainable Livelihoods: a Handbook for Caribbean Reef Managers* provides managers with tools, information, and recommendations on managing coral reef ecosystems. With chapters on climate change, fisheries management, ecosystem services, livelihoods, and more, the report breaks down each chapter into a number of smaller, stand-alone "briefs". The guidebook is available at [www.force-project.eu/node/252](http://www.force-project.eu/node/252)

## New report on integrating people into MPA planning and management

A new publication from WWF South Africa provides guidelines on how MPA practitioners can apply a more "people-centered" approach to planning and management, recognizing that long-term MPA success is often linked to stakeholder satisfaction. Based on the findings of a three-year-long project, the publication highlights the importance of considering issues such as human values, aspirations, lifestyles, cultural heritage, livelihoods, local economic activities, and institutional arrangements in the development of MPAs and their management strategies. The report *Guidelines for Integrating Human Dimensions into MPA Planning and Management* is available at [www.wwf.org.za/media\\_room/publications/?11401/People-centric-guidelines-for-MPA-management](http://www.wwf.org.za/media_room/publications/?11401/People-centric-guidelines-for-MPA-management)

## Gauging the protection of US state waters

In its second annual ranking of US states and territories by how well they protect their coastal waters in no-take zones, Marine Conservation Institute finds most states and territories are failing to safeguard the nation's marine life, seafood, and coasts. The

front-running state, California, protects just 5% of its waters in no-take zones. In contrast, 16 states don't have any no-take areas.

Lance Morgan, president of Marine Conservation Institute, says, "We rely on our oceans for so many things including food, to absorb carbon dioxide in the air, economic gains, and more. It is ludicrous to treat the oceans as if they are an endless resource that we can continue to harm at will." Called *SeaStates 2014: How Well Does Your State Protect Your Coastal Waters*, the publication is available at <http://seastates.us>

## 'MPA Campaign Tracker' shows MPA planning campaigns worldwide

A new online tool called MPA Campaign Tracker allows viewers to explore and track the progress of MPA campaigns and initiatives worldwide. Integrated in [MPAtlas.org](http://MPAtlas.org), MPA Campaign Tracker currently shows more than 80 MPA campaigns underway, and allows analysis of MPA coverage and protection levels by country and habitat. The tracker was produced by Marine Conservation Institute, which encourages other organizations in the ocean conservation community to add their campaigns to the tool. It is available at [www.mpatlas.org/campaign](http://www.mpatlas.org/campaign)

## Study: MPAs can alleviate poverty...until funding ends for the MPAs

A new study indicates that MPAs can help to reduce poverty, but that this effect is dependent on the MPAs being funded adequately. Published in the journal *Global Environmental Change*, the research focuses on Indonesian MPAs that were designated with dual goals — conservation and poverty reduction. The MPAs contributed to alleviating poverty during their implementation periods, which were typically five years in length and funded by international donor institutions. But when donor assistance for the MPAs dried up, so did the poverty alleviation and conservation. Lead author Georgina Gurney of James Cook University says, "This finding questions the efficiency of the short-term approach taken in many international donor-assisted protected area projects. These projects often expect that project activities will be sustained and related benefits will continue to accumulate after external support is terminated."

A link to the study, "Poverty and protected areas: An evaluation of a marine integrated conservation and development project in Indonesia", is at <http://jamescook.academia.edu/GeorginaGurney>