

# MARINE ECOSYSTEMS *and* Management

News and analysis on ocean planning and ecosystem-based management

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## New on OpenChannels: With 'Private Groups' function, your group or project can have its own secure forum for discussion, content sharing

The OpenChannels.org website – built by MPA News and Marine Ecosystems and Management to help ocean planners and managers share knowledge more easily – now offers the ability for ocean-oriented groups and projects to establish their own online communities, with secure discussions and content sharing.

With our new Private Groups function, groups of individuals or organizations can hold easily organized discussions, share media, and keep an internal event calendar - all via our independent and safe platform. The service is free.

As a bonus, each Private Group can also make ready use of the array of functions offered publicly on OpenChannels, including our robust live chats, extensive literature library, blogs, news, tool resources, and up-to-date listings of conferences and funding opportunities.

Are you interested in learning more? Email me at [john@openchannels.org](mailto:john@openchannels.org) and we can discuss opportunities for your group.

Meanwhile, check out the new content on OpenChannels:

- **Blog:** Large, meaningless MPAs divert attention from policies that could really make a difference. By anonymous
- **Blog:** Klahowya Tillicum: Finding my footing in intercultural relations and marine planning. By Julie Gardner
- **Office Hour:** Q&A from 7 February live chat with Jon Day, "Clarifying 10 Key Misunderstandings about Zoning in the Great Barrier Reef"
- **Office Hour:** Q&A from 17 January live chat with Christine Taylor and David Stein, "Multipurpose Marine Cadastre"
- **Ask the Expert:** Ocean planner Jennifer McCann is here to answer all your questions about marine spatial planning.



**John B. Davis**  
MEAM Editor

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## Table of Contents

Communications and Marine Spatial Planning: Engaging Stakeholders and Building Public Support.....	1
Perspective: The Present and Future of Marine Spatial Planning around the World.....	4
Global survey on what tools MSP processes are using: Preliminary findings .....	5
Tundi's Take: Ecosystem Assessments - Telling it like it is .....	6
Notes & News.....	7
Upcoming events on OpenChannels.org .....	7
Ecosystem-Based Arguments to Expand Boundaries of Two MPAs..	8
The EBM Toolbox: Finding the right tool(s) to assess coastal climate change vulnerability and to plan for adaptation .....	8

## Communications and Marine Spatial Planning: Engaging Stakeholders and Building Public Support

At a recent meeting of ocean planners in North America, the question was asked:

### How do you make the concept of marine spatial planning interesting?

The fact is, unless there is an immediate need for MSP in a particular region — like when offshore wind projects move into an area with other existing uses — the concept can seem abstract or even irrelevant to current user groups. ("Why do we need to plan the ocean if things are fine as they are?") In such cases, it may even seem easier for opponents to build a constituency *against* MSP — "The government is trying to zone the oceans and take away your use rights!" — than for proponents to build one for it.

To engage stakeholders and gain their support for

MSP processes, planners must interest them in the subject at hand. Without overselling the promise of MSP, they need to explain what the process can offer, including in cases when there may seem to be no pressing need. In this issue, MEAM asks practitioners how they have addressed this challenge.

### A. Vancouver Island, Canada: "We wanted people to say, 'MSP makes sense – actually, it's kind of cool'"

Andrew Day is managing director for West Coast Aquatic, a management body established by federal, provincial, local, and aboriginal governments in Canada to undertake cooperative marine

continued on next page



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management. The focus of its work is the West coast of Vancouver Island in the Pacific province of British Columbia. With its board of eight governmental and eight non-governmental representatives, West Coast Aquatic is leading marine spatial planning initiatives in its region.

To describe to communities, stakeholders, and governments why and how West Coast Aquatic is applying MSP, Day and his team created a video that takes a light-hearted, hand-drawn approach to the subject (<http://westcoastaquatic.ca/plans/marine-planning-video>). West Coast Aquatic shows the video at local meetings and events, as well as making it available online.

### The West Coast Aquatic marine planning video is conversational and informal. What did you want to achieve by taking this nontraditional approach to MSP communications?

**Andrew Day:** Our goal was for audience members to feel that they could understand MSP and see its value. We wanted people to say, "Yeah, of course, that makes sense. Actually, it's kind of cool." And our goal was to have fun and represent our organization's vibe. We were also clear on what we didn't want to do, which was some big, complicated, boring, and threatening hoo-ha. There is a lot of condescending stuff out there with a basic message of "MSP is the savior and you are ignorant and we know what is right for you." Yuck.

### How did you create the video?

**Day:** We did it in-house. I just started talking, Kelly drew, and Jake took notes. Then we could see the natural groupings of concepts and we could see what worked and what didn't. If you can't easily draw it, it's too complicated! The video is not perfect, but we did our best by having fun together, calling some friends who could teach us the technology, focusing on the audience, and working hard.

### Would you recommend that more MSP projects adopt a similarly light-hearted, visually inventive approach like yours?

**Day:** In general, yes. I think we should honor and recognize the power that artists and entertainers have to make complex concepts understandable and to make people feel something. If MSP practitioners do not connect with the people affected, it will take longer, cost more, produce poor results, and be a drag for everyone. Having said all that, there are lots of ways of connecting. Face to face is the best. And it isn't easy to do entertainment — there is a very small zone between too light and too serious.

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## B. The Azores: "Our efforts are directed toward the opening of new opportunities"

The nine-island archipelago of the Azores, an autonomous region of Portugal, is located 1500 km<sup>2</sup> west of Lisbon. The Azores have a large EEZ — 1.1 million km<sup>2</sup> — but a relatively small population of 245,000 people. When the Azorean government started a process in 2011 of developing a maritime spatial plan, the concept of MSP was new to many stakeholders. Azorean waters have no large industries and the pressure on resources is not particularly high: the Azorean fishing fleet is primarily artisanal, consisting of small boats. Furthermore, there are already rules in place for fisheries, tourism, and other uses. Trawling, for example, is prohibited throughout Azorean waters.

Frederico Cardigos is regional director for sea affairs for the Azorean government, and oversees the MSP process.

### When you speak to stakeholders, how do you explain what MSP is and why it is needed in Azorean waters?

**Frederico Cardigos:** Our efforts are directed toward the opening of new opportunities, including exploration for deep-sea minerals. In other words, our focus is not on targeting the existing activities, but on being inspirational to new marine uses. Of course, we include the characterization of the sea, state the current uses and rules, and emphasize the overlapping of activities. If needed, priorities for use will be established. Some fisheries, for example, may have to be discontinued in especially sensitive areas, such as historical wrecks and areas with obvious use for science.

### Would you recommend that all MSP initiatives focus their language on new opportunities rather than restrictions on use?

**Cardigos:** In general, yes. Nevertheless, if use conflicts are already huge or if there are unprotected values that must be accounted for — such as sensitive species protection — the language will obviously need to be adapted to fit the circumstances. In the Azores, we are fortunate that the heavier industrial pressures like marine transportation or mining of aggregates do not demand much space or resources, and sensitive areas and species are already protected under specific legislation. Therefore, in our particular case, those issues will not need to be readdressed in the MSP process, leaving space for the new opportunities.

### Has there been any resistance to MSP so far from stakeholders or various government agencies in the Azores?

**Cardigos:** So far so good. No opposition from stakeholders has arisen. From the government agencies we had no resistance, but we are facing a certain amount

of lethargy in receiving some of their inputs. Due to the fact that MSP has not been considered a priority by all government agencies, the internal bureaucracies involved — and especially the incapacity to take the time needed to focus on such a demanding task within each agency — has delayed the MSP process. However, we have opted to take the time needed to get everyone on board and make sure that our MSP is a truly participative process.

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### C. The film *Ocean Frontiers*: “Stories told by real people can persuade audiences”

The documentary film *Ocean Frontiers: Dawn of a New Era in Ocean Stewardship* aims to help audiences understand key principles of EBM and marine spatial planning, profiling success stories that focus on a broad range of stakeholders across the US ([www.ocean-frontiers.org](http://www.ocean-frontiers.org)). Karen Anspacher-Meyer, who produced the film for Green Fire Productions, intended it to inspire audiences to get involved with MSP. *Ocean Frontiers* does this in part by showing how unlikely allies — from upstream farmers to industrial shippers to recreational fishers and others — have cooperated to sustain ocean health and coastal economies.

Over the past year, Green Fire and its partners have organized 174 *Ocean Frontiers*-related events for some 14,000 people in 31 US states, 2 US territories, and 9 countries. The venues have ranged from the US Department of State, to coastal planning meetings, to theaters, classrooms and aquariums. In surveys following the film, 85% of audience members have reported an increase in understanding about MSP, and 94% reported the film inspired them to participate in MSP processes.

#### **With *Ocean Frontiers*, was it a specific goal of yours to make MSP interesting to the people viewing it?**

**Karen Anspacher-Meyer:** We hear how difficult it is to speak effectively about marine spatial planning so that people not only understand the concept but see it as a solution they want to be a part of. *Ocean Frontiers* addresses this challenge with a plainspoken style of storytelling that has proven itself effective toward increasing understanding and support for MSP. It is a tool for persuasive communication.

As we began producing the film, we realized there were some terrific examples of initial work on MSP in the US, with inspiring people doing groundbreaking work. It wasn't just one group of people, either: these were often competing interests coming together

### D. Rhode Island, US: “Not a flashy advertisement for MSP; our audience would see through that”

A four-part series of short films on MSP was produced around the International Marine Spatial Planning Symposium, held in May 2012 in the US state of Rhode Island. Designed to capture key findings from the meeting, the series also aimed to communicate MSP concepts to policy-makers and stakeholder groups, particularly in the US.

The films were produced by the Rhode Island Sea Grant Program in partnership with Zygote Digital Films, a private company. Together they interviewed more than 30 symposium attendees from around the world, each for 30-45 minutes. Transcribed, the interviews came out to nearly 800 pages of content, which were edited down to four 8-minute films. The films consist of:

- An overview of MSP
- A film on offshore renewable energy issues as they relate to MSP
- A film on fisheries and MSP
- A film on the environmental implications of MSP

All four “Marine Spatial Planning Series” films are available at [www.youtube.com/user/RISeaGrant](http://www.youtube.com/user/RISeaGrant). Jen McCann oversaw the symposium and the films for Rhode Island Sea Grant; Dorria Marsh managed the project for Zygote Digital Films.

#### **You gathered more than 20 hours of interview footage of MSP practitioners at the symposium, then had to distill it down to about 30 minutes. How did you decide what would go into the finished videos?**

**Jen McCann:** We started by “scripting” the videos even before we conducted the interviews. By this I mean our team developed the main messages and key objectives for each film. There was a tremendous amount of research that went into this: anticipating what each interviewee would be able to talk about, based on his or her experience, then developing an individualized set of questions for that person. As a result, each film had a pre-scripted outline that we were able to fill in with the filmed interviews and additional visual content. So although we had a lot of content, it was already organized to some extent, and we just had to edit it down to be as concise and clear as it could be.

#### **The films have a distinct look: very modern with multiple images and camera angles. Was this part of your messaging?**

**Dorria Marsh:** First, with so many different people being interviewed, and with the edited clips of each person being only a few seconds long in most cases, we needed to ensure the films had a consistent look and feel. The design helps with that. At the same time, we wanted the overall experience for the audience to be a little bit exciting. Not in a flashy advertisement sort of way — our target audience would be able to see through that. What we wanted was a lightness in the look to balance out the informational aspect of the content. And by using multiple images on screen at once, we could cover more ground in less time without necessarily overwhelming the viewer. If the films were going to engage the target audience, we couldn't allow them to become boring.

#### **For more information:**

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to find solutions. Audiences tell us *Ocean Frontiers* avoids pointing fingers and conveys the stories in an inclusive style, leaving them with the understanding that collaboration among stakeholders is possible and

*vital* to ocean management. We all have a role to play.

### **You purposefully avoided the term “marine spatial planning” in your movie. Why?**

**Anspacher-Meyer:** We chose to avoid the term because we were aiming for a fairly general audience and *marine spatial planning* is essentially an insider term. One rule concerning the narration of our films is that if the average person has to think about the meaning of a particular word, don't use it. You are going to lose your audience every time they have to think about the meaning of a particular word or phrase. Use simple and direct terms — like *ocean planning* — and then your audience stays with you and follows the logic of the story.

### **As a filmmaker, you tell stories for a living. How important is storytelling in communicating new concepts to audiences, and what kinds of stories should ocean planners tell to engage their audiences?**

**Anspacher-Meyer:** Storytelling is critically important in communicating new concepts to lay audiences. I've seen over and over that stories told by real, credible people working together to make authentic change are one of the most effective ways to persuade

audiences to consider changing their opinions and behavior.

Choosing the right storyteller or “messenger” is crucial. Think about who the audience is and who they would listen to. If you are reaching out to fishermen, fishermen are your best storytellers. If you have a broad audience like we do with *Ocean Frontiers*, a broad range of people need to be part of the story: decision-makers, scientists, industry leaders, conservationists.

We hear from many people that they are tired of the doom-and-gloom stories often associated with ocean policy — how ocean health is suffering and who is at fault. *Ocean Frontiers* shows that MSP represents a way to break out of that mindset, with real examples that affirm the vital link between healthy oceans and healthy communities. ■

**For more information:** Karen Anspacher-Meyer, Green Fire Productions, US. Email: [karen@greenfireproductions.org](mailto:karen@greenfireproductions.org)

Editor's note: *Ocean Frontiers* is available in several lengths, as well as a version with Spanish subtitles. It is free of charge to all who would like to use it in their work. Visit the website [ocean-frontiers.org](http://ocean-frontiers.org) to learn more.

### **To comment on this article:**

<http://openchannels.org/node/2789>

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## **Perspective: The Present and Future of Marine Spatial Planning around the World**

**By Charles N. Ehler, Ocean Visions Consulting, Paris, France. Email: [charles.ehler@me.com](mailto:charles.ehler@me.com)**

### **Editor's note:**

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Integrated marine spatial planning is alive and well in many parts of the globe and continues to grow at astonishing speed. Strategic debates about the long-term future of marine areas are being held in various fora throughout the world. Today almost 10% of the world's exclusive economic zones (EEZs) are covered by government-approved marine spatial plans — an impressive accomplishment that has been reached over only the past 10-12 years. Over the next 10-12 years marine spatial plans will easily cover more than a third of marine waters under national jurisdiction.

Several large maritime countries are leading the way. Norway has already prepared and approved two marine spatial plans for its exclusive economic zone covering the Barents and Norwegian seas. Australia — the third largest EEZ in the world — has just completed and approved, after ten years of planning, five marine bioregional plans for its entire EEZ. A major output of the Australian bioregional planning program is the designation of the world's largest national system of marine reserves of about

2.5 million km<sup>2</sup>, about a third of its ocean territory (although critics claim that the design of the marine reserve system avoided conflicts with fishing and oil and gas development). China has completed and implemented marine zoning plans for its entire territorial sea and, more importantly, has implemented a user charge system that has raised the equivalent of over US\$4 billion to sustain marine planning and its implementation over time. Other countries that have already implemented national marine spatial plans include Belgium, The Netherlands, and Germany.

Other European countries have begun marine spatial planning programs. England should approve the first marine plan for its East region next year following public consultation and will begin work on its second regional plan in the South of England. The United Kingdom has also selected 31 of 127 proposed marine conservation zones within its waters, although critics point out that many biologically important areas have not been included. Portugal has completed a plan for its entire EEZ that is being publicly reviewed prior to

implementation in 2013. Sweden has begun a MSP process that will be completed over the next several years. Six other countries around the Baltic Sea have finished MSP pilot projects with funding from the European Union. However, European countries along the northern Mediterranean lag behind their counterparts in the North and Baltic seas. In a promising development, the Directorate-General for Maritime Affairs of the European Commission that has been promoting transnational MSP for the Baltic, North, and Mediterranean seas is expected to issue a directive on maritime spatial planning in 2013 with the intent of providing a consistent framework across the European Union for coastal and marine spatial planning. The 22 coastal countries of the European Union collectively represent one of the largest EEZs in the world (about 5 million km<sup>2</sup>, excluding overseas territories).

In the United States, the re-election of President Obama gave renewed life to coastal and marine spatial planning currently authorized under a presidential executive order. Progress has been slow but steady, particularly in the Northeast and Mid-Atlantic marine regions of the US. Despite continuing opposition from a few key legislators and lack of substantial funding, the United States will continue to move slowly ahead toward completing plans, or at least the basis for marine planning, for many of its marine regions over the next 5-10 years. However, it will remain back in the pack of countries that are leading implementation of MSP.

### Setbacks

Not all the news is as positive. The Canadian Oceans Act of 1997 was the first comprehensive oceans management legislation in the world, and expectations were high that Canada would be a model of how ocean management could be done. Five large ocean management areas (LOMAs) were identified as priority marine planning areas. A plan for the Eastern Scotian Shelf was completed in 2008, but never approved by the Department of Fisheries and Oceans (DFO). A plan for the Beaufort Sea was completed in 2009 and “supported” by the DFO, but no funds were allocated for implementation. And, after six years of preparatory work by conservation groups, fishing interests, indigenous groups, and marine scientists, the DFO initiated in 2010 the Pacific North Coast Integrated Management (PNCIMA) planning process. The goal was to develop a plan to conserve a relatively undeveloped marine region, while fostering sustainable economic development on the coast. But after only a year of cooperative planning among governments and stakeholders, countered by aggressive lobbying by the marine shipping and oil and gas interests, in 2011 the federal government

withdrew from an agreement with the Province of British Columbia and Coastal First Nations to fund the PNCIMA planning process. A new partnership between British Columbia and First Nations continues to work on a regional marine plan for the west coast of Canada.

### A bright future: 50% of world EEZs spatially planned by 2025?

Despite a few setbacks, the future of MSP and its ecological and economic outcomes looks bright. One indicator of a promising future is the startup of interdisciplinary university programs in MSP, especially in Europe; professional training programs in MSP are springing up from North America to Europe to Southeast Asia. A new generation of well-trained marine planners and managers is being born. Interest is rising in South American countries with large marine areas such as Brazil and Chile, and Southeast Asian countries, including Indonesia. A European Directive on MSP should stimulate all European countries to marine spatial planning and implementation.

If most of the 22 EU coastal countries (which, not including their overseas territories, account for 3.4% of total world EEZ area), mainland US (1.7%), Alaska (2.7%), and Hawaii (1.7%), New Zealand (2.9%), Brazil (2.6%), Mexico (2.2%), Costa Rica (0.4%), and one or two large Pacific island nations (Kiribati, Seychelles, or Fiji — each about 1%) implement MSP over the next 12 years, almost 33% of the total area of the EEZs of the world will have approved marine spatial plans by 2025.

Stretching aspirations only a little, Russia (5.3%), Indonesia (4.3%), Canada (3.9%), Japan (3.2%), Chile (2.6%), Philippines (1.1%), South Africa (1.1%), Greenland (1.1%) and Argentina (0.8%), and several other small island/large ocean nations (Federated States of Micronesia, Maldives, Mauritius — each about 1%) could add another 20-25% to a 2025 target. This will mean almost 50% of the area of the EEZs of the world can have approved marine spatial plans — and at least a large part of the world ocean will be in a better place. ■

**To comment on this article:**  
<http://openchannels.org/node/2502>

### Global survey on what tools MSP processes are using: Preliminary findings

In December 2012 and January 2013, the EBM Tools Network and OpenChannels.org conducted a survey on what tools have been used in marine spatial planning (MSP) processes around the world. More than 120 practitioners responded. We anticipate analyzing the data for the next several weeks, and posting conclusions on a rolling basis on OpenChannels.org in the blog section.

Among the preliminary findings:

- Respondents mentioned using approximately 70 different tools.
- Only six tools, however, were cited by more than two respondents. The most commonly used tool was GIS, followed in order by Marxan, MarineMap, Marxan with Zones, Oregon MarineMap, and SeaSketch.

**For more preliminary findings, go to [OpenChannels.org/blog](http://OpenChannels.org/blog).**

# Tundi's Take

## Ecosystem Assessments: Telling it like it is

By Tundi Agardy, MEAM Contributing Editor. Email: [tundiagardy@earthlink.net](mailto:tundiagardy@earthlink.net)

Nothing could be more droll than an ecosystem assessment. By its very nature, assessment is meant to be comprehensive, systematic, rational – not the stuff of colorful sound bites or emotive calls to action. But what is really more important to effective communication about marine ecosystems and the urgent need to conserve them than thorough knowledge about how these ecosystems function, how we use and value them, and what pressures they face? After all, we cannot love what we do not know, and without being informed and invested in marine ecosystems, we cannot hope to generate the resources and will to conserve them.

Basing communication strategies on sound assessments allows us to tell the ocean story with confidence. It also allows us to communicate priorities, and chart our progress in EBM over time, keeping both the public and important decision-makers informed and aware. Constituencies built on sound strategic assessment cannot be criticized as representing special interests, or pandering to environmental hype or hysteria.

I may be biased, but I do strongly believe that it was the Millennium Ecosystem Assessment of 2005 that changed much of the global conversation about the importance of marine and coastal systems for human well-being, and the risks to that human well-being brought about by coastal degradation. When the early planning for the MEA began, there was decided disinterest (nothing new to any of us in the marine field) – a sense that marine and coastal systems were a) of limited importance to humans, and b) in pretty good shape overall. The findings released in 2005 really grabbed people's attention in that the links between seas and all life on the planet were myriad, and highly significant. The MEA also showed that coastal and marine services were being lost at rates much greater than what was assumed. This comprehensive assessment, involving over 1200 scientists from 80 countries, highlighted the conditions of virtually all marine ecosystems and presented evidence that the ability of these systems to deliver important ecosystem services was being severely impaired by human activity.

Global scale assessments can only go so far as tools of strategizing and communicating, however. At smaller scales, assessments can actually guide how EBM can take place, to achieve specified goals. In the Mediterranean, the 22 parties to the regional seas (Barcelona) convention have agreed on what they are striving for through very specific objectives, indicators, and targets. The agreed Ecological Objectives span all the interconnected coastal/marine ecosystems (coastal lands, transitional or estuarine areas, nearshore habitats, pelagic waters, deep sea) and consider

all the impacts that these ecosystems face. By setting objectives regarding optimal conditions for biodiversity, food webs, hydrography, sea floor integrity, commercially exploited fish and shellfish, eutrophication, noise and chemical pollution, the countries have agreed on what they should strive for through EBM. Representatives are now deciding what the targets for indicators of these 12 Ecological Objectives will be, and from that will flow specific management plans to achieve EBM.

Strategically designing management to address priority needs is only possible once an assessment of conditions is made. In the Mediterranean, the recently completed comprehensive assessment of biodiversity, ecosystem services, and regionally important pressures such as pollution, shipping, and over-fishing, essentially serves as a baseline. However, the initial integrated assessment is not a good source document for communications – it is too dense for that. Instead, its findings have been captured in the most recent *State of the Mediterranean Marine and Coastal Environment Report* (see page 7, this issue), which explains in clear language, with excellent infographics, the current condition of the sea. As a reference document, it will serve to present easily comprehensible comparisons with future conditions as well.

At an even finer scale, environmental assessments can help decision-makers evaluate tradeoffs to make informed choices. These assessments can also help raise awareness about why such choices are made, and why investing in EBM will result in positive outcomes. One example is the multi-institutional assessment of coastal ecosystem services in Abu Dhabi, involving my Marine Ecosystem Services (MARES) Program at Forest Trends, GRID-Arendal, WCMC, and UNEP, as well as several academic and research institutions. We are currently working to evaluate the potential for mangroves, seagrasses, saltmarshes, and other coastal habitats to capture carbon (in what is now known in the trade as “blue carbon”). But the project looks beyond carbon sequestration to other ecosystem services that these blue carbon habitats provide. By assessing the value of these services, decision-makers will be able to weigh the costs of protection/restoration against the benefits provided by carbon sequestration, fisheries production, biodiversity to support tourism, shoreline stabilization, and waste management, among others. This relatively small-scale project seems a clear example of how assessment allows prioritization, and also lays the groundwork for clear communications about the value of marine ecosystems and the need for effective management. **M**

“We cannot love what we do not know, and without being informed and invested in marine ecosystems, we cannot hope to generate the resources and will to conserve them.”

To comment on this article:  
<http://openchannels.org/node/2790>

## Notes & News

### New MSP guide shows how site would look at different stages of planning

The MarViva Foundation, an NGO that supports sustainable management of coastal and marine resources in the Eastern Tropical Pacific region, has produced a new guidebook on marine spatial planning. Based on findings from a regional capacity-building and training event on MSP in May 2012, the guide focuses on challenges faced by practitioners in North America, the Caribbean, and the eastern Pacific.

Similar to other guides on MSP, the publication describes the concept of marine spatial planning, the elements of MSP processes, and governance issues. A unique feature of this guide, however, is that it uses a particular example — in this case the south Pacific coast of Costa Rica — to illustrate the progression of an MSP process. Readers can follow a series of maps of the site (called “How does the area of analysis look now?” and “How do we want the area of analysis to look in the future?”) to see how MSP advances from one stage to the next. *Marine Spatial Planning: A Guide to Concepts and Methodological Steps* is available at <http://openchannels.org/literature-library/1360174790>.

### Study on EU policy and marine spatial planning

A new analysis of European policies on marine spatial planning concludes that the EU's existing Marine Strategic Framework Directive already provides an adequate legal framework for MSP, including links to many directives, and that any new directive focusing solely on MSP could “increase complications and tensions in an already crowded policy landscape.” Authored by Wanfei Qiu and Peter Jones of the University College London, the study features discussion of ecosystem-based and integrated-use perspectives on MSP, including in relation to the role of MPAs. The open access paper “The emerging policy landscape for marine spatial planning in Europe” appears in the journal *Marine Policy* at <http://dx.doi.org/10.1016/j.marpol.2012.10.010>.

### New report on state of Mediterranean coastal and marine environment

Produced under the aegis of the UNEP Mediterranean Action Plan, the latest report on the state of the Mediterranean coastal and marine environment focuses on the drivers, pressures, state, and known impacts of human activities in the region. The report

is intended to inform decision-makers from contracting parties to the Barcelona Convention as they advance a formal ecosystem approach to managing human activities in the Mediterranean. These parties (countries bordering the Mediterranean Sea and the European Union) committed in 2008 to applying an ecosystem approach to the region.

The report provides guidance and recommendations on avenues for furthering ecosystem-based management in the Mediterranean. These avenues primarily pertain to establishing a systematic, comprehensive, and efficient monitoring regime for Mediterranean coastal and marine systems. The report also analyzes information gaps that exist in regional monitoring data. The *State of the Mediterranean Marine and Coastal Environment* report is available at [www.grida.no/publications/med](http://www.grida.no/publications/med).

### Report: Reverse global declines in ocean health by scaling up regionally successful strategies

The global decline of ocean health is primarily due to market and policy failures, according to a report by the UN Development Programme and the Global Environment Facility. These failures have led private and public entities to under-invest in environmental protection measures (such as wastewater treatment and coastal habitat protection) and over-invest in activities that negatively impact the marine environment, including over-fishing and chemically intensive agriculture.

According to the report, these failures — and the resulting declines in ocean health — could be reversed by scaling up proven instruments and approaches that have worked at regional levels. These include strategies, for example, that have helped lower the risk from invasive species in ship ballast water, and that have bolstered the sustainability of tuna fisheries in the Pacific.

*Catalysing Ocean Finance* (Volumes I & II) estimates that an initial public investment — on the order of US \$5 billion over the next decade — could catalyze several hundred billion dollars of additional public and private investment, and thereby foster global transformation of ocean markets toward sustainability. The report is at [www.undp.org/content/undp/en/home/librarypage/environment-energy/water\\_governance/ocean\\_and\\_coastalareagovernance/catalysing-ocean-finance](http://www.undp.org/content/undp/en/home/librarypage/environment-energy/water_governance/ocean_and_coastalareagovernance/catalysing-ocean-finance). 

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## Upcoming events on OpenChannels.org

### Webinar: Role of Decision Support Tools and Toolkits in Improving Conservation Capacity

Date: 26 February  
Time: 7 pm GMT / 2 pm EST / 11 am PST

### Live Chat: Current and Future Management of the Phoenix Islands Protected Area (Kiribati)

Date: 27 February 2013  
Time: 9 pm GMT / 4 pm EST / 1 pm PST (In Kiribati: 28 February, 9 am)

### Webinar: Turning Visitors into Partners — Challenges and Successes at Golden Gate National Recreation Area

Date: 14 March 2013  
Time: 5 pm GMT / 1 pm EDT / 10 am PDT

### Webinar: Marine Protected Area Network Planning in the Bay of Fundy/Scotian Shelf (Canada)

Date: 9 May 2013  
Time: 5 pm GMT / 1 pm EDT / 10 am PDT

For more information on any of these events, go to [OpenChannels.org](http://OpenChannels.org) > Community > Upcoming events

# Ecosystem-Based Arguments to Expand Boundaries of Two MPAs

The US National Oceanic and Atmospheric Administration is considering a proposal to expand the boundaries of two federal MPAs along the coast of northern California — Cordell Bank National Marine Sanctuary and the Gulf of the Farallones National Marine Sanctuary. Designated in the 1980s, the sanctuaries currently cover roughly 1800 square miles (4700 km<sup>2</sup>) of ocean. The expansion area, proposed by the Administration of President Barack Obama last December, would cover an additional 2500 square miles (6500 km<sup>2</sup>) — more than doubling the sanctuaries' size.

Although the expansion, as proposed, would not impact current fishing activity, it would apply a permanent ban on offshore oil drilling in the expansion area. The proposal is under public review, with comments welcome through 1 March 2013.

When MPA boundaries are changed to help ensure the sustainability of particular ecosystem services, it is a form of ecosystem-based management. In the case of this proposed expansion, ecosystem-based arguments provide the basis for it. "The expansion area includes the entire upwelling zone that feeds the existing sanctuaries," says Lance Morgan, Chair of the Cordell Bank National Marine Sanctuary Advisory Council. "So the addition provides for continuity of this critical environmental process that is the basis for the rich productivity and concentration of marine life at Cordell Bank and the Farallon Islands — from rockfish and sea urchins to seabirds and marine mammals."

Richard Charter, Vice-Chair of the Gulf of the Farallones National Marine Sanctuary Advisory Council, considers the upwelling zone to be among the most productive in the world. "There is ecosystem science that confirms higher concentrations of certain large marine predators at various locations within the proposed expansion area — a probable indication of the presence of prolific prey species, reinforcing the need to protect the rich biota in the region," he says. A ban on offshore drilling in the area is needed, he says, because any offshore drilling accident would threaten the ecosystem and its services. "A significant oil spill would be virtually impossible to clean up in the often hostile sea-states and extreme weather conditions that can exist in this area. And nearby sensitive estuaries are configured in ways prohibitive of booming and other site-specific response measures in the event of an oil spill."

Previous attempts to expand the sanctuary boundaries stalled due to political concerns about blocking future offshore oil and gas development. (Richard Charter describes the development of the current proposal at <http://meam.net/Charter.htm>.) To learn more about or comment on the current proposal, go to [http://farallones.noaa.gov/manage/northern\\_area.html](http://farallones.noaa.gov/manage/northern_area.html) . 

**To comment on this article:**  
<http://openchannels.org/node/2792>

**Editor's note:** The goal of The EBM Toolbox is to promote awareness of tools for facilitating EBM. It is brought to you by the EBM Tools Network, an alliance of tool users, developers, and training providers.

## The EBM Toolbox by Sarah Carr

### Finding the right tool(s) to assess coastal climate change vulnerability and to plan for adaptation

Coastal natural resource managers and communities have begun to plan for the impacts of climate change on their local ecosystems and infrastructure. However, many practitioners are finding it difficult to select tools suited to their needs and capacities. This is because of the wide variety of tools, the difficulty of finding clear information about tool functions, and the lack of ways to compare different tools (e.g., their functionality, data and training requirements, and strengths and limitations).

The EBM Tools Network will release a decision guide *Tools for Coastal Climate Adaptation Planning* in March 2013. The guide provides information on a set of key tools for multi-sector climate-related planning, like plans that incorporate both ecosystem health and human well-being. It also explains and illustrates the utility and role of tools in

planning, and helps practitioners select appropriate tools for their projects.

To learn more about the guide:

- Attend the roll-out webinar of the guide on 12 March at 2 pm EDT / 11 am PDT / 6 pm GMT to ask questions about the guide and the tools in it. Register for the webinar at [www1.gotomeeting.com/register/406184944](http://www1.gotomeeting.com/register/406184944) .
- Learn about the guide and tools in it in person at the National Adaptation Forum ([www.nationaladaptationforum.org](http://www.nationaladaptationforum.org)) in Denver, Colorado, US, from April 2-4. Look for the *Tools for Coastal Climate Change Vulnerability Assessment and Adaptation Planning* symposium.
- Get an electronic copy of the guide as soon as it is released. Send me ([sarah\\_carr@naturereserve.org](mailto:sarah_carr@naturereserve.org)) an e-mail to be put on the mailing list.

**To comment:** <http://openchannels.org/node/2793>

Sarah Carr is coordinator for the EBM Tools Network. Learn more about EBM tools and the EBM Tools Network at [www.ebmtools.org](http://www.ebmtools.org) .