

MARINE ECOSYSTEMS *and* Management

News and analysis on ocean planning and ecosystem-based management

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This is the final *paper* issue of MEAM

MEAM will continue in email format and will feature more applied, practitioner-focused content

Hi everyone,

This is the final issue of the traditional MEAM. After publishing for eight years and building a global audience of 4500 practitioners, MEAM is preparing its first big change in format. In September 2015, MEAM will:

- Become a monthly publication, rather than bimonthly
- Provide more applied, practitioner-focused content
- Become an all-electronic newsletter. This will end our paper version.

The main reason for these changes is for us to serve you better. In our recent survey of readers, we heard from you that you wanted more applied content: more cases, more advice from your peers, more information that was immediately useful and useable. That information is on its way, and we're excited about that!

We recognize that those of you who receive only the paper format of MEAM will be impacted by the end of our paper version. We sincerely apologize. The percentage

of our subscribers who receive only paper has shrunk steadily over the years to just 6%, while postage rates have risen. Combined with MEAM's upcoming move to more frequent distribution, these trends indicate the time has come for us to make the switch to all-email delivery.

We will automatically convert all paper subscribers to email delivery in the coming weeks.

In the meantime, we would love to receive your suggestions on topics you would like to see covered in MEAM. Please let us know at meam@u.washington.edu. We look forward to hearing from you.

Sarah Carr, MEAM Editor

John Davis, MEAM Supervising Editor



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Getting business on board: Engaging the business community in ocean planning

According to figures from the World Ocean Council, an ocean industry alliance focused on sustainable development, maritime industry accounts for a remarkable amount of global economic activity. More than 50 thousand merchant vessels deliver 90% of international trade. Offshore energy sources supply 30% of oil and natural gas. More than one million kilometers of submarine cables carry 98% of international communications. Roughly 1.3 million vessels work the worlds' fisheries.

Yet despite this vast industrial use of the oceans, ocean planning processes are often dominated by government agencies, NGOs, and academics with relatively little involvement by industry. In some cases this is by industry default, such as due to a lack of understanding of the MSP movement or its utility; in others

it is because planners have not engaged industry effectively (see box on page 2, "Barriers to industry involvement in MSP").

The potential benefits of ocean planning for industry can be substantial. This was shown, for example, by a study that assessed potential conflicts among offshore wind energy, commercial fishing, and whale-watching sectors in the US state of Massachusetts. The researchers estimated that using marine spatial planning rather than conventional sectoral planning could prevent more than US \$1 million in losses to the fishery and whale-watching sectors while generating more than \$10 million in extra value to the energy sector. (These figures would accrue over 27 years — see MEAM 5:5, "Analyzing tradeoffs of ecosystem services in Massachusetts Bay").

continued on next page



Constructive engagement of industry in marine planning processes — and the support of ocean businesses for the end results of those processes — increases the likelihood of marine spatial plans being implemented and achieving widespread compliance.

In this issue of MEAM, we learned from a variety of experts what ocean planning practitioners should (and should not) do to get the ocean business community actively and productively engaged in ocean planning processes.

A. Convey the costs of conflict and degradation in business-related terms

Editor's note: Jorge Jiménez is director general of the MarViva Foundation, a regional, non-profit organization that promotes the conservation and sustainable use of coastal and marine ecosystems in the Eastern Tropical Pacific (www.marviva.net). MarViva's work focuses on sustainable markets as well as marine spatial planning.

MEAM: What advice do you have for ocean planning practitioners who are getting started on engaging the ocean business community?

Jorge Jiménez: Every business sector is different and operates in specific contexts. Despite the differences, no business sector can grow indefinitely in a degraded environment. At the same time, in the face of economic activity, no healthy environment can be maintained without the commitment of a responsible business community.

Engagement of ocean businesses in multi-sectoral marine planning needs to derive from a previous analysis of the stakeholders as a whole, including their relative interests and their preliminary positions with regards to potential management of traditional private and economic activities. A powerful opposing sector might represent a disruptive force in an incipient planning process. On the other hand, a powerful

corporate sector, convinced of the advantages of such processes, might be a pivotal catalyst and advisor to enable its advancement.

Early development of information and awareness of the magnitude of the conflicts faced by the ocean businesses given the lack of planning is key to building the required confidence and persuading the sector to get involved. Joint development of preliminary alternatives to reduce or eliminate conflict is also critical. The implementation of planning measures (use regulations, zoning schemes, among others) might be considered an interference by the business sector. Nonetheless, if designed as a result of a collaborative process in the context of conflict resolution and with the corresponding cost-benefit analysis, it can convince the business sector and gain from its inputs and know-how.

Planning and managing the marine space means maximizing the benefits to all stakeholders while minimizing the impact to the environment. One position that needs to be established at the onset is that the ocean belongs to all and therefore we need to agree on how to use it sustainably. If business sectors realize that other users have legitimate interests in some areas or resources, and potentially crossing those stakeholders might represent a lengthy and expensive process, it will be easier to reach agreements.

MEAM: Are there some mistakes to avoid?

Jiménez: The business community talks about efficiency and profit. We need to talk to them in the same language. Approaching the corporate sectors with ecological arguments is a mistake. We need to talk about costs and benefits. Ocean planning benefits businesses and their sustainability. Ocean planning must encompass comprehensive cost-benefit analysis of the activities, including the proper selection of sites and methods by which the business sector can secure long term operations. For many sectors, maximizing short-term benefits is ecologically unsustainable, although some elements in the private sector might favor that approach. To inform those doing this, it is necessary to convey, in business-related terms, the implications of an escalating high-level conflict (among human uses or among uses and the environment) and the impact of that conflict/degradation on their future performance and results.

Approaching business sectors without community and government stakeholders is also a mistake. Business people need to understand from the start of the process that there is increasing need and interest in the ocean planning process and that we are calling their attention as essential participants in it.

MEAM: Do you have examples of ocean planning processes that have done a particularly good job of engaging ocean businesses?

Barriers to industry involvement in MSP

In an essay published in the June-July 2010 issue of MEAM, Paul Holthuis of the World Ocean Council described three main barriers to industry involvement in MSP:

- Lack of understanding of the MSP “movement” and momentum;
- Limited engagement in the multi-stakeholder processes characteristic of MSP because industry is engaged in sectoral processes; and
- Lack of structure and processes engaging the diverse ocean business community in MSP in a systematic manner that identifies each kind of industry relevant to the planning area and specifically engages individual companies.

For more, see “Marine spatial planning and ocean industries”, MEAM 3:6.

Jiménez: One noteworthy experience has been the zoning of the Stellwagen Bank National Marine Sanctuary (<http://bit.ly/Stellwagenzoning>). The navigation sector collaborated in the process and abides by the resulting regulations. Several factors were fundamental to this achievement: 1) the existence of detailed information, not only of navigation routes, ship velocities, and use intensity, but also whale aggregations and distribution; 2) extensive public engagement in the process, with strong public support from awareness campaigns; 3) the existence of a strong governance structure for the area that commanded respect and had the influence to change the existing scenario. So far, the effective cases have involved only one to three sectors. Truly multi-sectoral planning is still very limited.

For more information: Jorge Jiménez and Alejandra Pacheco, MarViva. Emails: jorge.jimenez@marviva.net and alejandra.pacheco@marviva.net

B. Avoid going to battle with businesses

Editor's note: Linda Sams is the head of sustainability and fish health at Tassal Group Limited, Australia's largest producer of aquaculture salmon and one of the largest employers in Tasmania, Australia (www.tassal.com.au). Tassal has been actively involved in marine and coastal planning processes, including spatial zoning, at both the Australian state and federal levels.

MEAM: What advice do you have for ocean planning practitioners getting started on engaging the ocean business community?

Linda Sams: First of all, planners should learn about the businesses they want to engage. Planners should meet with businesses individually and ask them to discuss their strategic direction, risk profile, and planning tools. Planners should also develop an understanding of the main drivers for these businesses and how ocean planning may impact their development decisions and opportunities and constraints for growth.

Second, planners should provide businesses with the background information they need such as relevant legislation, agency and department dynamics, organizational charts, and ocean usage information — e.g., shipping lanes, recreational and commercial fishing areas, high value habitat. Planners should also come to the table with clarity of purpose and direction, a strategic plan, action items, targets, and clear deadlines and responsibilities. The sweet spot for businesses (and everyone else) is a process that neither fast tracks predetermined outcomes nor drags on forever.

Third, planners should carefully consider who they engage and when. They should bring moderate

environmental NGOs and businesses to the table first to model outcomes and benefits. More radical/polarized participants should also have a voice and be able to bring their position to the table in the process. But the process should be steered with participants that bring a collaborative mindset to the table.

Other strategies/things to keep in mind:

- Try pairing a business with a conservationist or scientist to allow them to learn each other's perspective and language before they enter into the planning process. They can co-mentor each other so the different perspectives are understood.
- Bring economic development departments into the conversation with business. Align the process with economic goals and be creative about how business can benefit from being at the table.
- Always give businesses public credit for the compromises they make. Businesses risk their reputation when making compromises, and they should benefit (socially and reputationally) for the positive steps they take.
- Be very transparent about motives and politics throughout the process. This will invite criticism, but in the end it will be worth it.

MEAM: Any mistakes to avoid?

Sams: Yes, definitely some of those, too. First, avoid consulting with business as an afterthought. Businesses should be brought in the formative stages of planning and should be part of determining outcomes. When businesses aren't backed into a corner, collaborative solutions can be achieved.

Second, planners should avoid a negative mindset about businesses and assuming they will have to do "battle" with them. Large and small business holdings are an important and legitimate part of the cultural framework of the coastal and marine environment. Planners should first assume that businesses will want to minimize their impact and protect their image

More resources on maritime industries and their roles in ocean planning

- **"The Shipping Industry and Marine Spatial Planning: A professional approach":** <http://bit.ly/MSPshipping>
- **"Offshore Energy Development: How Marine Spatial Planning Could Improve the Leasing/Permitting Processes for Offshore Wind and Offshore Oil/Natural Gas Development":** <http://bit.ly/offshoreenergyMSPguide>
- **Multiple resources from the World Ocean Council** (www.oceancouncil.org/site/resources.php), including the outcomes of the 2014 Business Forum on Ocean Policy and Planning (<http://bit.ly/WOCbusinessforum>) and an analysis of industry comments on the US National Ocean Policy (<http://bit.ly/NOPcomments>)
- **IUCN Business and Biodiversity Programme:** www.iucn.org/about/work/programmes/business

and that they do want to be engaged in conservation programs.

Third, planners should understand commercial sensitivities. Do not ask competitors for a marine space to sit in a room together and show all their cards in relation to development — it is not going to happen.

Who are you going to call?: The role of boundary organizations in engaging business

“Boundary organizations” are institutions that facilitate collaboration and information exchange among diverse sectors. An example is the World Ocean Council (see adjoining article), whose programs help bridge the divide between for-profit businesses and the entities that traditionally coordinate ocean planning processes (government, NGOs, and academia). The council combines knowledge of the current status of ocean planning processes with knowledge of the interests, constraints, operations, and leadership of businesses and industries relevant to ocean planning.

Boundary organizations can also operate as joint public-private mechanisms. An example of this is the NOAA National Marine Sanctuary System Business Advisory Council in the US (<http://sanctuaries.noaa.gov/management/bac/welcome.html>). This council was established in 2013-14 to provide advice and recommendations to the National Marine Sanctuary System about its relationship with the ocean business community. Members of the council represent diverse interests such as travel and tourism, recreation, fishing, transportation, communication and marketing, and energy, among others. According to council coordinator Rebecca Holyoke of NOAA and an initiating staff member Elizabeth Moore of NOAA:

“Businesses often are not seen as stewards of the ocean, and government agencies – especially those protecting the ocean – aren’t always viewed as proponents of ocean use. We hope the Business Advisory Council will help change these entrenched viewpoints and lead to more cooperative relationships and, ultimately, enhanced ocean protection.”

Another model for an ocean boundary organization is The Maritime Alliance (www.TheMaritimeAlliance.org), a San Diego, California-based organization focused on promoting sustainable, science-based ocean industries. The Maritime Alliance and its Foundation are currently working to mobilize support and financing for an MSP plan for San Diego County that would serve as a test bed and model for the State of California. Michael Jones, the President of The Maritime Alliance and The Maritime Alliance Foundation, told MEAM:

“Over the last couple of years we have spoken at length with interested parties — economic development officials, elected officials, NGOs, Port of San Diego, private companies across a series of ocean industry sectors (including commercial and recreational fishing), State and Federal agencies and others — to position MSP as a process that can be a win-win scenario where a balance of conservation and economic development is possible.... Ocean planners need to work with industry to create this near-term win-win situation that allows industry to see why it makes sense to participate in MSP.”

For more information:

Rebecca Holyoke and Liz Moore, NOAA, US. Emails: rebecca.holyoke@noaa.gov and elizabeth.moore@noaa.gov

Michael Jones, The Maritime Alliance, US. Email: mbjones@themaritimealliance.org

And, last, a common mistake is not building in enough time to change commercial situations to allow for a different use of the marine space. Business will need years, not months, to adapt to major changes.

MEAM: Any challenges and benefits of participating in ocean planning processes that are unique to businesses?

Sams: For businesses, successful ocean planning processes can reduce risk of changing regulatory environments and help “future proof” the business by increasing certainty of development and/or operations in areas that are recognized as suited to the business. This supports long-term planning.

Conversely, planned, ongoing, stalled, or failed ocean planning processes are a challenge for business because they can be perceived as blockages for growth and development, thereby impacting shareholder value and commerce.

Another benefit of working in these processes is furthering the corporate social responsibility evolution of a business. By participating in these processes, businesses gain a better understanding how they can contribute to a healthy future for the ocean and grow as a business in a new economy that values responsible development.

For more information: Linda Sams, Tassal Group Limited, Australia. Email: linda.sams@tassal.com.au

C. Engage the ocean business community in designing the planning process itself

Editor’s note: Paul Holthus is founding CEO and president of the World Ocean Council, an industry leadership alliance for corporate ocean responsibility (www.oceancouncil.org). A key area of effort for the World Ocean Council is encouraging and facilitating proactive, constructive industry involvement in MSP. It is working with the business community to develop understanding of MSP and the associated issues, stakeholders, and process.

MEAM: Any advice for ocean planning practitioners getting started on engaging the ocean business community?


Paul Holthus: Build relationships with the ocean business community by developing common ground around the need and opportunity to improve the relevant data and science. Create a process to identify data needs and build a cooperative process for stakeholders to gather and share data and support independent science in agreed-upon priority areas. If ocean planning is to move forward, ensure that there is a solid rationale for the planning. It should be based on good data and science that have informed good risk

assessment and an evaluation of the costs and benefits of the planning.

MEAM: What mistakes should be avoided?

Holthus: Much of the ocean planning to date has been through a process wholly, or largely, developed without input from the business community. Industries are then approached to provide input to a system and process that they often had not heard about previously and had no input in developing. Rather than coming to the business community to seek involvement in planning through a process that has not considered all stakeholders when it was developed, a better approach is to engage the ocean business community in designing the planning process itself. This is more likely to create a sense of co-ownership of the process, lead to constructive industry input into the planning, and result in participation in implementing the outputs of the planning.

MEAM: Any examples of ocean planning processes that have done a particularly good job engaging ocean businesses?

Holthus: At the World Ocean Council we are in the process of reviewing and evaluating marine planning efforts, their interaction with the business community, and what benefits, if any, for the business community resulted from previous marine planning efforts. We will be able to provide much more information on this later this year. 

For more information: Paul Holthus, World Ocean Council, US. Email: paul.holthus@oceancouncil.org

To comment on this article: <http://openchannels.org/node/10455>

Is integrated use, as opposed to ecosystem-based planning, becoming the overarching focus of European MSP?

In a recent blog published on OpenChannels.org (“European marine spatial planning policies towards the good environmental status of our seas are veering off course?”), Peter Jones, Reader in the Department of Geography of University College London, described what he sees as a worrying trend in international MSP. In his view, MSP that is focused on integrated use is starting to compete with — or even supersede — ecosystem-based MSP, particularly in the EU:

“This is certainly a worry in Europe, as it would seem European maritime policy is veering off course towards an integrated-use model of maritime spatial planning in which ecosystem protection/restoration through measures such as MPAs to achieve good environmental status is demoted to just another sectoral priority, with trade-offs consistently steered towards economic development. It could also be reflective of a wider worrying trend whereby integrated-use maritime spatial planning becomes the focus rather than ecosystem-based marine spatial planning.

“We need to ensure that marine spatial planning co-evolves and converges with MPAs and wider environmental protection measures to achieve a balance between marine ecosystem protection and maritime blue growth, and that integrated-use maritime spatial planning does not become a competitor to and diverge from an ecosystem-based marine spatial planning approach. EB-MSP approaches could include both sustainable blue growth and effectively governed MPAs. We need both, but the worry is that MSP is veering off course and that MPAs are sinking down the agenda, along with the health of the marine ecosystems that they help protect.”

Read the full blog at www.openchannels.org/node/10076

Tundi's Take

Ocean planners, want to engage business? Start walking the walk and talking the talk

By Tundi Agardy, MEAM Contributing Editor (tundiagardy@earthlink.net)

We often say that all three sectors of society — government, civil society, and business — are necessary for effective ecosystem-based management. And while governments and civil societies around the world have been actively engaged in marine management, attempts to get business on board have largely failed, and private sector participation has been sorely lacking. So what's behind the trepidation, or even antipathy, of the business community to participating in marine management?

Speaking the language of business

One factor is language. Business and management interests lack a shared vocabulary, straining communications between them. As ecologists we think it's a no-brainer that the private sector should be interested

in protecting the services that marine ecosystems provide them and thereby reducing the risk of losing future profitability. But to the private sector, the narrative is neither clear nor compelling.

To convince business that investing in ocean management makes good business sense, ecologists, planners, social scientists, and managers need to speak the language of business. We need to be able to deftly describe value propositions. We need to understand and explain what drives capital, where there is value added, how to capture and sustain benefit flows, and how to get to scale following successful incubation of projects. We need to understand finance, private equity, markets, public-private partnerships, bonds, and incentives and know when to promote which mechanism. We need to highlight existing and

To comment on Tundi's Take:
<http://openchannels.org/node/10456>

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SUPERVISING EDITOR

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CONTRIBUTING EDITOR

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CORRESPONDENCE:

MEAM

School of Marine and

Environmental Affairs

University of Washington

3707 Brooklyn Ave. N.E.

Seattle, WA 98105, US

meam@u.washington.edu

Tel: +1 425 788 8185

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emerging commodities that are ripe for investment, follow their supply chains, and provide new metrics for performance and actionability. We should identify bona fide investment opportunities and signal these to the private sector. And most importantly, we need to be better at providing proof, not just theoretical rationales, for why investing in EBM is a good thing.

Profits matter

But the problem isn't all semantic, or even in the way we market (or fail to market) EBM. Because while it is true that cost savings and risk reduction are the inevitable outcomes of better and more efficient management, these things may just not resonate enough. Recently I was pulled aside by an investor who attended a meeting on environmental markets. He pointed out that while efficiencies do figure into investors' calculations about whether or not to engage, what really gets investors' attention is one simple thing: profitability. That reminded me of a meeting on innovative financing in the marine realm (a Marine Katoomba event hosted by Forest Trends some years ago) where speculative investors circled hungrily

at the start of the meeting. By the end of the meeting, after we had discussed the nuances of property and access rights, the state of ecological knowledge about ecosystem services, and the challenges businesses faced when operating in the marine space, we had identified a hundred reasons why private sector engagement was so darn difficult. And the investors were long gone.

We in the conservation community ought to work more purposefully to engage the business community in EBM by doing three things:

- 1) Learning and using the language of business;
- 2) Using case studies to demonstrate how private sector engagement can be achieved; and
- 3) Showing how EBM increases not only management efficiency but also potential profitability.

Only then will business be truly on board and partner with government and civil society to secure the future of our valuable seas. **M**

"If the fishers are having coffee, you drink coffee with them":

Interviews on MSP in St. Kitts and Nevis

In 2013, MEAM met with marine spatial planners from throughout the Americas to discuss their experiences and lessons learned, and to hear their stories. One meeting was with planners for the Caribbean nation of St. Kitts and Nevis, where a draft ocean zoning plan had been developed. The full transcript of this discussion is at <http://openchannels.org/node/10459>. Below are excerpts:

"As we know with any kind of planning — land use planning, marine planning, family planning — it really comes down to how individuals interact and communicate with each other. I like to call it *ego*-system management. So when we manage ecosystems, that's one thing, but it's really about the *ego*-system and how you interrelate — what kind of network of people exists and how they're facilitated to communicate with each other."

— **Ruth Blyther**, Director, Eastern Caribbean, Caribbean Program, The Nature Conservancy

"What we try to do is to meet the fishers in their own element. You may not drink coffee — but if the fishers are having coffee, you drink coffee with them. You drink a beer with them. We see this has eased the process in getting information from the fishers, so that we could

have more effective management of the marine sphere. And they have been volunteering information to us even in times when we don't ask."

— **Marc Williams**, Director, Department of Marine Resources, St. Kitts and Nevis

"[A big storm] was pounding down rain, and the roads in Nevis were flooded. Everything had stopped, and nobody could get to the final zoning meeting from St. Kitts. And there we were in our public meeting venue, with all of our science people and our maps and everything. We thought, 'Great. So we've just put all these resources into getting here and now we're going to have to postpone the meeting to some future date.' But what happened was the Nevisian folks came. They came through the flooded streets to the venue, and all showed up in the rain — which was very inspiring for us. We felt like, 'Okay, this process does mean something to these people and they're very interested.' So we had a very good meeting in the end and looked over the zoning designs and came up with the options."

— **Ruth Blyther**

More background on the St. Kitts and Nevis MSP process is at <http://bit.ly/StKittsNevisMSP> **M**

EBM Toolbox: Marxan, Present and Future

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

Marxan is the most widely used conservation planning tool worldwide. With more than 5600 users in over 180 countries, Marxan helps planners make informed decisions on where to make conservation investments, such as siting marine protected areas. In recent months, the Marxan development team has introduced several updates to the tool. We caught up with Matt Watts and Hugh Possingham of the University of Queensland to learn more. Watts is the lead technical developer for Marxan, while Possingham co-developed Marxan and serves as custodian of Marxan development and research.

MEAM: Can you give us an overview of the new developments with Marxan?

Matt Watts and Hugh Possingham: We're constantly working to make Marxan easier to use, and improving it so it can solve more problems that encompass the "triple bottom line": society, the environment, and economics. Some recent developments include:


- It's now open source. Computer software wants to be free for everyone to use and modify. We've released all the source code for Marxan, Marxan with Zones, Zonae Cogito, C-Plan, and Marxan.net into the wild under the AGPLv3 open source software license. This will stimulate innovation and lead to improved sustainability and improved management of threatened species worldwide.
- Users can explore optimal tradeoffs between different objectives. We're making it easy for users to apply Pareto front analysis to conservation planning problems. These techniques allow planners to explore optimal tradeoffs between different objectives, such as between conservation and fisheries.
- R language is supported. R is the programming language most widely used by scientists worldwide. We've implemented virtually every part of the Marxan workflow with R. Users can construct and

automate conservation planning workflows very easily with these tools. This includes powerful and simple graphical interfaces for Marxan.

- Users can store, analyze, and share scenarios in the cloud. We've created an online infrastructure for cloud computing — Marxan.net — with easy-to-use graphical interfaces as well as a flexible command line interface.

MEAM: Clearly Marxan is adapting to user needs. What's your vision for where the tool is headed?

Watts and Possingham: There are a number of possibilities for directions we'll take the software in the future:

- Support for more programming languages and environments. We'd like to provide programming interfaces for other languages such as Matlab. This would allow users to integrate Marxan into systems and workflows in these languages.
- New algorithms. Different problems require different algorithms. We want to visualize the solution space for problems so users can decide which algorithm is best, then provide a range of algorithms that will work best for solution space of a problem. This will allow users to provide more optimal solutions to difficult problems.
- Supercomputing. We're developing techniques to improve the scalability of Marxan analysis. Users will be able to utilize massively scalable computer networks in easy-to-use interfaces to solve big problems more quickly.
- Global spatial prioritization system. We want to integrate a scalable real-time optimization system with a number of online repositories of environmental, social, and economic data. Users will be able to construct and analyze complex planning problems on the fly in a cloud environment. 

[Learn more about Marxan at www.uq.edu.au/marxan. Sarah Carr is coordinator for the EBM Tools Network. Learn more about EBM tools and the EBM Tools Network at www.ebmtools.org.]

To comment on this EBM Toolbox:
<http://openchannels.org/node/10457>

Notes & news

Reports offer roadmap for sustainable ocean prosperity

A new coalition has produced a series of reports to inform decision-makers on effective ocean and coastal resource management strategies. The research describes best practices for how reforms in governance

and management can reduce poverty while achieving economic gains, increasing food production, replenishing fish, and conserving ocean health for future generations.

Called the Ocean Prosperity Roadmap, the collection of reports is a result of work from The Economist Intelligence Unit, Environmental Defense Fund, the Gordon and Betty Moore Foundation, the David

To comment on any notes & news items or the letter to the editor:
<http://openchannels.org/node/10458>

and Lucile Packard Foundation, California Environmental Associates, the University of California at Santa Barbara, and the University of Washington. The reports are at www.oceanprosperityroadmap.org

Reports outline opportunities for Ireland from “blue economy” and MSP

A set of new reports from the Government of Ireland identifies economic opportunities to come from developing a “blue economy” based on sustainable growth of maritime industry and the institution of a national MSP process. Produced by the Government’s Inter-Departmental Marine Coordination Group, the reports provide support for an integrated marine plan for Ireland (*Harnessing Our Ocean Wealth*) that was published by the Government in 2012. The reports also outline and recommend a MSP framework for Ireland. The new reports are at www.ouroceanwealth.ie/publications

Letter to the Editor For marine EBM to work, we must recognize major political and economic changes

Dear MEAM:

As always the MEAM newsletter is good reading. But I have a deep concern regarding your recent retrospective on progress in marine EBM (MEAM 8:4). The discussion seems to take no account of the major political and economic changes going on in the world. A main feature of these, beginning in the days of Reagan and Thatcher and progressing through the collapse of the USSR, is essentially the wholesale privatisation of the Commons, nationally and globally. Giant corporations now control the use of most natural resources, and the possibility of national, international and local authorities having much say — especially to coordinate, innovate, conserve, restore, and advance — is very much diminished, and this process continues. Thus so much of the discussion here about integration, coordination, rationalisation is pie in the sky.

Those who wish to see EBM advance in reality really need to revise their thinking about method and look at the ongoing transformation of the world economy and actual authority. Personally, as a socialist, I would prefer to see this transformation not happening but, still, I think people of goodwill have to look reality in the face and act according to what they see.

Sidney Holt

Sidney Holt is a biologist and consultant in Italy.

Upcoming events on OpenChannels.org

- **Webinar: Tools to Plan for Hazards Resilience and Climate Change.** Featuring Lauren Long and David Betenbaugh of NOAA. 26 August 2015
- **Webinar: Maps and Datasets for Blue Carbon Habitats.** Featuring Karen Richardson of the Commission for Environmental Cooperation. 10 September 2015
- **Live Chat: The Marine Planning Concierge.** Featuring Mary Ruckelshaus and Gregg Verutes of the Natural Capital Project. 15 September 2015
- **Webinar: Mapping Ocean Wealth.** Featuring Rob Brumbaugh of The Nature Conservancy. 23 September 2015.

For more information on these events, including their times, go to www.openchannels.org/upcoming-events-list

Pope gives nod to marine EBM concepts in environmental encyclical

In June 2015, Pope Francis released an encyclical — a letter sent to all bishops of the Roman Catholic Church — that expressed his views on an array of environmental issues, including ocean health. The Roman Catholic Church has more than 1.2 billion members worldwide. The encyclical’s ocean sections are below, representing passages 40–42 in the document. These passages touch on several aspects of marine EBM, including the interconnectedness of upstream and downstream ecosystems:

“Oceans not only contain the bulk of our planet’s water supply, but also most of the immense variety of living creatures, many of them still unknown to us and threatened for various reasons. What is more, marine life in rivers, lakes, seas and oceans, which feeds a great part of the world’s population, is affected by uncontrolled fishing, leading to a drastic depletion of certain species. Selective forms of fishing which discard much of what they collect continue unabated. Particularly threatened are marine organisms which we tend to overlook, like some forms of plankton; they represent a significant element in the ocean food chain, and species used for our food ultimately depend on them.

“In tropical and subtropical seas, we find coral reefs comparable to the great forests on dry land, for they shelter approximately a million species, including fish, crabs, molluscs, sponges and algae. Many of the world’s coral reefs are already barren or in a state of constant decline. ‘Who turned the wonderworld of the seas into underwater cemeteries bereft of colour and life?’ This phenomenon is due largely to pollution which reaches the sea as the result of deforestation, agricultural monocultures, industrial waste and destructive fishing methods, especially those using cyanide and dynamite. It is aggravated by the rise in temperature of the oceans. All of this helps us to see that every intervention in nature can have consequences which are not immediately evident, and that certain ways of exploiting resources prove costly in terms of degradation which ultimately reaches the ocean bed itself.

“Greater investment needs to be made in research aimed at understanding more fully the functioning of ecosystems and adequately analyzing the different variables associated with any significant modification of the environment. Because all creatures are connected, each must be cherished with love and respect, for all of us as living creatures are dependent on one another. Each area is responsible for the care of this family. This will require undertaking a careful inventory of the species which it hosts, with a view to developing programmes and strategies of protection with particular care for safeguarding species heading towards extinction.”

For the full encyclical, go to <http://bit.ly/EnvironmentEncyclical> 