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## [From the Editor: Join a live online chat on practical solutions for ocean planning](#)

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Dear MEAM readers,

MEAM is continuing pairing some of our articles with live online events. This month, we will host a live online chat on the [lead article "Insights from Practitioners: Challenges and Solutions for Ocean Planning"](#) [2] with Karen Anspacher-Meyer of Green Fire Productions, Jennifer McCann of the URI Coastal Resources Center and RI Sea Grant, and some of their interviewees. The chat will be held on Tuesday, March 8, at 1 pm US EST/10 am US PST/6 pm UTC. [Join the chat](#) [3].

Best wishes for your work,  
Sarah Carr, MEAM Editor

## [Insights from Practitioners: Challenges and Solutions for Ocean Planning](#) [4]

What keeps ocean planners up at night? How are they tackling the challenges they face?

In October 2015, ocean planning leaders from around the world [met in Rhode Island, US](#) [5], to share practical solutions to the most pressing challenges for ocean planning. [Green Fire Productions](#) [6] in collaboration with the [URI Coastal Resources Center](#) [7] and [RI Sea Grant](#) [8] interviewed these practitioners about the top challenges they face. The resulting series of [brief video interviews, "Insights from Leaders: Practical Solutions on Ocean Planning"](#) [9], captures good practices and lessons learned in marine spatial planning, including from several cases in the US.

Participate in a [live on-line chat on practical solutions for ocean planning](#) with Karen Anspacher-Meyer of Green Fire Productions and Jennifer McCann of URI and other [interviewees on Tuesday, March 8 at 1pm EST/10am PST/6pm UTC](#) [3].

MEAM has distilled insights from these interviews to share with readers. A number of lessons stood out:

1. **MSP should be, and is, a system for responding to new and emerging ocean issues** Emerging ocean issues range from determining where to place fiber optic and offshore energy transmission cables to protecting traditional navigation routes for canoes to creating security zones around oil rigs. Interviewees stressed that MSP is critical for staying out in front of these issues and having a process to deal with them rather than being reactionary when the issues emerge. [Read about how MSP processes are dealing with some emerging issues such as placing fiber optic cables, routing the America's Cup Regatta, and leasing offshore sand and gravel deposits for beach nourishment.](#)
2. **MSP processes need to account and plan for stakeholder bandwidth limitations and stakeholder burnout.** [Editor's note: "Bandwidth" in this context is being used to denote the time and capacity needed to participate in a process.] The topics of engaging the right stakeholders and engaging them in a productive manner are often discussed in ocean planning forums. The ocean planners who met in Rhode Island brought up the issue that many key stakeholders are unable to keep up with the time demands of an MSP process, and sometimes multiple MSP processes, even if they would like to engage. [Read about strategies, such as rotating working group membership and bringing meetings to stakeholders, that ocean planning practitioners are employing to deal with stakeholder limitations and burnout.](#)
3. **Ocean planners should always be thinking about implementation, even during the initial planning process.** Interviewees stressed that ocean planning does not end once an initial plan is approved; rather it is an ongoing process. [Read about considerations for plan implementation, including continued stakeholder engagement, and the need for continually updating plans so that they remain useful and used.](#)
4. **Just engaging stakeholders is not enough.** Successful MSP processes build and sustain trusting relationships with stakeholders, both for developing plans and implementing and updating them. [Read about the need for strong relationships to handle the tough issues that MSP addresses and how a key, reluctant stakeholder group was brought into and given an ownership role in an MSP process.](#)

[Editor's note: The interviews below have been lightly edited for clarity and readability.]

### **Lesson 1: MSP should be, and is, a system for responding to new and emerging ocean issues**

#### **On placing fiber optic cables off the Oregon coast by Paul Klarin, Ocean Resources Coordinator, Oregon Coastal Management Program**

"One of the user groups that was not at the table but really needed to be at the table for this conversation about marine renewable energy was the fiber optic cable community. Oregon is one of the places in the continental US where these fiber optic cables land. These cables cost billions of dollars to build. They convey information and data that are worth millions of dollars per minute.

"But unlike our other users, unlike our other stakeholders and interest groups, these owners and operators are not located in Oregon. They may not even be located in the US. These are multi-national corporations that come in to do a job bringing their special ships with them.

"So the fiber optic cable community needed to be found out. Who are they? Who do we go to? How do we get those people to select a person to represent them in our state

process? So we had to find them, find a person, educate him/her on what we were doing, school them on why it's of importance to them, and get him/her to participate in a process that is extremely intensive and long that they're not at all used to doing. So we did find that person. We did get them to be on a rule-making advisory committee, and over the course of two or three years, they participated in our process. And the outcome from that is that in our plan there is a special area, called the PRUA or Protected Resource Use Area, that is designed to protect cable corridors specifically.

"So the plan is put in place so that users can take advantage of it, so that cable companies can access our resource map and see where things are, so they know when they're routing a new cable that they're in proximity to these other uses, so that they and the fishing community can come to an agreement about what is the best route for a cable to avoid the trawling grounds where they're dragging gear across the bottom and it might hook into a cable. The plan is there to help all the communities of users understand who does what where, how, when – because there are temporal and spatial elements to uses – and just having them know about each other and agree on the type of information we're using is of great benefit to all of us." [Listen to the full interview](#)<sup>[10]</sup>.

### **On routing the America's Cup Regatta in San Francisco Bay by Commander Amy Wirts, Chief of Waterways, Vessel Traffic Service Branch, US Coast Guard, San Francisco**

"In mid-2011, it was announced that the America's Cup finals would be held in San Francisco Bay, one of the major working ports on the West Coast. For containerized traffic, Oakland Harbor is historically the Number 3 or Number 4 containerized cargo port in the United States. A lot of refining capacity, about half or 60% of California's oil refining capacity, is in San Francisco Bay. The nation's Number 3 ferry system by volume of passengers is in San Francisco Bay. So our goal was to help make this event happen on San Francisco Bay, while balancing all of the other needs and demands of a pretty small area of water.

"In the Coast Guard, we call it waterways management, and it is balancing all of the different uses of the Bay. What we ended up with is a zoned plan that allowed for the race to happen in a designated space so that nothing would disrupt the race while it was happening. It would also make room for the deep-draft vessel traffic to still enter the bay and go to points in the North Bay and into Oakland and space around the perimeter of the race for the commuter ferry traffic, even though the entire San Francisco city front where the ferries tie up was also prime viewing area for the race.

"All in all, I believe it was about 65 days of racing, and in those 65 days of racing, we did not have any delay to any commercial traffic moving in or out of the Bay.

"So after the America's Cup World Series races in 2011-12, we were feeling pretty good about the plan for 2013. Everything had worked out well. And then there were two incidents. The first was in October of 2012. One of the teams capsized, and it was a complete loss of their vessel, which was swept out through the Golden Gate to the open ocean.

"Then in May of 2013 there was an unfortunate accident with another of the sailing teams during a practice day. They were out sailing on the Bay during an unregulated practice day, and they capsized and experienced the loss of one of their sailors. That loss of life made us go back to the drawing board to take a look at our overall plan and say, 'Is this adequate? Can we have ferry vessels that are coming through this transit lane when we're not sure if these vessels are losing control in a way that we didn't think that they would lose control?'

"We looked at everything and made the decision that we needed to extend the area needed to hold the race. By doing that we were encroaching more into the small amount of space that we had left for deep-draft vessel traffic to transit. So we needed to make sure that we weren't putting one element of users in more danger by trying to protect others. And through that process we were able to make an adjustment to the racecourse and meet in the middle of what the Event Authority asked for as an extension of the racecourse and what the Pilot's Association felt they needed for transiting safely.

"I think that really early engagement with the stakeholders was extremely important. And then we didn't let that early engagement sit, we were consistently refreshing it. We kept the lines of communication open.

"So it was a success from all of those standpoints. No one was left out. Everyone was represented. And I think at the end everyone was proud to see San Francisco on everyone's TV screens and know that they had had a part of making that event happen." [Listen to the full interview](#)<sup>[11]</sup>.

### **On leasing offshore sand and gravel deposits for beach renourishment in the Mid-Atlantic by Bob LaBelle, Senior Science Advisor to the Director, US Bureau of Ocean Energy Management [BOEM]**

"BOEM's mission, among many, is that we're responsible for federal offshore sand, so the leasing of offshore sand and gravel deposits. In the Mid-Atlantic, we've had some individual beach nourishment projects, off Dam Neck, Virginia, for example, and off New Jersey. And what we're trying to do is to use the MSP process to create a regional approach for safe access to that federal sand resource if the states and communities need the sand, which they probably will with all the coastal resilience work that's going on now.

"The first thing we're doing is looking at where the offshore federal sand deposits are located. We had a vessel that did a yearlong survey off the coast this past year, and those data will be shared. Once we characterize where those offshore federal deposits are, then the next thing to do is try to get on handle on how many potential coastal projects might want to use that sand.

"The goal would be to avoid having a first-come, first-served type situation which has happened elsewhere – counties in Florida are kind of famous for fighting with each other, for example – to try to get sand resources. We're trying to avoid that kind of conflict in the Mid-Atlantic, and hopefully in the Northeast as we move further up the coast. And we thinking that by getting all the agencies, all the entities together – state, federal, tribes – everybody knows what's going on." [Listen to the full interview](#)<sup>[12]</sup>.

Listen to other MSP practitioners discuss:

- [Placing offshore energy transmission cables \(Long Island Sound](#) <sup>[13]</sup>, [Massachusetts](#) <sup>[14]</sup>),
- [Protecting traditional navigation routes for canoes](#) <sup>[15]</sup>,
- [Translocating corals when dredging shipping channels](#) <sup>[16]</sup>,
- [Permitting native Hawaiian fish ponds](#) <sup>[15]</sup>,
- [Eliminating shipping traffic collisions with fishing vessels and marine mammals](#)<sup>[17]</sup>, and
- [Creating security zones around oil rigs](#) <sup>[18]</sup>.

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## **Lesson 2: MSP processes need to account and plan for stakeholder bandwidth limitations and stakeholder burnout**

### **On stakeholder burnout and bandwidth limitations in the Northeast US by Bruce Carlisle, Director, Massachusetts Office of Coastal Zone Management**

"In Massachusetts, sustaining stakeholder involvement really means ocean planning for us. They are synonymous. So one of our concerns as we've been going through this process for years now, is stakeholder burnout and stakeholder bandwidth. So in burnout, you're asking individuals to commit to, in the case of our Ocean Science Council, quarterly meetings with sometimes significant homework between meetings on a year-to-year to year basis. And that is really difficult to sustain for someone who doesn't have the job to provide that service.

"We address that in part by rotating individuals. And we've seen cases where people simply say, 'Can't do it anymore.' And that gets to this similar, parallel concern which is bandwidth limitation. Between the activities that we have in the Northeast alone, they're being asked to do Massachusetts, Rhode Island, and the Northeast Regional Ocean Planning effort. So there is a very real bandwidth issue." [Listen to the full interview](#)<sup>[19]</sup>.

## **On maintaining stakeholder engagement in the Hawaiian Islands by Leo Asuncion, Director, Hawaii Office of Planning**

"We all are based in Honolulu, so we really use our volunteers as our eyes and ears on the islands. They bring issues to the table. And then we also reach out to them. If we're working on a particular issues, say at the state level around coastal management, then we reach out to the stakeholders and we say, 'We need your input.' It's this two-way street. It's not just us going to them and saying we need your input now. We're always asking them, 'What are you hearing right now on the islands because we want to know?' And if we can roll it up into one issue or a series of issues that we can work on together then it becomes the agenda.

"And certainly keeping people engaged over the long term is a challenge, but I think we've done pretty well. I mean, seven years – and it's totally voluntary. We find ways – 'If you can't come to the meeting, give us your input. We'll put it on the table for everybody else to discuss.'

"We've been thinking more and more about rotating these meetings. Maybe at least once a year going out, or four times a year going out, to different counties which means the different islands. That would be a serious undertaking, but I think we have the resources to do that which would make it better for the neighbor islands. It would make them feel like we're really coming to them. We'd be saying, 'We're not just coming to you in an email; we're coming to you in person. We're going to start talking about the issues, and we can even devote meetings to island issues. And we're bringing along our federal partners and our state and local partners to help resolve things in the community.'" [Listen to the full interview](#) [20].

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## **Lesson 3: Ocean planners should always be thinking about implementation, even during the initial planning process**

### **On integrating marine plans with terrestrial plans in adjacent coastal areas in England by Paul Gilliland, Head of Marine Planning, UK Marine Management Organisation**

"We're thinking about the implementation of the plans once they're adopted much earlier in the process. We've been running sessions with these local terrestrial authorities, not just about, 'let's understand your plans', but 'let's talk about what role you will play when our plans are adopted. Let's talk about how our plans might be used by you when you come to review your next revision of your statutory terrestrial plan.'" [Listen to the full interview](#) [21].

### **On maintaining stakeholder engagement for the implementation process by Jennifer McCann, Director of US Coastal Programs, University of Rhode Island Coastal Resources Center and the Director of Extension, Rhode Island Sea Grant**

"When you're developing your plan and your stakeholder process, remember that you're going to need the stakeholder process while you're implementing. So the stakeholder process doesn't end once the plan has been completed. You're going to need that stakeholder support even more during implementation. So in the development of your plan you need to think about strategies, techniques where maybe not all stakeholders are involved as much as they were during the process, but key stakeholder members are involved in the process during implementation.

"For example, right now we are updating the recreational and tourism chapter of our plan. So just last week we had members of the sailing community, the Coast Guard, and researchers coming together to review the information in the recreation/tourism chapter to determine how we update the information in that plan." [Listen to the full interview](#) [22].

### **On the need to continually update ocean plans by Jennifer McCann, Director of US Coastal Programs, University of Rhode Island Coastal Resources Center and the Director of Extension, Rhode Island Sea Grant**

"You need to continue to update your plan. If you stop updating your plan, then it will eventually not be relevant. And all of that goodwill and all of that trust of the contents of the document will be lost. We know the Coast Guard and the Navy and the Army Corps and BOEM and industry and communities and researchers are using the information within the Ocean SAMP [Special Area Management Plan] because it's relevant and up-to-date. We've been amending the document. We continue to collect information and bring that information in.

"If we don't continue to update the Ocean SAMP then that whole process and that whole ability to trust is lost. You need to make sure that you are incorporating the opportunity, the ability to update your plan – you have to make sure that that's part of the process." [Listen to the full interview](#) [23].

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## **Lesson 4: Just engaging stakeholders is not enough. Successful MSP processes built and sustain trusting relationships with stakeholders, both for developing plans and implementing and updating them**

### **On the need for solid relationships to handle tough issues by Dallas Smith, President and CEO, Nanwakolas Council of British Columbia**

"Planning processes bring multiple views into a room, and you have to hear all those views. You don't have to agree with them, but you have to understand them. And from the years of working together through the land use and marine use planning processes, we've really started to understand what the needs of various stakeholders are, and we're able to communicate around those needs. You spend enough time with someone, and you just sort of all start drinking each others' Kool-Aid.

"So it's really just time and relationship building and understanding that nothing's an Indian issue, nothing's an industry issue, nothing's an ENGO issue – they're all human nature issues at the end of the day. And so thanks to some good facilitation and society evolving, we've been able to build some really solid relationships that give us the ability to have some very tough discussions about jurisdiction, about resource development, about resource protection.

"Really the key to solid relationship building is you have to be able to have those disagreements and walk out of the room in frustration, but understand that that door's open for that dialog to continue. Sometimes you have to back up a little bit and go out and extend an olive branch, which we've done. And sometimes we've had to have that olive branch extended to us. But like I said, it's all about that relationship building and managing those expectations. Because we are talking about peoples' livelihoods and cultural connection to the land and resources and the livelihoods of First Nations people on the coast. It's very emotional stuff, and you need to be able to show emotion to show how important it is. But you have to have the big picture in mind and be able to show leadership to remind people that what we're trying to achieve is to incorporate everybody's livelihoods and cultural connections and issues into the final product as it's being implemented." [Listen to the full interview](#) [24].

### **On engaging the fishing community in MSP in Rhode Island by Grover Fugate, Executive Director, Rhode Island Coastal Resources Management Council**

"Early on in the planning process we had a very contentious relationship with the fishermen. There were several start-up exercises looking at offshore wind farms and how you might site those. And the fishermen were not brought in or were treated very shoddily during those previous processes. So as we came into this, they were already at a high level of distrust and actually antagonistic towards this whole thing. The early meetings were very contentious, very vocal. They were very upset, understandably, about the process and feared that their livelihood was going to be taken away from them.

"The fishermen understood that things were changing on them, that they weren't going to have the unfettered access to the resource that they had before, that they were going to have to share that resource. They wanted to be there at the very beginning stages of any development so they would be able to have dialog with any potential developer about locations and alternatives.

"Well, nothing like that had ever existed within the regulatory process. So I said, 'Give me a chance to think about it, and we'll see what we can do.' So we came up with

what's called the Fishermen's Advisory Board. And the Fishermen's Advisory Board actually got embodied into the plan. It has official standing not only with the state but, because we have a federally adopted plan now, it got standing with the federal government too.

"Also part of the discussions that we had with the fishermen was trying to get their input into areas that they fished and areas that were important to them. So very early on we started a mapping exercise where we sat down with all the individual groups. We spent many hours sitting down and mapping this out and then compiling those maps. We had a very nice map at the end that showed all the various sectors and their fishery by year, by season. And lo and behold what it showed us was that they fished the entire area that we were looking at.

"So in discussions with them I said, 'OK guys, what you're telling me is that all areas are equal.' And they said, 'No. That's not the case.' And I said, 'Well, can we have a discussion about that and try to get some data in so that we can understand that?' They were very reluctant to give us that information. So as time goes on, we adopt the plan, and we're into the implementation phase.

"The map of the BOEM call area goes out, the fishermen see the map, and it includes an area that's called Cox's Ledge which is an extremely important area to all fisheries in this area. And they said to us, 'Surely they're not going to lease Cox's Ledge [for offshore windpower development].' And we said, 'Remember we had this discussion, and we had no information from you to pick those areas that were more important than others.' So they said, 'OK, let's sit down and have those discussions now.' So we did, and we started to sit down, sector by sector, group by group, getting incredibly detailed information from these people. Now they were opening up their navigation logs to us. We were getting individual tow lines from fishermen, stuff that they never gave anybody anytime.

"So we were able to compile that, and we had a map that showed that 80% of the area was valuable to one sector or another. Well, that wasn't going to work. So we weighed it by sectors and came up with a heat map that showed what areas were more important to three or four sectors of the fishing industry. Lo and behold, at that point, Cox's Ledge popped right out, and we were able to depict that in a format that federal agencies could use.

"The state was concerned about our submitting a map on behalf of the state of Rhode Island to BOEM that would have depicted these high-value fishing areas. But because the Fishermen's Advisory Board had standing with the federal government, they were able to send the map in on their own. BOEM took that into consideration, to their credit, and then carved out in the final lease areas a north and south block and left Cox's Ledge out of the lease offering.

"So it was a combination of both relationship building where they were able to trust us and then having a mechanism, the Fishermen's Advisory Board, in place where they could have a voice into the system that would give them some clout and standing. And that was a very, very successful part of this process and continues today. In fact, the fishermen became very possessive of the Fishermen's Advisory Board and asked for a series of changes to it to make it theirs, so that it was clearly their organization."

[Listen to the full interview](#)<sup>[25]</sup>.

Listen to other MSP practitioners share their insights on:

- [Ensuring indigenous communities are part of MSP processes](#)<sup>[26]</sup>
- [How relationships built through ocean planning processes can benefit other coastal management issues](#)<sup>[27]</sup>.

See more interviews from the "Insights from Leaders: Practical Solutions on Ocean Planning" video series<sup>[9]</sup>

Join a [live on-line chat on practical solutions for ocean planning](#) with Karen Anspacher-Meyer of Green Fire Productions and Jennifer McCann of URI and other interviewees on Tuesday, March 8 at 1pm EST/10am PST/6pm UTC <sup>[3]</sup>.

## **Dispatches from the Field: When MSP enables Blue Growth, who benefits?** <sup>[28]</sup>

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

16 February 2016. Portugal. Sleepy, scenic Olhao. Inside the conference facilities of the Real Marina Hotel in Olhao, Portugal, the room is abuzz with information exchanged, knowledge gained. [Mares Conference](#) <sup>[29]</sup> participants are poring over posters showing emerging marine technologies and listening intently to scientists describing expanding marine uses, and ways to monitor attendant biodiversity decline. Most of the intellectual energy in the room seems focused on one thing: growth – growth in technology, in communications, in fisheries and other marine uses, in development, and in the economy.

Meanwhile, on the vast tidal flats outside the hotel, Portuguese fishers and their families are quietly going about their business, searching for and collecting shellfish from the nutrient-rich ooze of the tidal flats. The only apparent excitement comes from the shorebirds who occasionally protest the uneven competition between themselves and the humans engaged in the race for cockles, whelks, clams, and worms. Occasionally, a group of fishers breaks into song, their contented notes mixing with the unusually mild sea air, both flowing in through the open doors of the meeting room.

It would be presumptuous to assume that the families plying the flats, using the simplest technology possible to gather up delicious edibles from the coastal plain, are satisfied with life the way it is and have little interest in economic growth. Perhaps they are out on the flats because they have no choice and are part of a subsistence economy of last resort. Maybe they would all be happier working in the Algarve's many tourist hotels, contributing to the economic recovery that Portugal so desperately needs. Yet it is hard to imagine that all would be well if economic growth transformed this sleepy little corner of the Algarve into a bustling industrial or tourist center full of high-rises and superhighways, the rich tidal flats into a mosaic of shipping channels, ports, and outfalls.

So it seems as if the stage may be set to see a mighty clash of cultures unfold – as the pro-growth maritime spatial planning (MSP) agenda catalyzes new uses and expanding economies that endanger the values and the traditions of local people.

### **MSP – ensuring sustainable use or incentivizing as much use as possible?**

The [European Union's Roadmap for MSP](#) <sup>[30]</sup>, and all the relevant guidance and obligations that emanate from the Marine Strategy Framework Directives, are all about the Blue Economy and maximizing Blue Growth. With much of the world in economic recession, avenues for economic growth are being sought everywhere as a road to recovery. In Europe as elsewhere, there is palpable excitement about MSP "unlock[ing] the Blue Growth potential" of the oceans.

There is reason to be cautious, however, and to diligently track how MSP will end up being used. In Europe, and in other places as well, it seems that marine and coastal planning is less about ensuring that use is ecologically and socially sustainable, and much more about incentivizing as many uses as possible. In the worst-case scenario, conservation becomes just another special interest at the table and a weakly represented one at that. Expand existing uses, encourage new ones, maximize profits, and economic well-being will follow – we can worry about biodiversity and ecosystem function once the economy is back on track.

But will expanded maritime uses necessarily translate into improved well-being? Certainly Blue Growth has the potential to make select companies and individuals wealthy. To be fair, this economic growth can also make national economies more robust and provide a more solid foundation for social service and infrastructure and stabilize governments – all of which can in turn improve human well-being.

But is this the lesson provided by the history of ocean exploitation? When energy development, fisheries, shipping, and tourism expand and flourish, are the benefits shared across societies? And do those industries (and the private sector investors or public sector subsidizers who help develop them) compensate for the costs incurred for expanding uses? One doesn't have to look too far to see that in most cases, the negative externalities of economic growth affect local coastal residents. They often pay the price for all this growth by having to cope with pollution, resource depletion, declining aesthetic values, and impeded access to the places they cherish. Too often it becomes a case of 'privatize the benefits while making public the costs'.

A [recent MedTrends report by WWF](#) <sup>[31]</sup> looks at likely scenarios for Mediterranean Sea maritime uses in light of the Blue Economy the European Union endorses. It predicts that all maritime uses will greatly expand in the region with the exception of commercial fisheries – which are in some cases thought to be at their limit and in other cases unable to compete with more profitable industries for the same swath of ocean. With all this expansion of use comes unavoidable increases in pressures on the marine

system and irreversible loss of biodiversity and related ecosystem services.

The Algarve is not in the Mediterranean, but the Portuguese share the same deep-rooted connection to the sea. Seafood is part of the cultural identity of the towns scattered along the coast, and even in winter, paths along the seaside, benches overlooking cliff tops, and even beaches are filled with people socializing, getting exercise, and enjoying nature. As Portugal looks to MSP to allocate ocean space to new industries and expand uses as much as possible<sup>[32]</sup>, the inhabitants of the Portuguese coasts may well find that the world they know and love is being taken away from them. All in the name of Blue Growth and enabled by MSP.

Read a recent article about the new legal framework for MSP in Portugal and how it may favor new uses over existing ones and prioritize financial concerns in the selection of alternatives <sup>[32]</sup>.

## **The EBM Toolbox: Adapting MSP tools to new processes: Tools for planning in Seychelles and Indonesia** <sup>[33]</sup>

By Joanna Smith

*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.*

In September 2015, I wrote an EBM Toolbox column about tools used for MSP in British Columbia, Canada<sup>[34]</sup>. For 3.5 years, I was a private consultant to the Marine Planning for the North Pacific Coast (MaPP) process in British Columbia and led the development of the technical and science planning tools for regional priorities and sub-regional plans. Now with TNC Canada <sup>[35]</sup> (an affiliate of The Nature Conservancy <sup>[36]</sup>), I work with TNC's Global Oceans Team and country programs to advance MSP and plan implementation around the world including in Seychelles, Indonesia, Canada, and Mexico. TNC has been engaged in marine spatial planning since 2006 and supported MSP processes in the United States, Caribbean, and Asia-Pacific region. We have found that by incorporating local knowledge, stakeholder input, and spatial information, planning tools can effectively be adapted to meet planning objectives in new geographies. This approach saves valuable time versus starting from scratch in each location, and we can build on lessons learned from previous processes.

### **MSP Tools for Seychelles**

In Seychelles, we are facilitating a government-led multi-objective MSP initiative for the 1.37 million km<sup>2</sup> Exclusive Economic Zone <sup>[37]</sup>. This planning is driven by international biodiversity agreements, national biodiversity targets, a national "blue economy" and sustainable development strategy, and climate change adaptation objectives. The main outcomes of the initiative will be a zoning design and management conditions. The design and conditions are being developed over a 5 year period (2014-2020) and will result in a legislated marine plan that includes marine zones for high and medium biodiversity protection goals covering up to 30% of the EEZ, or 400,000 km<sup>2</sup>. The remaining 70% is being proposed for a multiple use zone. The MSP process in the Seychelles is being developed using an EBM framework with foundational principles of ecological integrity, human wellbeing, and governance.

Like the MaPP process in British Columbia, Marxan outputs <sup>[38]</sup> are being used to identify high priority conservation areas and inform discussions to propose locations for biodiversity protection areas that meet representation percentage targets set by experts and scientific literature (e.g., 30% of coral reefs). Marxan scenarios for a 30% representation goal were developed by a 4-year UNDP-GEF Programme Coordination Unit of Seychelles Protected Area Expansion project<sup>[39]</sup> that utilized expert advice, stakeholder review, and a spatial data catalogue for more than 100 biodiversity features. The UNDP preferred scenario is being used to inform the MSP zoning design and propose areas to meet the Seychelles government's 30% by-area and 30% by-representation goals. The zoning design process is being supported by Rick Tingey (Spatial Support Systems LLC) who has developed an adaptable spatial data management and analysis framework and custom ArcGIS decision-support tools to visualize and quantitatively assess how well draft zoning designs meet government goals. Adaptable spatial planning tools can facilitate the efficient incorporation of stakeholder input during rapidly evolving planning processes.

To accompany the zoning design, we are developing Activities Tables to indicate activities that are compatible with the objectives for a zoned area and, where necessary, note the conditions associated with a particular activity. These tables were adapted from the Recommended Uses and Activities Tables from the MaPP process and the Activity Table developed by the Australia Great Barrier Reef. (See the North Vancouver Island Marine Plan for an example<sup>[40]</sup>.) The first step in developing these tables was developing a relative compatibility matrix for marine uses. We looked at versions from the MaPP process and from the Grenadine Islands <sup>[41]</sup>, a zoning framework project supported by TNC and others from 2011-2012. These planning tools are being continually refined and adapted during the planning process as new information becomes available from stakeholders, other projects get underway in Seychelles, and the zoning framework changes.

### **MSP Tools for Indonesia**

In Indonesia, TNC's Indonesia Marine Program <sup>[42]</sup> is supporting a government-led MSP process in the Lesser Sunda Ecoregion, an extension of a marine protected area network project in Lesser Sundas and Savu Sea. We are using SeaSketch to develop a web-based planning tool to view spatial data<sup>[43]</sup> and support the planning process. The SeaSketch-based tool will be critical for viewing, reviewing, and overlaying data for existing zones (such as military uses and park and political boundaries), marine species and habitats (such as whales, turtles, and coral reefs), marine uses (such as fisheries), marine ecosystem services (such as coral reefs for fish supply and tourism), and spatial model outputs (such as Marxan results). The SeaSketch project may also be used to assist with stakeholder review of a regional zoning plan and for spatially explicit analyses of tradeoffs. The Lesser Sunda Ecoregion SeaSketch project will be live at this link<sup>[44]</sup> in Spring 2016.

To effectively use existing MSP tools in new planning processes, tools obviously need to be adapted to the physical environment and ecosystems of a new location. Equally critical, tools need to be adapted to the specific needs, governance structures, politics, stakeholders, cultures, and styles of a new location. MSP practitioners should evaluate tools for local fit before they start using them, and they must be willing and able to adapt the tools to their specific planning process as it moves forward. Adapting the tool could include modifying the tool itself or trying a new way of using it. And if a tool is not effectively meeting local needs, practitioners must not be afraid to scrap it and try something else.

At the end of the day, MSP is about governance and improving ocean decision-making to benefit people and the environment. We look forward to continuing our work to make MSP processes more efficient and effective through the use of planning tools while also making sure every process, including its tools, is fully "place based."

*[Editor's note: Joanna Smith is the Marine Spatial Planning Science Manager for TNC Canada. Read more about her work<sup>[45]</sup>. She can be contacted at [joanna\\_smith@tnc.org](mailto:joanna_smith@tnc.org).]*

## **Latest News and Resources for Ocean Planners** <sup>[46]</sup>

### **Global fishery catches and fish stock declines dramatically underreported?**

Scientists with the Sea Around Us Project at the University of British Columbia have "reconstructed" fisheries catches from 1950 to 2010 in all of the world's EEZs and the high seas. They estimate that global marine fisheries catches are significantly higher (possibly by as much as 50% annually) than nations report to the FAO due to lack of information on small-scale fisheries, some recreational fisheries, illegal and other problematic fisheries, and discarded bycatch. They also estimate that annual landings since 1996 have declined significantly faster than official data would suggest and attribute this change to declining fish stocks. The FAO has responded to this analysis, agreeing with basic conclusion that catch statistics (including estimates of additional sources of removals) should be improved but expressing technical reservations about a number of other aspects of the analysis. Other fisheries scientists and fishery industry representatives have criticized the reconstruction analysis, particularly on the basis that catch data should not be considered a measure of the state of a stock. Read the original analysis <sup>[47]</sup>, FAO's response to the analysis <sup>[48]</sup>, and some criticism and discussion of the

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## US opens federal waters in Gulf of Mexico to aquaculture

In January 2016, NOAA implemented the first comprehensive regulatory program for aquaculture in US federal waters. A new permitting system will allow the cultivation of species such as red drum and cobia in federal waters in the Gulf of Mexico for an initial period of 10 years. There has been commercial farming of marine species such as mussels and salmon in US state waters for many years, but there are not currently any commercial aquaculture operations in federal waters. According to Michael Rubino, director of the NOAA Fisheries Office of Aquaculture, "This is all about managing and expanding seafood farming in an environmentally sound and economically sustainable way. The permit process we've laid out accounts for the region's unique needs and opens the door for other regions to follow suit." Fishermen and environmental groups have filed a lawsuit against NOAA over the plan to open the Gulf of Mexico to aquaculture due to concerns that it will affect the fishing industry and environment. Learn more about [the new rule](#) [51] and [opposition to it](#) [52].

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## Tools and approaches for avoiding ecological thresholds summarized

Ecological thresholds are points at which a relatively small change or disturbance in conditions causes a significant change in an ecosystem. Understanding of the dynamics of ecological thresholds, including when thresholds will be crossed, is currently limited. But there are approaches – such as ecosystem monitoring and statistical methods for identifying thresholds and indicators – that practitioners can use to help avoid reaching ecological thresholds. A new paper published in *Frontiers in Marine Science* reviews the current state of knowledge about ecological thresholds and uses real-world examples to demonstrate these approaches. [Read the paper](#) [53].

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## Publications provide “blue solutions” from Latin America and the Caribbean and guidance for creating more

The Blue Solutions Initiative (comprised of partner organizations GIZ, GRID-Arendal, IUCN and UNEP) has released two new publications. “Blue Solutions from Latin America and the Wider Caribbean” features 50 “blue solutions” – technical, scientific, and policy practices that are adaptable and replicable in other geographies and contexts. The solutions range from regional conservation trust funds to communication tools for participatory vulnerability assessments. The other publication, the “Solution-ing Workshop Methodology Handbook”, published in conjunction with the Panorama Initiative, walks users through the process of planning and conducting their own “solution-ing” sessions to draw out possible “solutions”. [Read the solutions from Latin America and the Caribbean](#) [54], and [download the handbook](#) [55].

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## From the Archives: Turning science into policy: What scientists should (and should not) do when talking to policy-makers (MEAM Feb-Mar 2015, Issue 8:3) [56]

*Editor's Note:* From the Archives calls attention to past MEAM articles whose perspectives and insight remain relevant.

Science is one of many considerations that policy-makers juggle in their decision-making. So how do scientists and other proponents of science make sure it gets its due? In this article, four experts shared their experiences and insights into what scientists and other proponents of science tend to do wrong, do right, and can improve in communicating science to policy-makers.

[Read the article](#) [57].

[Printer-friendly version](#) [58] [PDF version](#) [59]

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- [33] <https://meam.openchannels.org/news/skimmer-marine-ecosystems-and-management/ebm-toolbox-adapting-msp-tools-new-processes-tools>
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