

# MARINE ECOSYSTEMS *and* Management

*International news and analysis on marine ecosystem-based management*

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## Making the Most of Stakeholder Involvement in EBM: Practitioners and Researchers Share their Insights

In ecosystem-based management, people are considered to be part of the ecosystem. As such, EBM decisions not only take ecological factors into account but also the economic and social conditions that affect, or are affected by, the environment. The idea is to build a framework for management that ensures a sustainable environment and sustainable human communities over time.

Considering the central role that socioeconomic factors play in EBM, stakeholders are usually involved in various ways in developing and implementing an EBM framework. (For the purposes of this article, stakeholders are defined as people or organizations with an interest in how an ecosystem is managed: residents, resource users, conservationists, and so on.) Several benefits can come from involving stakeholders in EBM, including:

- **More information**

By collecting locals' knowledge of the ecosystem, managers can access a much broader base of information on environmental and socioeconomic factors than they otherwise would.

- **Increased trust**

Particularly through face-to-face meetings with managers, stakeholder participation can help build trust and break down walls between community members and authorities.

- **Greater buy-in**

Management strategies developed with stakeholders may fit better within the local context and involve less economic upheaval than otherwise. This can increase community support for the decisions and make implementation more feasible.

With these benefits in mind, there are experts who recommend involving stakeholders as early, and as often, as possible in EBM planning and implementation. However, stakeholder participation brings its own set of challenges. As many EBM practitioners know well, meetings with stakeholders can be time-consuming and expensive in terms of money and personnel. Also, depending on how their participation is structured, stakeholders may end up impact-

ing EBM planning processes in ways that make the resulting management less effective. A process where decisions require 100% approval by stakeholders, for example, can be susceptible to one person's holding up the process until his or her interests are prioritized.

For a stakeholder process to be productive, it should inform management decisions that are consistent with a sustainable environment and sustainable communities over time. There is no one-size-fits-all approach. Some successful projects have involved stakeholders in a largely *consultative* manner (i.e., asking for their insights and opinions), after which final decisions are made by a central authority. Others apply a more *collaborative* approach, in which local community members share EBM decision-making power with authorities. The "right" approach to stakeholder involvement depends on each project's context.

In this issue, MEAM examines EBM projects that have used very different approaches to stakeholder participation — Australia's Great Barrier Reef and locally-managed marine areas in the Western Pacific. We also ask researchers who have studied EBM stakeholder processes for their advice on ensuring productive outcomes.

### A. Applying a consultative approach: Rezoning the Great Barrier Reef

By Leanne Fernandes

**[Editor's note:** Nearly a decade ago, Leanne Fernandes managed a multi-year process to rezone the 344,000-km<sup>2</sup> Great Barrier Reef Marine Park (GBRMP). Called the Representative Areas Program, the process resulted in substantial changes to the park's zoning scheme. Most significant, and controversial, was that portions of the park that were off-limits to fishing increased from 4.6% to 33% of the total area. The planning process was subject to two substantial community participation phases in which all components of the zoning plan were open to comment and alteration.

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The first phase drew more than 10,000 written submissions from stakeholders. The second phase drew 21,000 submissions. Overall, park personnel attended more than 1000 public meetings and information sessions with stakeholders along the Great Barrier Reef coast.

Several publications with lessons learned from the Representative Areas Program, including on managing public submissions and communication challenges, are available at <http://bit.ly/RAPLessons>. Fernandes now runs Earth to Ocean, a consulting firm on integrated marine and coastal resource management.]

### On challenges the park faced with stakeholder consultation:

Genuine community participation is the foundation of effective resource management. However, it is also expensive in terms of both staff time and resources to travel to communities, especially if the intent is to sustain ongoing liaison and community involvement. In the case of the Great Barrier Reef, we were interacting with over 30 townships and about 70 Aboriginal traditional owner groups in a continuous manner for about five years during the rezoning effort. To address this resource challenge, the agency decided to stop doing some (unrelated) management tasks and reduce efforts on others to free up time to prioritize the engagement of communities on the rezoning of the marine park.

Another challenge was our initial failure to identify the need to explain the problems facing the Great Barrier Reef ecosystem — problems that required changes in management, namely through rezoning. As managers, we thought that the community would be well aware of the problems and, in many ways, they were. However, our communications strategy originally failed to explain the nature, degree, and dimensions of the problems and then link those to zoning as part of the solution. As a result, we were required, in many ways, to initiate the communication efforts anew by starting again with a discussion of the problems.

While we had so many staff in the field building partnerships with communities (up to 60 staffers at any one time), it was essential that the same messages were given to all our stakeholders and that false expectations were not raised. To ensure this was the case, a communication strategy within the Great Barrier Reef Marine Park Authority laid out the purpose of our community participation efforts, key messages, likely questions and answers, and more. All staff who interacted with community members then participated in a training session that briefed them on all aspects of the communication strategy, including explanation of the need to avoid raising expectations in the field.

### On integration of stakeholder input:

In the Representative Areas Program, a lot of the consultation led to management decisions that conformed with stakeholder and community preferences and advice. Once the community understood our “boundaries” — that is, we would be protecting a minimum of 20% of each bioregion in no-take areas — many tailored their advice to us upon this basis. In a number of instances, communities gathered information from the range of interested stakeholders in their towns (e.g., recreational and commercial fishers, tour operators, conservation groups) and provided advice that was supported by all these groups. This made the manager’s job easier in terms of complementing people’s uses and values, as far as possible. In places where communities did not balance all the local interest groups in their provision of advice, we did that for them in the course of our decision-making.

### On how the results might have differed if the role of stakeholders in planning had been more collaborative and consensus-based:

If rezoning had required 100% consensus among all stakeholders and management, that could have led to a stalemate with no rezoning happening at all. Also, a co-management process such as that would have had to involve stakeholder representatives (as opposed to the community at large with all stakeholders at once). That could have been tricky. In my experience, representative bodies (and representatives of those representative bodies) don’t always reflect the opinions of all their constituents and do not always effectively communicate back and forth with their constituency groups. In addition, it would have been absolutely essential to have the right stakeholder representatives at the table, and this can be very difficult to achieve depending on the diversity of opinions, and often the power plays, within each stakeholder group.

That being said, if a more co-management approach had been adopted — that is, with some degree of representative stakeholder involvement in decision-making — I think the outcomes, in terms of a management plan, may not have been that different. This is assuming that the approach would still have needed to conform with minimum requirements for no-take protection. In fact, it may well have led to an even greater sense of “ownership” of the final zoning plan than was achieved. Nonetheless, a more collaborative approach would have required a higher resource commitment (money and personnel), and that may well have been prohibitive.

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## B. Applying a collaborative approach: Locally-managed marine areas in the Pacific

By Hugh Govan

[**Editor's note:** Hugh Govan is an adviser to the Locally-Managed Marine Areas Network. The LMMA Network connects people involved in community-based marine management projects across Southeast Asia and the Pacific. The purpose is to share lessons and knowledge on improving local-scale management efforts ([www.lmmanetwork.org](http://www.lmmanetwork.org)). An LMMA is an area where use of resources is regulated depending on community goals, using any of a variety of management tools. Fewer than half of the sites are fully no-take. Govan's work has focused primarily on LMMAs in Fiji and more recently the Solomon Islands and Vanuatu, as well as sharing the experiences regionally and internationally including in Central and South America. He co-edited *Locally-Managed Marine Areas: A Guide to Supporting Community-Based Adaptive Management*, published in 2008 — [www.lmmanetwork.org/resourcecenter](http://www.lmmanetwork.org/resourcecenter).]

### On communities' role in LMMA planning and management:

In Oceania, collaboration with stakeholders is crucial for the success of the locally-managed marine area approach. In this region, local communities have strong rights (if not ownership) over marine resources, and governments are remote and poorly funded. Therefore the bulk of enforcement and management activities will fall to the local communities. In this scenario, unless the local communities feel in control of the process and outcomes, long-term engagement is unlikely. In fact in many cases, communities have taken charge of running the planning processes (usually with the support of civil society partners) and government authorities have found themselves in the "consulted" position.

Just over 10% of the 420 LMMAs in the network are in SE Asia. There government is more strongly present and more standard co-management approaches apply. Even so, building strong local partnership is crucial and this is unlikely with mere consultative processes. (Some sites in this region have tried to make up for lack of community "ownership" through the introduction of incentives to encourage stakeholders to behave in certain ways. But there is little evidence that this provides sustainable outcomes except perhaps in the rare "high value" sites — i.e., ones where income may be generated from exceptional dive sites or cruise ship revenue, for example.)

### On challenges of involving stakeholders in decision-making:

From my perspective as an adviser to multiple LMMA planning processes, there can be problems when making assumptions about local governance and hierarchies. In some communities, for example, it is standard practice for authorities or LMMA supporters to work with the chief and representatives of key sectors or groups (e.g., fishermen, women, youth), resulting in adequately respected management decisions. In others, however, we have found that the process needs to be much more inclusive: village-wide approaches may be required so that all community members respect and comply with the decisions that are reached. (At some sites with very low compliance, we found that some fishers had not been involved or felt that their concerns were not properly addressed by the "representatives".) In some cases, representatives of community groups or family lines may need to return to their own groups to carry on the discussions — sometimes for months or years before committing to a course of action.

Another common challenge relates to conflicts between process and product. Outside facilitators are often more interested in products such as presentable management plans or biologically sensible decisions. However, experience suggests that processes that ensure wide participation, consensus, and community ownership lead to much more (self-)enforceable management decisions. Such decisions may not necessarily look like a standard, many-paged management plan (the regulations and action items may be recorded on a single sheet of paper), but they are alive in the minds of the affected stakeholders.

### On how LMMAs might look different if their management involved only consulting with stakeholders rather than collaborating with them:

In the 1990s prior to creation of the LMMA Network, conservationists in the region were struggling to keep a small handful of MPAs functioning — these were sites designated in a top-down manner. If LMMAs only consulted community stakeholders on local marine management efforts, in all likelihood we would be in the same situation now as we were in the 1990s. The LMMAs would never have taken off.

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“In Oceania, collaboration with stakeholders is crucial for the success of the locally-managed marine area approach.”

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## C. Recognizing when stakeholder collaboration is likely to be effective or ineffective

By Judith Layzer

**[Editor's note:** Judy Layzer is a political scientist and head of environmental policy and planning in the Department of Urban Studies and Planning at the Massachusetts Institute of Technology, in the US. In her 2008 book *Natural Experiments: Ecosystem Management and the Environment* (MIT Press), Layzer examined seven cases of large-scale EBM in practice in the US. She determined that the initiatives whose goals were set in consensus-based collaboration with stakeholders produced environmental policies that were less likely to conserve ecological health than those whose goals were set through conventional policies. In other words, stakeholder collaboration in these cases led to less-effective plans — ones that featured incremental rather than meaningful change.

But her message is not that collaboration is bad and conventional management is good. In fact, she writes, collaborative processes can be effective if they are supported by (1) a regulatory framework that is protective of resources and (2) strong pro-environmental leadership for the process. "The findings should not be construed as disparaging efforts to involve stakeholders in planning efforts," writes Layzer. "Rather, they affirm the importance of undertaking such negotiations within a hospitable context.]"

### On the challenges involved in running collaborative, consensus-based processes:

Proponents of collaboration often gloss over the potential tradeoffs among environmental, economic, and social considerations, particularly in the short run. They assume that long-term thinking, and a related preoccupation with ecological sustainability, will somehow emerge from a collaborative process. For this to happen, however, participants must adopt a view that healthy, functioning ecosystems are essential to human well-being. They must embrace a land ethic (or sea ethic, as the case may be) and avoid a short-run economic point of view. And that simply doesn't occur in many instances.

### On framing a collaborative process to help ensure an environmentally beneficial plan:

Resource managers may want to establish an environmentally protective management goal at the outset, particularly if resource pressures are intense. They may also want to devote some time to educating potential stakeholders and/or building coalitions in support of environmental protection in advance of a

broader engagement process. This is so that they are not steamrolled by development interests, who tend to be intensely interested and are often politically astute.

### On whether her findings would apply to cases outside the US:

I do not expect that my findings would be the same in all countries, or even at all scales within the US. My findings are specific to landscape-scale initiatives in rapidly urbanizing areas. I can imagine a different set of dynamics arising in, say, a small-scale, rural collaborative initiative, particularly one in which development pressure is not intense.

The important insight to be gleaned from the particular cases I investigated is that powerful interests can dominate collaborative planning processes, and flexible implementation allows those who are not committed to evade responsibility. That being said, other researchers (such as Elinor Ostrom and her colleagues) have identified cases, many of them in the developing world, in which stakeholders work together to conserve resources. In most of those cases, strong norms exist, and pressure on resources is not severe. Such examples are becoming harder to find, however, as the global market pervades all but the most remote places.

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## D. Why most public decision-making should be collaborative

By Steven Yaffee

**[Editor's note:** Steve Yaffee is a professor in the School of Natural Resources and Environment at the University of Michigan, in the US. He directs the school's Ecosystem Management Initiative ([www.snre.umich.edu/ecomgt](http://www.snre.umich.edu/ecomgt)). In 2000 he co-authored with Julia Wondolleck the book *Making Collaboration Work: Lessons from Innovation in Natural Resource Management* (Island Press), which analyzed 200 cases of EBM in terrestrial and freshwater systems. He and Wondolleck are now analyzing cases of stakeholder collaboration in marine EBM from around the world. Many of the cases, as well as lessons drawn from them, will be profiled on the Ecosystem Management Initiative website by the end of 2011.]

### On defining "collaboration":

When I use the term collaboration, I refer to a wide range of behaviors and working arrangements that involve multiparty cooperation. These can include

“Participants [in a collaborative EBM process] must adopt a view that healthy, functioning ecosystems are essential to human well-being.”

arrangements that result in sharing of information, work on cooperative on-the-ground projects (which comes closer to the “co-laboring” root of collaboration), or full co-management situations that involve formal shared decision-making norms.

Almost all of the arrangements we study involve the development of a shared commitment to some set of actions (small or large). This usually includes recognition of a common problem or objective, or an opportunity for joint action that can simultaneously achieve different but not conflicting objectives.

#### **On the usefulness of collaboration:**

Traditional public involvement — where the agencies ask for input, take it in, and ostensibly consider it in their management choices — unfolds often as a unidirectional flow of information. It neglects much of the benefit of collaboration: face-to-face discussion and dialogue that clarifies interests, contributes new knowledge and ideas, and helps to shape creative solutions to problems that often are not produced when agencies retreat to “the mountaintop.”

I believe that most public agency decision-making should be collaborative in that it should involve some level of face-to-face dialogue and problem-solving, which ultimately produces wiser and more effective management strategies. It also enlists those who are affected by decisions in problem-solving and makes it more likely that we achieve a joint sense of understanding and ownership of agency decisions. Traditional consultative processes have rarely produced this sense of joint understanding and ownership, and have often been appealed as a result.

#### **On making decisions in collaborative processes:**

In most of the cases of formal collaboratives that involve decision rules, the goal is to get all the parties to feel supportive of the decision or at least to indicate they can live with the decision. Often these consensus-seeking processes have a fall-back decision rule, which may be a super-majority or more likely involves a recommendation to a decision-making authority that includes pros and cons of an alternative. But if majority rule is adopted as the only guiding norm, there can be a “tyranny of the majority” that can block honest and effective consideration of minority opinions and concerns. On the other side, if 100% support is needed to make choices, there can be a tyranny of the minority, which blocks everything they do not agree with. Consensus decision-making involves balancing the tyranny of the majority with the tyranny of the minority, and structuring effective processes that produce outcomes that avoid both of these tyrannies.

#### **On “shared authority” vs. “shared power”:**

In many cases that involve public agencies or elected officials, they cannot transfer their statutory authority to a nongovernmental collaborative group. This means that these officials can participate in a collaborative as stakeholders and resources, and they can pledge to consider the outcome in agency decision-making in an open and honest way, but they cannot commit that it will be the agency decision. That would be shared authority, which often is not allowed by law.

Shared *power* on the other hand is allowable, where parties to a collaborative agreement share the ability to shape the agreement, and that agreement — if it develops in a scientifically and legally bounded way — will likely become the official decision (or something close to it). Collaborative processes seek to share the power to shape direction even when the agencies participating in them cannot share authority to make decisions. ■

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

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### **More resources on stakeholder collaboration in resource management**

- “Making Collaboration Work” (article). *Conservation Magazine* (Winter 2000). By Steven Yaffee and Julia Wondolleck. [www.conservationmagazine.org/2008/07/making-collaboration-work/](http://www.conservationmagazine.org/2008/07/making-collaboration-work/)
- *Sharing Power: Learning by Doing in Co-Management Throughout the World* (IUCN, 2004). By Grazia Borrini-Feyerabend, et al. [http://cmsdata.iucn.org/downloads/sharing\\_power.pdf](http://cmsdata.iucn.org/downloads/sharing_power.pdf)
- FAO Guidelines: Collaborative natural resource management. [www.fao.org/docrep/008/a0032e/a0032e0c.htm](http://www.fao.org/docrep/008/a0032e/a0032e0c.htm)
- “Co-management of coral reef fisheries: A critical evaluation of the literature”. *Marine Policy* (36 [2], March 2012, 481–488). By A. W. Wamukota et al. Abstract only at: [www.sciencedirect.com/science/article/pii/S0308597X11001461](http://www.sciencedirect.com/science/article/pii/S0308597X11001461)

# Tundi's Take: Finding the Right Representatives of Stakeholder Constituencies – an Essential but Challenging Task

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

Participatory planning is the Holy Grail of EBM. Reaching out to stakeholders to determine a group vision for the coastal or marine area to be managed, bringing stakeholders into the planning process, and actively involving user groups in management are each thought to be a key to EBM success.

But paying homage to “participatory planning” is easier than working hard to ensure truly comprehensive stakeholder engagement. The broader the stakeholder spectrum, the more opportunities for conflict and the greater the need to negotiate compromise among differing perspectives, values, and needs. And even maximum engagement among user groups can result in a failed attempt at management if the individuals participating in planning and management are not truly representing stakeholder constituencies.

Participatory planning means having to spend resources (time, human resources, funds) on identifying all possible stakeholders with vested interests in the place to be managed and its resources. This is a worthwhile investment, to be sure – the literature is rife with examples of planning run amok because stakeholders opposed planned management measures that were developed without their participation.

But what is a stakeholder? People living in or adjacent to the managed area, direct users of resources, management entities, those holding property or use rights – these are all obvious candidates for inclusion in participatory management. But what of environmental campaigners, or shareholders of companies that have designs on developing resources in the area? What of the person who lives far from the area but feels strongly about its protection because of the cultural or spiritual value it holds? In discussions of the US MPA Federal Advisory Committee on which I had the good fortune of serving, we agreed to define stakeholders as “all affected and effecting parties” – in other words, groups who either derived benefits from the area by using the space or resources, or those responsible (either directly or indirectly) for exerting pressure on or influencing the ecology of the area. A pretty broad spectrum indeed – and one that poses problems for planners, who, in order to engage in participatory planning, have to identify all these parties, contact them, and request their participation via a representative.

If the area to be managed is relatively small, and the set of users more limited, then participatory planning and/or management that encompasses all stakeholders can be possible. In the case of the multiple small community-based management initiatives in the Philippines or within locally-managed marine areas in Fiji, stakeholder engagement operates relatively smoothly. It helps if those stakeholders have aligned interests. But even in cases where user groups have differing perspectives and objectives for an area, participatory management can result in supported EBM. Whether in Norway or in Namibia — where fishing interests co-exist with energy and minerals development, tourism, and conservation interests — participatory planning has allowed views of stakeholders to be voiced, compromises to be reached, and steps toward EBM to be taken.

However, negotiation and conflict resolution between stakeholder groups can occur only if the individuals participating in a process truly represent the “affected and effecting parties”. For coastal communities, this representation is pretty straightforward: the public can have some confidence that elected officials or traditional authorities can represent their interests. Businesses, too, can control how they are represented by appointing individuals to make their case. But what of institutions that lack this kind of social organization? Who can represent the interests of all scientists as a stakeholder group, for instance? Can one individual represent the interests of the environmental community? And who speaks for cultural values across myriad cultures? Or for spiritual or religious interests? Does nature itself have a voice?

I do not pretend to have an answer to these questions. But these questions need answering, with rigor and with some urgency, too. As the world calls out for more EBM, with more participation of stakeholders, the challenges become more daunting. EBM planners and managers have the responsibility to reach out as broadly as possible. At the same time, society and its institutions have the responsibility to organize themselves and make sure that the voice that is being heard is the one that best represents the complex web of values and desires that the collective group holds. ■

“EBM planners and managers have the responsibility to reach out as broadly as possible. At the same time, society and its institutions have the responsibility to organize themselves, and to make sure that the voice that is being heard is the one that best represents the web of values and desires that the collective group holds.”

## Profiles in EBM:

# Sustaining Ecosystems, Supporting Human Well-Being in The Bahamas

[Editor's note: Ecosystem-based management is as much a process as an endpoint. It does not require a single giant leap from traditional, sectoral management to fully integrated, comprehensive management. Rather, it can be achieved in a step-by-step, adaptive manner. In our new "Profiles in EBM" feature, MEAM will briefly highlight places where important steps toward EBM are being taken — recognizing ecosystem connections, protecting ecosystem services, integrating management, and pursuing multiple objectives.]

The Caribbean nation of The Bahamas consists of 29 principal islands and has a population of 330,000. Although most of the country's income is tourism-related, fishing is an important economic activity as well — feeding the local populace (and tourists) as well as providing significant export revenue. Efforts to protect the Bahamian environment have begun taking these ecosystem services into account.

"In earlier years when conservation efforts were implemented in The Bahamas, a lot of focus was placed primarily on maintaining healthy ecosystems and biodiversity," says Felicity Burrows, marine conservation specialist in The Nature Conservancy's Northern Caribbean office, located in The Bahamas. "In more recent years, conservation strategies have been designed to incorporate the maintenance of human livelihoods and sustainable use. It is important to have that balance."

A selection of some of the country's ongoing or recent conservation and sustainable use initiatives is below. Each initiative has involved a diverse mix of partners including government departments, local and international NGOs, stakeholders (particularly fishermen), funding organizations, and more.

### • Andros West Side Protected Area Project

This project promotes good management on the nation's largest island (Andros) through the Andros West Side National Park, which the Bahamian Government expanded in 2009 to include connected, critical marine habitats. The project also promotes sustainable use of the area through ecotourism activities like fly-fishing, the primary source of income on Andros. An economic valuation of the island has determined Andros habitats generate as much as US \$260 million per year in net economic benefits, a figure that could rise substantially with expanded sustainable use.

### • Spiny Lobster Fishery Improvement Project

This project encourages sustainable fishing practices and improved management of the nation's spiny lobster fishery. The goal is to secure Marine Stewardship Council (MSC) certification for the fishery. MSC certification is an ecolabel that rewards and promotes sustainable fishery management to global markets: following certification, a fishery's market value typically increases, which benefits fishermen. Spiny lobster production in The Bahamas is significant, averaging US \$70 million annually.

### • The Caribbean Challenge

Through this initiative, The Bahamas aims to expand its MPA network to cover 20% of its marine waters by 2020. A new master plan for the country's protected areas has identified priority sites and outlined funding, training, and policy actions to ensure the network's long-term sustainability. The planning process has incorporated analyses of the future effects of climate change on Bahamian coral reefs and mangroves, as well as those habitats' anticipated resilience.

### • Belize and Bahamas Fishermen Exchange

This project shared lessons among fishermen from Belize and The Bahamas on addressing the mutual threat of invasive lionfish in their marine ecosystems. The exchange involved a visit of Belizean fishermen to The Bahamas where they attended a workshop with classroom training, field networking with fishermen, and the capture and preparation of lionfish for consumption.

"Through outreach efforts, we have educated the community on how all these initiatives connect in order to continue to provide and support our quality of life well into the future," says Burrows. "The goal is to take care of Nature so Nature can continue to take care of us." ■

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## Notes & News

### Report offers guidance on maximizing socioeconomic benefits of marine planning

A new report commissioned by the UK government analyzes the socioeconomic processes at work in England's coastal communities, and sets a framework for considering these processes in the country's upcoming marine planning process. The purpose is to inform

planners of the relative socioeconomic benefits associated with marine activities, including broad recommendations on which activities might fit most readily with different areas of the coast.

The report concludes that socioeconomic benefits are likely to be greatest when marine planning works effectively with terrestrial planning and economic development activity. That is, marine planning should inform terrestrial planning, and vice versa. "There is a role for using marine

planning to accentuate local distinctiveness and inform development strategies,” states the report. It was commissioned by the Marine Management Organisation, a UK government body created to implement the nation’s new marine planning system. *Maximising the Socio-Economic Benefits of Marine Planning for English Coastal Communities* is at [www.marinemangement.org.uk/marineplanning/se.htm](http://www.marinemangement.org.uk/marineplanning/se.htm).

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### Report: Cases of good coastal management practice

A new publication provides case studies of a diverse set of 17 coastal management initiatives from across the Pacific region, ranging from local to regional scales of action. The initiatives all feature elements considered as good practice in coastal management:

- They are locally and culturally appropriate;
- They are suited to national institutional structure and capacity;
- They are supported by evidence of effectiveness or are considered to have a high likelihood of success;
- They are cost-effective; and
- They are potentially applicable elsewhere.

The report *Good Coastal Management Practices in the Pacific: Experiences from the Field* was co-published by the Secretariat of the Pacific Regional Environment Programme (SPREP) and the International Coral Reef Initiative (ICRI), and is available at <http://bit.ly/goodcoastal>.

### Committee gives advice on integrating MPAs in US marine spatial planning

The US Marine Protected Areas Federal Advisory Committee has released recommendations on integrating the National System of Marine Protected Areas within the country’s Coastal and Marine Spatial Planning (CMSP) Initiative, which is underway. The recommendations address:

- What role the national MPA system should play within the CMSP Initiative;
- What steps are needed to ensure that conservation is sufficiently addressed within regional coastal and marine spatial plans; and
- How decision support tools and conservation planning processes that have already been used to develop the national system of MPAs can be incorporated in spatial planning.

Notably, the advisory committee recommends that the CMSP Initiative should include identifying and protecting ecologically and culturally important areas. The MPA Federal Advisory Committee recommendations on MPAs and coastal and marine spatial planning are available at [www.mpa.gov](http://www.mpa.gov).

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

## The EBM Toolbox by Sarah Carr

### Tools for stakeholder engagement

Tools can facilitate many aspects of stakeholder engagement in a conservation or management project. They can assist with collecting information on local use of natural resources, disseminating project information and results, visualizing potential management alternatives and their consequences for ecosystems and communities, and gathering input from stakeholders about the desirability of those alternatives. The EBM Tools Network webinar series has profiled a variety of tools that coastal and marine practitioners have used to facilitate stakeholder engagement. Some general and easy-to-use tools include:

- **Google Earth and Google Maps** (<http://earth.google.com>; <http://maps.google.com>) allow users to create interactive and 3D maps. Google Earth shows points, lines, and areas with icons of the user’s choice and links to web pages, pictures, and e-mail addresses. Google Maps helps create online custom maps that can be used to collect stakeholder and collaborator contributions, shared with col-

leagues and embedded in project websites. A training manual on using Google Earth and Google Maps is available at <http://extension.unh.edu/GISGPS/GISINFO.cfm?crs=18>. Additional information for putting maps and geographic information on the Web is available at <http://clear.uconn.edu/training/maps>.

- **EngagingPlans** (Urban Interactive Studios; <http://engagingplans.com>) is a Web “microsite” that enables projects to launch and maintain interactive, project-specific websites to gather stakeholder feedback and share updates.
- **Audience response systems** (available from multiple providers) help obtain feedback from stakeholders at key decision points. Traditionally these systems consisted of handheld keypads that sent signals to a base station for use at in-person public meetings. But now many systems use smartphones and Web platforms to eliminate the need for keypads, thus allowing inclusion of remote participants.

Webinar demonstrations of these tools are on the EBM Tools Network website at [www.ebmtools.org/tools\\_training/presentations.html](http://www.ebmtools.org/tools_training/presentations.html). In our next EBM Toolbox, we will profile additional stakeholder management tools that are more specialized for use in conservation and management projects.

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