

**MPA networks:
Are they important? More
importantly, are they feasible?**

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A disconnect currently exists
between what we all know needs to
be done for the oceans,
and what we are able to do.

This disconnect is partly a scaling problem:

- Large scale marine policy, embodied in global and multilateral agreements, and underlying NGO conservation priority-setting, occurs on a different scale from...
- Small scale conservation projects, where much conservation actually gets accomplished

We know we have to think big,
but our interventions are invariably
too small to make a difference



The vast majority of MPAs are:

- Small
- Simplistic
- Opportunistic
- Ineffective in addressing real threats



Our successes seem overshadowed by our collective failures:

- Fisheries management is faltering on its way towards ecosystem-based management
- High seas issues are becoming more and more pressing
- ICZM is rarely able to address threats from afar, nor adequately link with marine management

Nearly 40% of the population now lives
in only 5% of the world's land area



As dependence on marine resources grows,
ecosystems are increasingly threatened



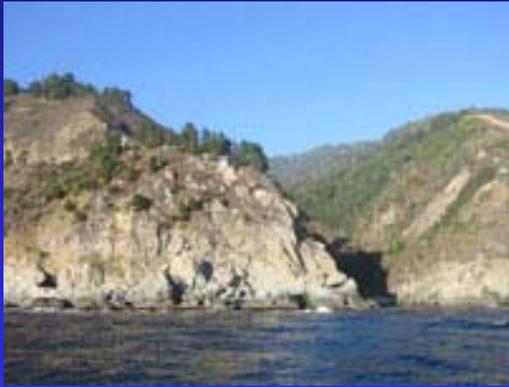
Coastal ecosystems continue to be highly impacted by human activity

- 50% mangroves and 30% coral reefs destroyed
- Coastal wetlands loss up to 20% annually
- Doubled nitrogen inputs have led to increased eutrophication and spreading hypoxia
- Freshwater diversion has led to catastrophic losses in water and sediment in estuaries
- Most commercial fisheries worldwide are overexploited

Chronic, cumulative impacts have stressed ecosystems in all biomes



The few MPAs we have are biased towards only some of these biomes



Globally, MPAs are too little, too late –



- and largely ineffective in addressing true threats (especially indirect threats), protecting mobile species, and conserving linkages between habitats

One potentially powerful solution is
the establishment of large scale
MPA networks

Networks allow us to capture ecological linkages, yet take advantage of economies of scale



Networks as a necessary element:

- In fisheries, allowing for true ecosystem-scale management
- On the high seas, where regional agreements can focus attention on threatening activity where that attention is needed most
- Across the land/sea interface, to better link ICZM with marine management regimes

But who decides how networks
should be designed?

Where? What species and habitats?
Addressing which threats?
Affecting which users?



In order to keep our sights on the big picture -

we must indeed approach networks from the top down.

A hierarchical, top-down approach:

- Is the only way to sufficiently scale up conservation to make it truly effective
- Allows us to systematically develop MPA networks that span whole ecoregions
- Creates management that is integrative across biomes, comprehensive in addressing real threats, and designed with the big picture in mind

MPA networks can overcome the disconnect between scales

- They represent a hierarchy of priority-setting, such that the large scale conservation is possible...
- While at the same time allowing local needs and conditions to dictate the form of management and governance in each individual MPA

Thus, MPA networks are an important, powerful tool.

But are they feasible?

I am confident they are.



Why?

- Increased awareness about the deteriorating condition of the oceans, and the link to human well-being
- Better scientific understanding of linkages at all scales, including requirements of key species, links between terrestrial and marine habitats, benthic-pelagic coupling, etc.
- More demonstration models, and...

Ocean Zoning

- Zoning is emerging as an innovative new way to address differing, sometimes conflicting uses of ocean space and resources
- MPA networks are a logical starting point for ocean zoning, since they can point to the “core areas” that need greatest protection

How do we get there?



Networks might be instituted in this way:

- Parties sharing jurisdiction in a regional sea agree to develop an MPA network
- Ecological assessment determines the most critical areas and the linkages between them
- National agencies or regional bodies undertake threats analysis at the priority sites
- Governments work with NGOs and local communities to determine the best management for each MPA

So while instituting a network is a top-down proposition,

building a network must be a bottom-up one.

Thanks for sharing

your time and interest.