

Global Coral Reef MPA Network Challenges Underestimated

THE POLICY FORUM “CORAL REEFS AND THE GLOBAL NETWORK OF MARINE PROTECTED AREAS” (C. MORA ET AL., 23 JUNE, P. 1750) UNDERESTIMATES the complexity of the conservation challenge in two important ways.

First, the analysis does not factor in the impacts of some of the most important pervasive global anthropogenic stressors on coral (1) that penetrate MPA boundaries at will via terrestrial, atmospheric, and oceanic avenues (2). These include increasing sea surface temperatures and associated coral bleaching, contagious coral disease and potential ocean acidification (3).

Second, while Mora et al. recognize the inadequacies of management and enforcement within MPAs themselves, they do not integrate the potential impacts of larger, and equally important, political, economic and sociological forces into their analysis. For example, it is possible to establish a perfect global MPA network using all the best science but still fail to protect coral reefs if you do not have high and sustained political and community capacity at local and national levels (2). Special interest groups that make campaign contributions and gain favorable permit decisions from politicians (low political capacity) can ruin the best scientifically designed MPA network in a short period of time. Likewise, if local residents do not have a conservation ethic (low community capacity) no amount of regulation and enforcement will protect coral reef resources in the long run from stressors like poaching. Low political and community capacity situations are more the rule than the exception in the MPA world.

We all have a vested interest in making MPAs effective tools for conserving coral, enhancing fisheries and conserving related reef biodiversity, but to make the MPA tool effective for conserving coral, we must reduce the root causes of pervasive global anthropogenic stressors (4). This starts with changing our own personal behavior and extends to making larger political, cultural and economic improvements. These include, but are not limited to, citizens demanding government enforcement of existing environmental regulations, voters participating in the political process, and stock holders demanding environmentally responsible business behavior. None of these tasks are easy or ever complete.

Any re-assessment of global-scale conservation strategies for coral reefs, in this era of global economies, climate change and interconnected ecosystems must focus on reducing the root cause of stressors on coral and on improving political and community capacity because the effectiveness of any global MPA network is inextricably linked to the success in these critical areas.

PS. What the analysis of Mora et al. does show clearly is the use of the term Marine “Protected” Area is truly a misnomer. The terms Marine “Management” Area or Marine “Park” are more appropriate names to describe this conservation tool. The MPA term should only be used if real protection can be biologically certified over time (2).

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