

ARC Centre of Excellence for Coral Reef Studies Media Release

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FINDING A CURE FOR THE “CORAL CRISIS”

The management of Australia’s Great Barrier Reef Marine Park has been hailed as a groundbreaking international model for better managing the oceans, in a leading United States scientific publication.

In a study published in the prestigious Proceedings of the US National Academy of Science, Per Olsson and Carl Folke of the Stockholm Resilience Centre and Terry Hughes of the ARC Centre of Excellence for Coral Reef Studies in Australia have identified the keys to successful marine ecosystem-based management. Their findings were revealed today at the 11th International Coral Reef Symposium, in Fort Lauderdale, Florida, where the world’s leading coral reef scientists and managers have gathered.

“The core issue is that the global ‘coral crisis’ is really a crisis of governance,” says Prof. Terry Hughes. “Round the world, people are struggling with the difficulties of managing these sensitive coral ecosystems in the face of all the human and natural pressures they are subject to.”

“Many people have tried to protect marine environments but as soon as some form of governance was put in place and everyone relaxed, it was overtaken by events – either human or natural. The critical realization in the case of the Great Barrier Reef was that its management had to be flexible and adaptive, based on continual scientific monitoring of what is going on.”

“This flexibility was important in order to deal with change, and to navigate the transition to an improved system of governance” Dr Olsson says.

The paper highlights the role of leadership and consensus-building, and credits the Great Barrier Reef Marine Park Authority and its Chair, Virginia Chadwick, with having sought and gained the support of the public, industry and governments at all levels for putting the management of the world’s largest coral reef system onto an ecological footing.

“Our study shows the importance of leadership and strategies for responding to signals of change before ecosystem collapse occurs”, Dr Olsson says.

A critical step in the process was to convince local communities that the reef was facing many threats, and to enlist public support for managing it more flexibly. This was accomplished through a major “Reef Under Pressure” community consultation campaign.

“Combined with the declines in populations of dugongs, turtles, sharks and other fish, polluted runoff from the land and global warming impacts, it became clear to everyone that the original

management system was becoming less and less adequate as the pressures on the reef grew.” Prof. Hughes says.

One of the most visible and controversial initiatives under the new regime was to extend the area closed to all forms of fishing from 6 to 33 per cent of the total reef area – creating the largest no-take zone in the world.

“The Barrier Reef example illustrates a shift in thinking to an integrated view of humans and nature, based on active stewardship of marine ecosystems for human well-being” Dr. Olsson says.

Backing all of this was the necessary legislation and regulatory powers and also having a sufficient flow of good science to inform the management process constantly. The study underscores the particular importance of integrating good science with good policy.

The report concludes that laws alone cannot bring about the changes necessary to protect the world’s ocean ecosystems – good science and public understanding and support are also vital.

“In contrast to the GBR case, marine zoning in some countries has been severely constrained because of poverty, inflexible institutions, lack of public support, difficulties developing acceptable legislation, and failures to achieve desired results even after zoning is established. These are the critical barriers that we must urgently address and overcome” Professor Hughes said.

“Understanding successes and failures in marine governance systems is a first step in improving their adaptive capacity to secure ecosystem services in the face of uncertainty and rapid change,” Prof. Folke says.

MEDIA NOTE: photos available electronically at <http://www.coralcoe.org.au/news.html>

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