

**Member's report on activities to ICRI**

Presented by the Great Barrier Reef Marine Park Authority

Reporting period December 2010 – December 2011

1. **General Information** (note that this information will be post on the ICRIForum in your member page: <http://www.icriforum.org/about-icri/members-networks>)

Are you an ICRI Member?	Yes
Representation to ICRI (Country / Organization):	Great Barrier Reef Marine Park Authority (GBRMPA)
Focal Point 1:	
<i>Name:</i>	John Baldwin
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Focal point 2:	
<i>Name:</i>	Anne Caillaud
<i>Organization:</i>	GBRMPA
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Last meeting attended:	25 th ICRI General Meeting, Apia, Samoa 8-12 November 2010 (7 th ICRI East Asia Regional Workshop, Siem Reap, Cambodia 9-13 Oct. 2011 also attended).
How do you circulate ICRI information within your country and/or organization?	Formalised intra- and inter-governmental committees (a) and Senior Executive briefings (b)
Budget allocated for coral reef related activities (please mention for year/period):	

For countries only:

National Action Plan / Initiative	
Do you have a National Coral Reef action plan?	YES ¹
Is this plan publicly available? If so please provide location:	www.environment.gov.au/coasts/mpa/commo-nwealth/coord/index.html
Do you have a National Coral Reef Initiative or Task Force?	YES ²
Are you engaged in any regional programs / initiatives relating to coral reefs:	The Australian Government is engaged in numerous multi-lateral and bilateral environmental initiatives within the Asia/Pacific region with coral reef implications.
If yes, please indicate which programmes/initiatives:	Examples include the Coral Triangle Initiative, the Asia-Pacific Economic Cooperation (APEC) and the Arafura and Timor Seas Expert Forum

2. **Updates on your activities** (new initiatives/programs/projects of your government /organization which will be of interest to the ICRI Members)\

¹ Within the context of the Australian National Representative System of Marine Protected Areas (NRSMPA)

² Within the context of the Australian "Marine Protected Areas Working Group"

Please see the list of recent initiatives addressing the major risks identified in the Great Barrier Reef Outlook Report 2009 (Attachment A).

- 3. Contribution to the ICRI GM:** Your responses to the following questions will assist the Secretariat in assessing contributions towards the major themes of the current ICRI action plan and objectives of the general meeting. Due to the heavy schedules of ICRI members, we have tried to keep the questions to a minimum and value any response you can provide.

a. Rio+20

To support efforts to share ideas and plans for coral reefs/marine initiatives at Rio+20 and nurture opportunities for collaboration, we would like to invite you to share your proposed events and ideas:

The GBRMPA is not initiating anything relating to Rio+20, however the Australian Government will be involved as follows:

"Australia has longstanding interests in oceans and other marine issues. The world's oceans are increasingly under pressure from threats such as ocean acidification, overfishing, biodiversity loss, habitat loss and pollution. Key ecosystems such as coral reefs may soon reach critical thresholds, disproportionately impacting on the people and communities that are most vulnerable, such as small island and coastal developing countries. Progressing sustainable ocean and marine conservation and management to achieve a "blue economy" is now an urgent sustainable development priority.

A wide range of States have highlighted the importance of oceans issues to the Rio+20 theme of "green economy in the context of sustainable development and poverty eradication." Marine resources and ecosystems are a foundation for sustainable development for many countries, particularly for Australia's Pacific neighbours, where they are an important source of food, livelihoods, income and culture. The conservation and management of ocean, coral and other marine environments is vital to the sustainability of coastal and island communities.

In its submission to the Rio+20 Compilation Document, Australia outlines its views for the conference, including improving the conservation and management of marine ecosystems and resources for sustainable development (the blue economy). Australia's view is that the outcomes of Rio+20 should include a framework for action to mobilise efforts towards a blue economy. The framework would include strengthening existing regional integrated oceans management or establishing new regional frameworks that link national efforts to address shared objectives and challenges; showcasing and promoting blue economy initiatives as a means of strengthening the political momentum and donor support that is key to their ongoing success; and developing improved metrics to monitor the state of oceans, coral reefs and other marine ecosystems.

Australia is working closely with Pacific and Caribbean countries through our United Nations Mission in New York and elsewhere to build support for the blue economy and is keen to collaborate with other interested parties."

- b. During the meeting, a full day will focus on the Indian Ocean region.** If you have any question about the region, ongoing projects in the region... please let us know.

Nil at this time

- c.** What other new initiatives/programs/projects/progress, in particular since November 2010, has been made by your government/organization relative to i) Marine Protected Areas, Ramsar, World Heritage sites, and Man and the Biosphere Programme (MAB) sites designation containing coral reefs; ii) Policy changes; iii) Economic valuation of coral reef ecosystem services, etc., which you believe would be of general interest to other ICRI Members?

The GBRMPA is an Australian MPA and a World Heritage site. More broadly, there has been progress by the Australian Government on topics (i) and (ii) as follows:

- i) **MPAs:** new Commonwealth marine protected areas are currently being identified across all of Australia's marine regions through the marine bioregional planning process. Draft plans and marine reserve network proposals were released for formal public consultation in 2011 for the Coral Sea, South-West, Temperate East, North and North-West bioregions.

World Heritage sites: Ningaloo Reef in Western Australia was inscribed in the World Heritage List on 24 June 2011.

- ii) **Policy changes:** Finalisation, in 2011, of the Australian Government *Support Plan for the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security*, including an associated \$2.5 million package of support for activities in Papua New Guinea, Solomon Islands and Timor Leste.
- iii) **Economic valuation coral reef ecosystem services:** As part of the Australian Government's National Environmental Research Program, Tropical Ecosystems Hub – Multi-year research program, the GBRMPA is working collaboratively with researchers on a project which investigates the relative value of goods and services produced by the Great Barrier Reef. The project aims, amongst other things, to improve understanding of a diverse range of stakeholder views on the relative 'value' of the different goods and services provided by the reef, and improve our ability to assess the relative importance (or 'value') of different market and non-market goods and services using both monetary and non-monetary approaches. It will fill critical information gaps about the 'value' of different goods and series produced by the reef (particularly non-market services such as cultural, existence and bequest values) to a variety of different stakeholders (tourists, residents, miners, fishers etc.) and about the way in which those 'values' might be affected by a range of external influences (e.g. increases in population, changes in the mix of visitors). It will also test and refine both traditional and state-of-the-art techniques for generating estimates of the relative importance of those 'values'.

d. Is there any topic you would like to raise during the meeting? Nil at this time

e. Please list publications, reports you have been released since the last meeting.

Publications

Anthony, K.R.N., Maynard, J.A., Diaz-Pulido, G., Mumby, P.J., Marshall, P.A., Cao, L., Hoegh-Guldberg, O. 2011, *Ocean acidification and warming will lower coral reef resilience*, *Global Change Biology* 17: 1798-1808.

Bainbridge, Z., Dight, I., Yorkston, H., Lewis, S., Brodie, J. 2011, Catchment management in a dry tropical river near the Great Barrier Reef, in *Catchment management and coral reef conservation: a practical guide for coastal resource managers to reduce damage from catchment areas based on best practice case studies*, eds C. Wilkinson and J. Brodie, Global Coral Reef Monitoring Network and Reef and Rainforest Research Centre, Townsville, pp. 96-97.

Bohensky, E., Butler, J.R.A., Costanza, R., Bohnet, I., Delisle, A., Fabricius, K., Gooch, M., Kubiszewski, I., Lukacs, G., Pert, P., Wolanski, E. 2011, Future makers or future takers? A scenario analysis of climate change and ecosystem services for the Great Barrier Reef, *Global Environmental Change* 21(3): 876-893.

Ceccarelli, D., Ayling, T. 2010, *Role, importance and vulnerability of top predators on the Great Barrier reef - a review*, GBRMPA Research Publication no. 105, Great Barrier Reef Marine Park Authority, Townsville.

Ceccarelli, D., Jones, G.P., McCook, L.J. 2011, Interactions between herbivorous fish guilds and their influence on algal succession on a coastal coral reef, *Journal of Experimental Marine Biology and Ecology* 399: 60-67.

- Costanza, R., Bohensky, E., Butler, J.R.A., Bohnet, I., Delisle, A., Fabricius, K., Gooch, M., Kubiszewski, I., Lukacs, G., Pert, P., Wolanski, E. (in press), A scenario analysis of climate change and ecosystem services for the Great Barrier Reef, in *Ecological economics of estuaries and coasts*, eds M. van den Belt and R. Constanza, (Treatise on Estuarine and Coastal Science series eds E. Wolanski and D. McLusky, vol. 12), Elsevier, Amsterdam, 22 p.
- Davies, S. 2010, International engagement provides a PD opportunity for regional professionals, *Incite* 31(12): 11.
- Day, J.C. 2010, Zoning within the Great Barrier Reef Marine Park (Australia), in *Ocean zoning: making marine management more effective*, ed. Tundi Agardy, Earthscan, London, pp. 59-74.
- Day, J.C. 2011, Conservation and marine protected areas, in *Encyclopedia of modern coral reefs: structure, form and process*, ed. D. Hopley, Springer, Dordrecht, Netherlands, pp.230-236.
- Day, J.C. 2011, Great Barrier Reef Marine Park - governance analysis, in *Governing marine protected areas: getting the balance right, volume 2*, eds P.J.S. Jones, W.Qiu and E.M. De Santo, Marine and Coastal Ecosystems Branch, UNEP, Nairobi, pp. 1-18.
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- Dobbs, K. 2010, Hawksbill sex ratios, incubation and pivotal temperatures from Milman Island, Australia, *Marine Turtle Newsletter* 128: 12-16.
- Dobbs, K., Day, J., Skeat, H., Baldwin, J., Molloy, F., McCook, L., Johnson, M., Elliot, B., Skeat, A., Vohland, K., Wachenfeld, D., Kenchington, R. 2011, Developing a long-term outlook for the Great Barrier Reef, Australia: a framework for adaptive management reporting underpinning an ecosystem-based management approach, *Marine Policy* 35: 233-240.
- Donnelly, R. 2011, *Climate change vulnerability assessment: Queensland marine aquarium supply industry, 2010*, GBRMPA Research Publication no. 108, Great Barrier Reef Marine Park Authority, Townsville.
- Fabricius, K., Brodie, J., Waterhouse, J., Yorkston, H. 2011, Science-based catchment management is evolving along the Great Barrier Reef of Australia, in *Catchment management and coral reef conservation: a practical guide for coastal resource managers to reduce damage from catchment areas based on best practice case studies*, eds C. Wilkinson and J. Brodie, Global Coral Reef Monitoring Network and Reef and Rainforest Research Centre, Townsville, pp. 102-105.
- Foster, T., Corcoran, E., Erfemeijer, P., Fletcher, C., Peirs, K., Dolmans, C., Smith, A., Yamamoto, H. 2010, *Dredging and port construction around coral reefs*, PIANC (World Association for Waterborne Transport Infrastructure), Brussels.
- Gooch, M., Rigano, D. 2010, Enhancing community-scale social resilience: what is the connection between healthy communities and healthy waterways, *Australian Geographer* 41(4): 507-520.
- Great Barrier Reef Marine Park Authority 2011, *Climate change adaptation principles: bringing adaptation to life in the marine, biodiversity and resources setting*, GBRMPA, Townsville.
- Great Barrier Reef Marine Park Authority 2011, *Identifying special or unique sites in the Great Barrier Reef World Heritage Area for inclusion in the Great Barrier Reef Marine Park Zoning Plan 2003*, GBRMPA, Townsville.
- Great Barrier Reef Marine Park Authority 2011, *Impacts of tropical cyclone Yasi on the Great Barrier Reef: a report on findings of a rapid ecological impact assessment*, July 2011, GBRMPA, Townsville.
- Kenchington, R.A., Day J.C. 2011, Zoning, a fundamental cornerstone of effective marine spatial planning: lessons learnt from the Great Barrier Reef, *Journal of Coastal Conservation* 15(2): 271-278.

Maynard, J.A., Marshall, P.A., Johnson, J.E., Harman, S. 2010, Building resilience into practical conservation: identifying local management responses to global climate change in the southern Great Barrier Reef, *Coral Reefs* 29: 381-391.

McCook, L. 2010, Getting the public to understand the 'learning as we do it', *Marine Ecosystems and Management* 4(3): 1-2.

McCook, L.J., Ayling, T., Cappo, M., Choat, J.H., Evans, R.D., De Freitas, D.M., Heupel, M., Hughes, T.P., Jones, G.P., Mapstone, B., Marsh, H., Mills, M., Molloy, F.J., Pitcher, C.R., Pressey, R.L., Russ, G.R., Sutton, S., Sweatman, H., Tobin, R., Wachenfeld, D.R., Williamson, D.H. 2010, Adaptive management of the Great Barrier Reef: a globally significant demonstration of the benefits of networks of marine reserves, *Proceedings of the National Academy of Sciences* 107(43): 18278-18285.

Myers, S., Carter, R.W and Smith, T. 2010, *Climate change in the Capricorn Coast: an analysis of stewardship potential*, GBRMPA research Publication no. 106, Great Barrier Reef Marine Park Authority, Townsville.

Roff, J., Zacharias, M., Day, J.C. 2011, *Marine conservation ecology*, Earthscan, Washington DC.

Thomson, D.P. and Frisch, A.J. 2010, Extraordinary high coral cover on a nearshore, high-latitude reef in south-west Australia, *Coral Reefs* 29: 923-927.

Selected Reports

Report Title	ISBN/ISSN
GBRMPA Corporate plan 2011-2014	1039-8538
GBRMPA Annual Report 2010-11	0155-8072

f. Please indicate upcoming coral reef-related meetings you will attend?

- Third Intergovernmental Review Meeting (IGR-3), 25-27 January 2012, and Global Conference on land-ocean interaction 23-24 [No](#)
- IUCN World Conservation Congress, 6-15 September 2012, Jeju. Are you planning to organize an event? Yes – [ICRI \(hosted by Australia\) has proposed a side event](#)
- 26th Meeting of the CITES Animals Committee, 15-20 March 2012, Geneva, Switzerland [No](#)
- Others: [International Coral Reef Symposium, 9-13 July 2012, Cairns, Australia](#)



Members Report

ICRI GM 26 - MR/[GBRMPA]

INTERNATIONAL CORAL REEF INITIATIVE (ICRI)

General Meeting

La Réunion, 12-16 December 2011

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Update on Activities

The left column presents the key risks to the Great Barrier Reef identified in the Great Barrier Reef Outlook Report 2009. Text in italics is quoted from the conclusions of the chapter on management effectiveness (chapter 6). The right column lists select recent actions by the GBRMPA to address those risks.

Key issue (management effectiveness conclusion)	Main actions & progress
<p>Climate Change</p> <p><i>"The challenge remains to translate plans and measures into specific policies and measurable on-ground actions".</i></p>	<ul style="list-style-type: none"> ▪ Incident response plans revised and Reef Health Incident Response System developed. ▪ Implementation of an Extreme Weather Response Program following Queensland floods and category 5 cyclone Yasi in Feb 2010, including rapid assessments of impacts, assistance to GBR industries to prepare for and adapt to future impacts, and inform future management responses. ▪ Development of a Climate Change Adaptation Planning Framework, stemming from climate modelling applied to green turtles and seabirds at Raine Island (northern Great Barrier Reef).
<p>Loss of coastal habitats from coastal development</p> <p><i>"A lack of integrated planning, resources and enforcement in managing coastal development is compromising protection of the Great Barrier Reef".</i></p>	<ul style="list-style-type: none"> ▪ Input provided into 19 assessments under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>, including 16 major projects. ▪ Expansion of the Reef Guardian Councils program. ▪ Assessment of the status of the Great Barrier Reef coastal and catchment ecosystems undertaken in collaboration with scientific experts and managers.
<p>Fisheries</p> <p><i>"A lack of coordination, plus variable uptake of best practice management, is limiting effectiveness of fisheries management"</i></p>	<ul style="list-style-type: none"> ▪ Worked with industry – including Queensland Seafood Industry Association through Ecological Risk Assessment for the East Coast Trawl Fishery to help achieve sustainability. ▪ New intelligence reporting databases implemented and new compliance intelligence developed, land-based patrols undertaken in high risk areas. ▪ Reef Guardian Fishers pilot program launched (March 2011) involving the reef line commercial fishing sector. Marine aquarium fish and coral collection fisheries joined the program in April. ▪ ProVision Reef's Stewardship Action Plan implemented through Keppel Island response plan following 2011 floods.

Key issue (management effectiveness conclusion)	Main actions & progress
<p>Water Quality</p> <p><i>"progress is slow and patchy"</i></p>	<ul style="list-style-type: none"> ▪ Through existing Marine Monitoring Program (partnership program) declining seagrass identified and first Reef Plan Report Card developed. ▪ Reef Guardian Farmers program launched (March 2011) with a sugar cane farmer pilot program. The program showcases good land practices that help improve the health of the Great Barrier Reef. ▪ Supported the development of Reef Rescue Research, Development and Innovation Plan.
<p>Traditional Use</p> <p><i>"Improvements are being made in the management of traditional use, including through joint resource use agreements, but progress is slow."</i></p>	<ul style="list-style-type: none"> ▪ Progress on the implementation of the \$10 million Reef Rescue Indigenous Land and Sea Country Partnerships Program 2009-2011. ▪ The GBRMPA has worked with 30 Traditional Owner groups on Traditional use of Marine Resource Agreements (TUMRAs) activities, which implement collaborative management arrangements to protect cultural values and to achieve sustainable hunting of culturally important species. ▪ A \$500,000 grants program was administered to assist Traditional Owner groups carry out environmental initiatives on their traditional land and sea country. ▪ Field surveillance in high risk poaching areas increased thanks to training provided to Traditional Owners and Indigenous Rangers to monitor and report illegal activities such as illegal netting and poaching.
<p>Information needs / gaps</p> <p><i>"Consideration of cumulative impacts, ecosystem resilience and connectivity issues is currently lacking or not reflected explicitly in most measures for biodiversity protection."</i></p>	<ul style="list-style-type: none"> ▪ Great Barrier Reef Biodiversity Strategy progressed. ▪ Great Barrier Reef node of the National Environmental Research Program (NERP)'s Tropical Ecosystems hub launched to fund research programs highly relevant to management. ▪ Integrated Eye on the Reef monitoring program enhanced. ▪ Knowledge Management Strategy and Implementation Plan progressed.