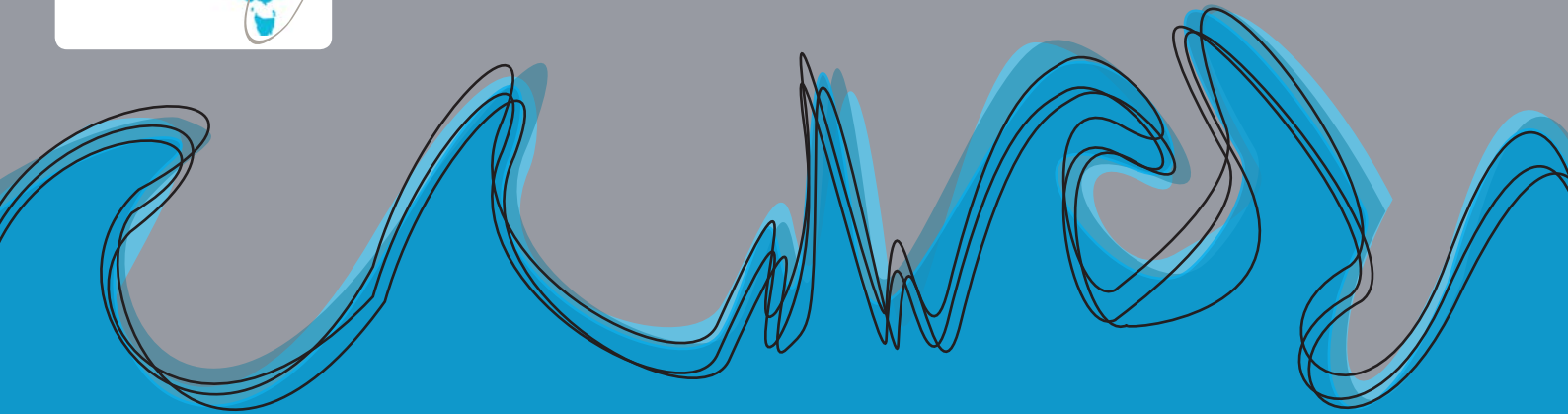




Changing currents in marine biodiversity governance and management: responding to climate change



Project Background

Climate change and a range of coastal and marine development pressures mean that we need an adaptive approach to conserving marine biodiversity. Current arrangements have limited adaptive capacity to deal with expected shifts in the structure and composition of marine ecosystems and habitats. This project is identifying adaptive governance and management

arrangements for conserving marine biodiversity in the context of climate change. We focus on three study areas: Whitsundays (Queensland), Tweed-Morton (NSW/Queensland), and East Coast Tasmania. This work will assist in securing the future of marine biota and associated dependent values, including tourism and fisheries.



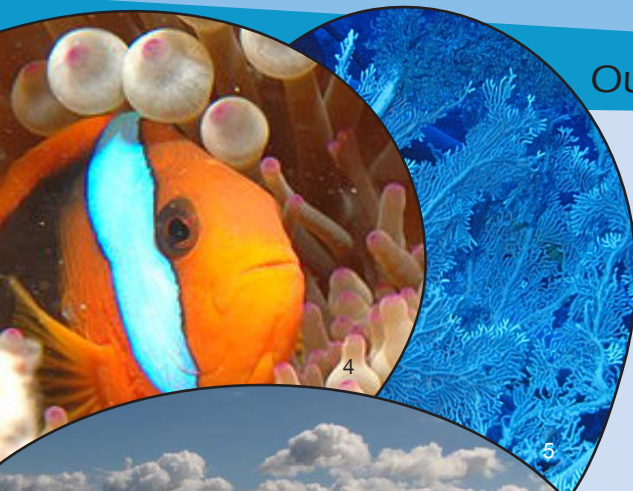
Project Outline

The project is:

- identifying governance and management requirements for conserving marine biodiversity in the context of climate change;
- assessing how well current arrangements meet these requirements;

- identifying alternative arrangements that would better conserve marine biodiversity; and
- providing advice to authorities on implementing reforms.

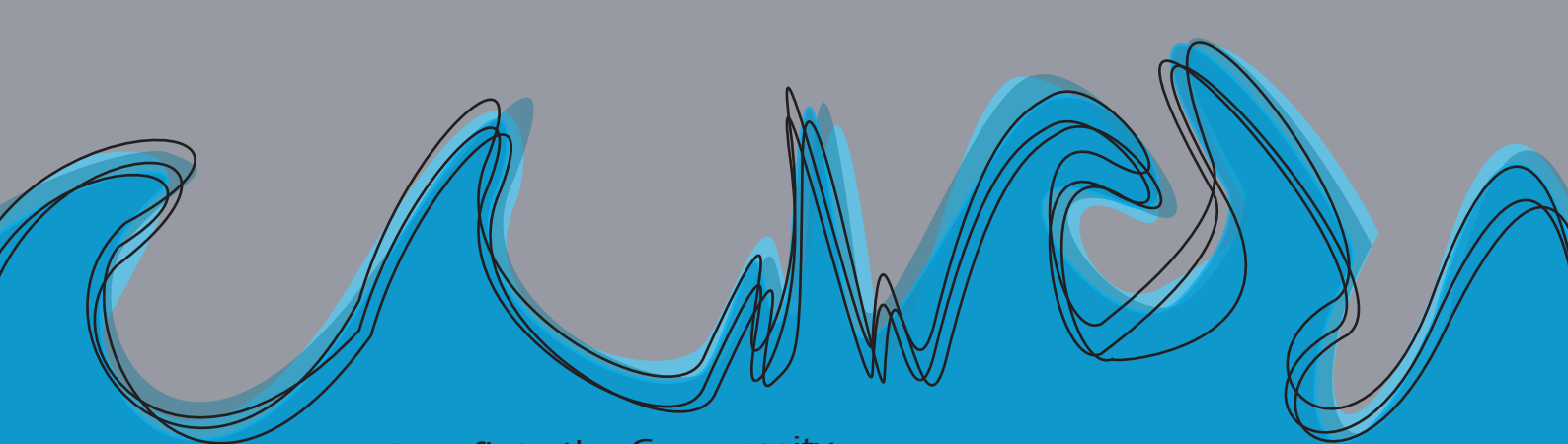
To do this, we are using scenario planning, system modelling and workshops with stakeholders and authorities.



Outcomes

1. A set of governance and management requirements for conserving marine biodiversity in the face of major environmental change. These requirements are applicable to all marine situations, and provide a 'benchmark' against which current and potential future arrangements can be assessed.
2. Assessment of how well current arrangements in three study areas meet the requirements, highlighting strengths and aspects that could be improved.
3. Identification of alternative arrangements that better meet the requirements, and therefore deliver more effective responses to climate change and development pressures.
4. Recommendations for reforms to current arrangements that will, through improved adaptive capacity, better conserve marine biodiversity.





Benefit to the Community



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Many people across Australia, and internationally, care about the future of marine biodiversity. This research hopes to benefit these people by helping bring about governance and management arrangements that improve our capacity to conserve marine biodiversity.

Through improving conservation of the resource on which they depend, we aim

to benefit the sustainability of marine nature-based tourism industry. Sustaining marine tourism would also yield economic benefits to those regional communities dependent on this industry. In the medium to long-term, recreational and commercial fishers also stand to benefit from improved capacity to conserve marine biodiversity and the associated fish stocks on which they depend.



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More Info

For further information and updates:
www.geog.utas.edu.au/geography/changingcurrents/

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Images



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1. Loggerhead sea turtle (*Caretta caretta*). Image: Brian Gratwicke;
2. Whitehaven Beach, Whitsunday Island. Image: Damien Dempsey;
3. Kelp forest, Tasmania. Image: Lorne Kriwoken;
4. Clownfish, Great Barrier Reef, Cairns, Australia. Image: Leonard Low;
5. Fan coral, Pacific. Image: Lorne Kriwoken;
6. Kayak, Tasmania. Image: Chris Allchin;
7. Fish and scuba diver, Tasmania. Image: Lorne Kriwoken;
8. Phytoplankton bloom, Great Barrier Reef. Image: Jesse Allen;
9. Shy albatross. Image: JJ Harrison;
10. Coffs Harbour. Image: frumbert, CC;
11. Sea kayaking, Coles Bay, Tasmania. Image: Tirin.

Disclaimer: The use of these photos in no way suggests the author endorses this work



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The research team involves collaborators from the University of Tasmania and Queensland University. Agency partners are: Australian Government Department of Sustainability, Environment, Water, Population and Communities, Marine Division, Great Barrier Reef Marine Park Authority, Queensland Parks & Wildlife Service; New South Wales Department of Primary Industries (Division of Fisheries); Tasmanian Parks and Wildlife Service.

The National Climate Change Adaptation Research Plan (NARP) for Marine Biodiversity & Resources identifies research priorities in five sectoral areas: marine aquaculture, commercial & recreational fishing, conservation management, tourism & recreational uses, and cross-cutting issues.

