



Australian Government

Department of the Environment and Water Resources



Marine and Tropical Sciences Research Facility

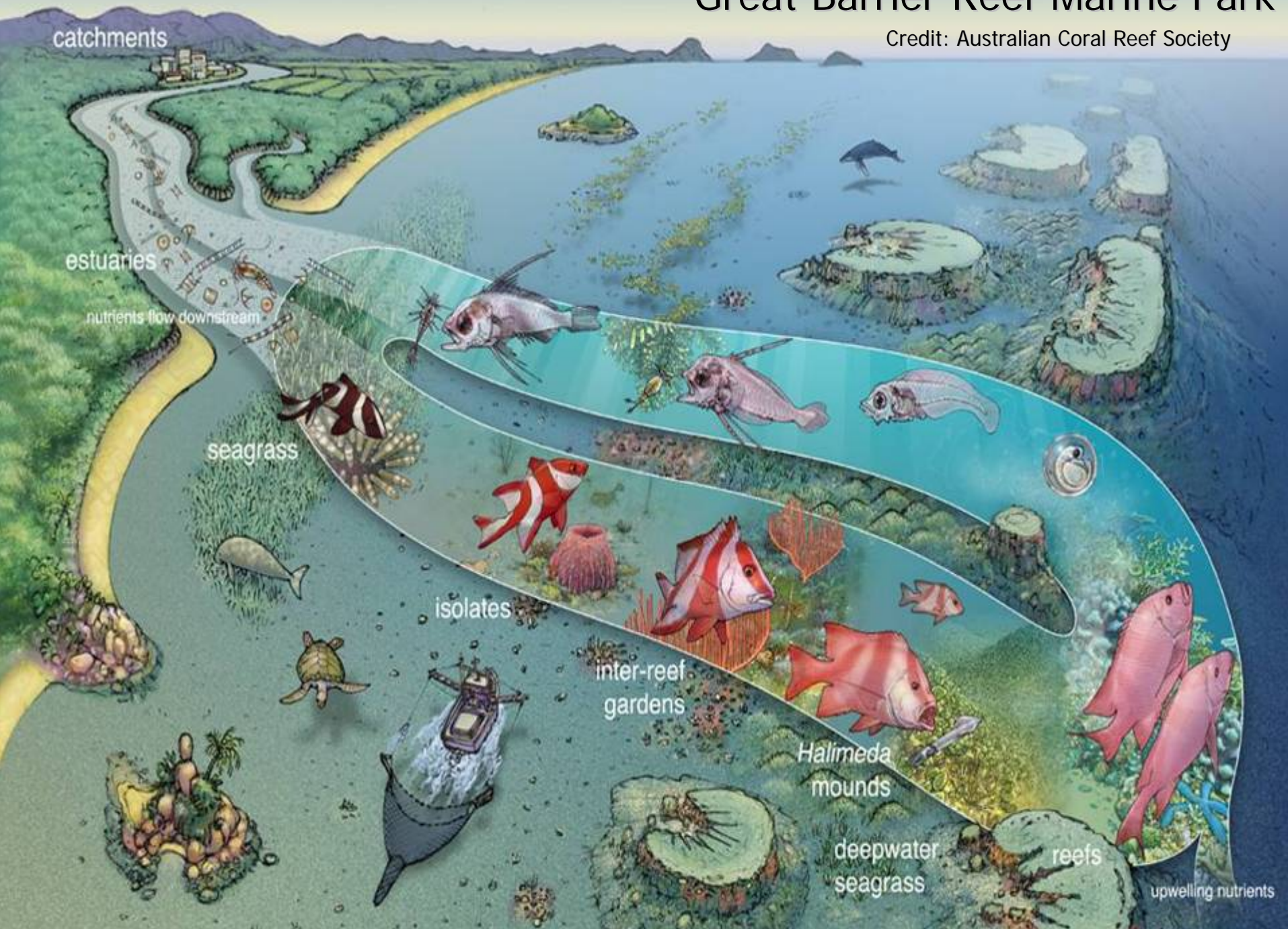
# Zoning and the values of MPAs to the future of the Reef

Peter Doherty

Australian Institute of Marine Science

# Great Barrier Reef Marine Park

Credit: Australian Coral Reef Society

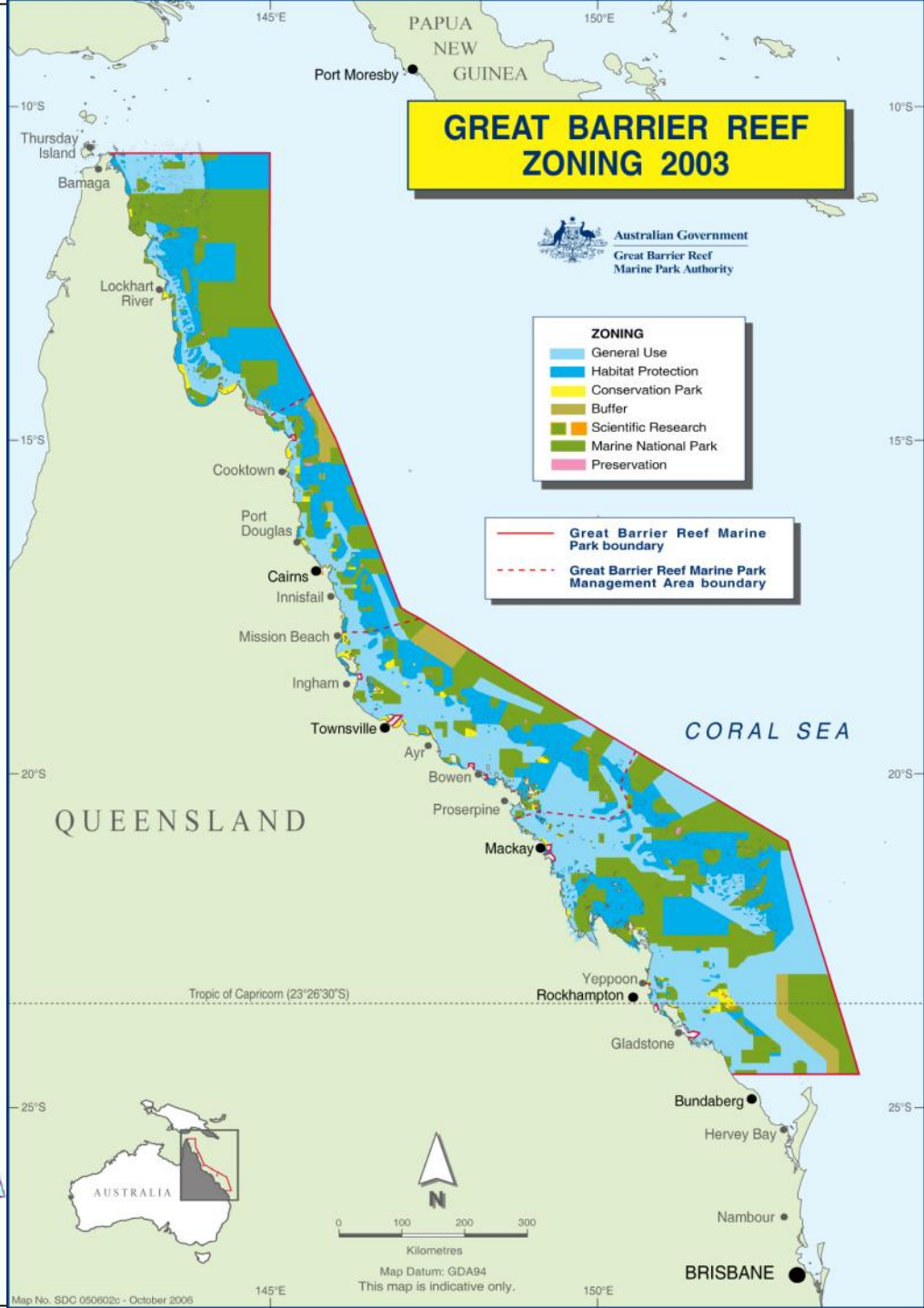
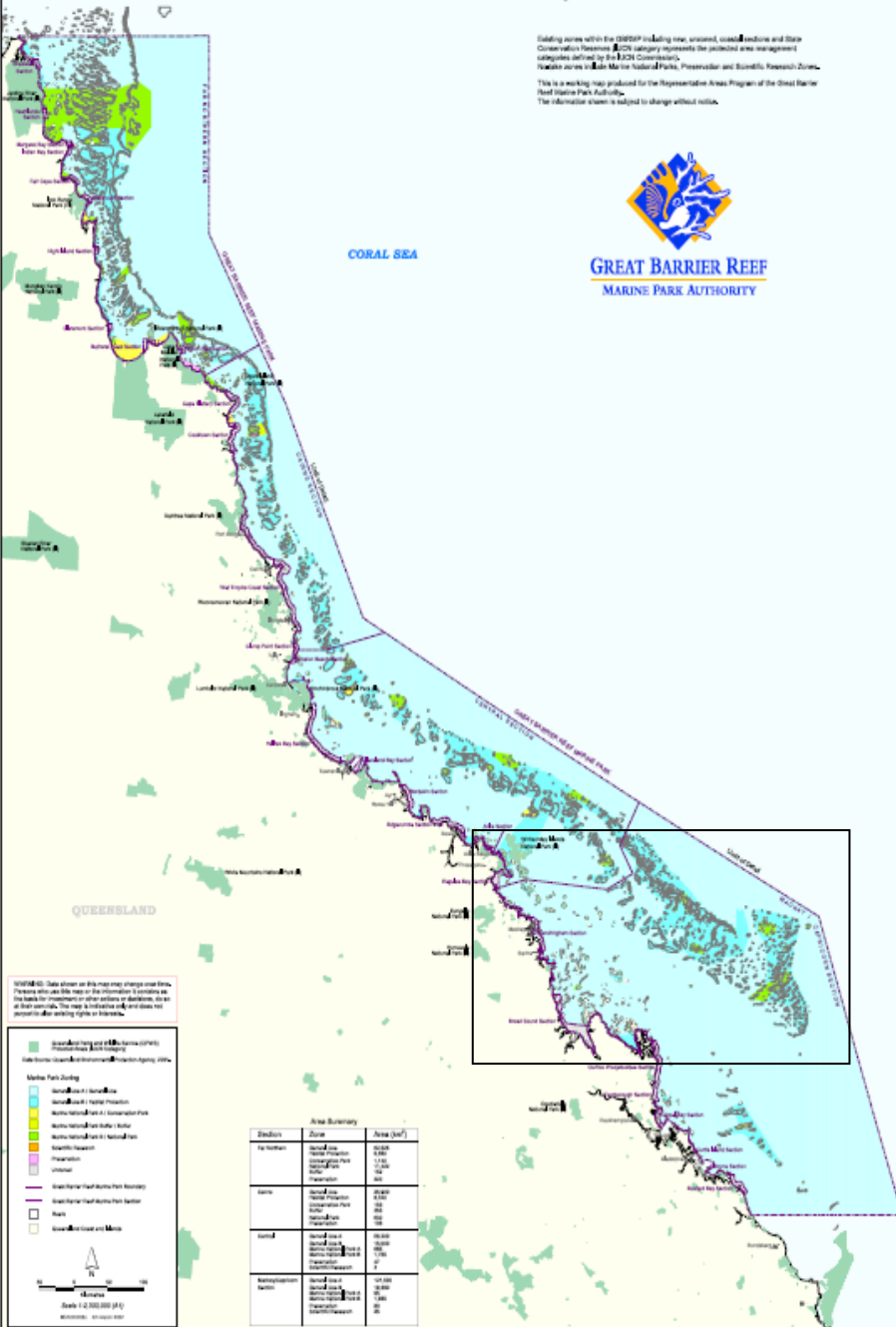


### Great Barrier Reef Marine Park Zoning and Adjacent Conservation Reserves

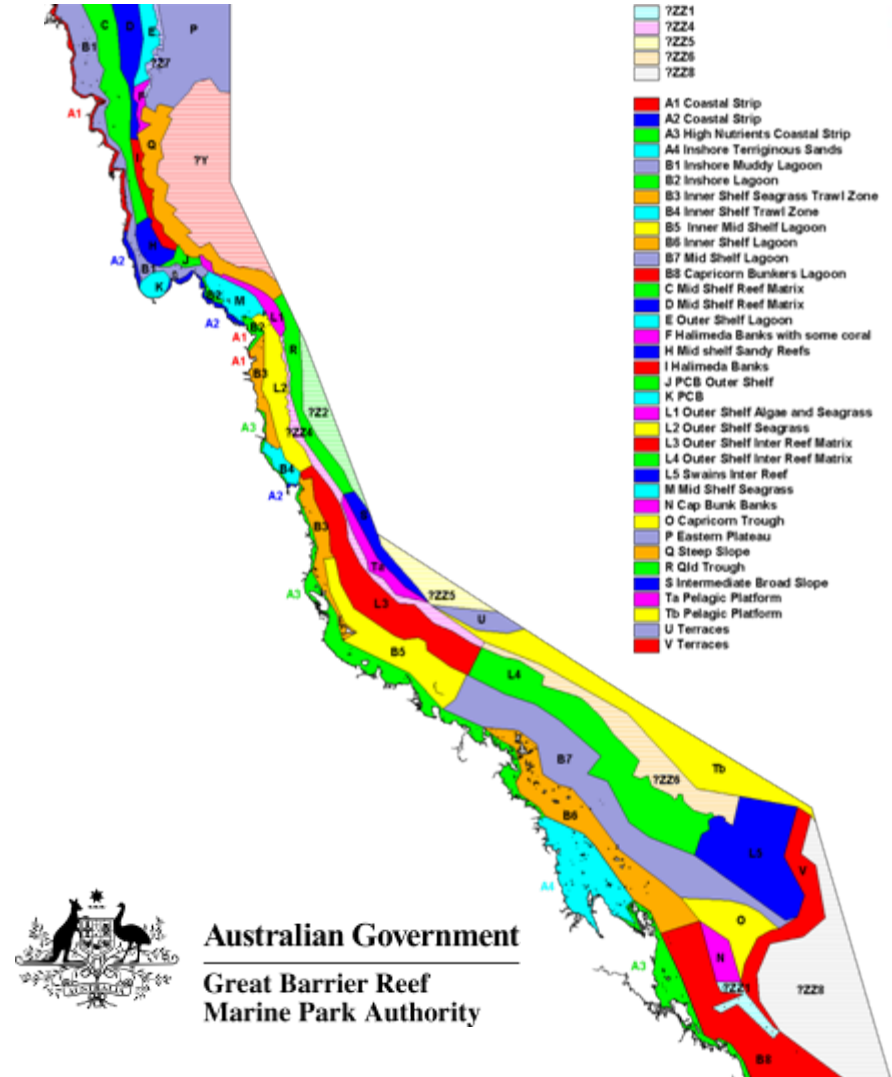
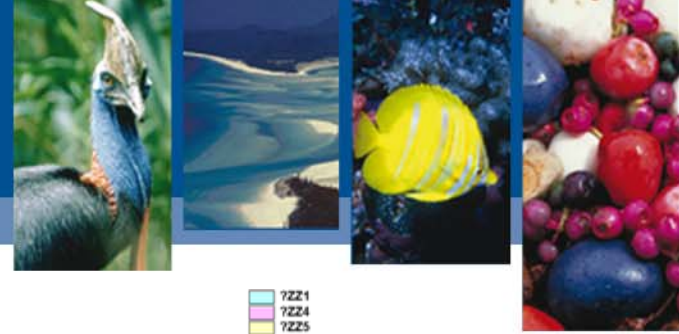
Shading areas within the GBRMP including new, revised, coastal features and their Conservation Reserves (CVR) category represents the protected area management categories defined by the RSCZ Commonwealth Native Areas in the Marine National Parks, Preservation and Scientific Research Zones. This is a working map produced for the Representative Areas Program of the Great Barrier Reef Marine Park Authority. The information shown is subject to change without notice.



**GREAT BARRIER REEF**  
MARINE PARK AUTHORITY



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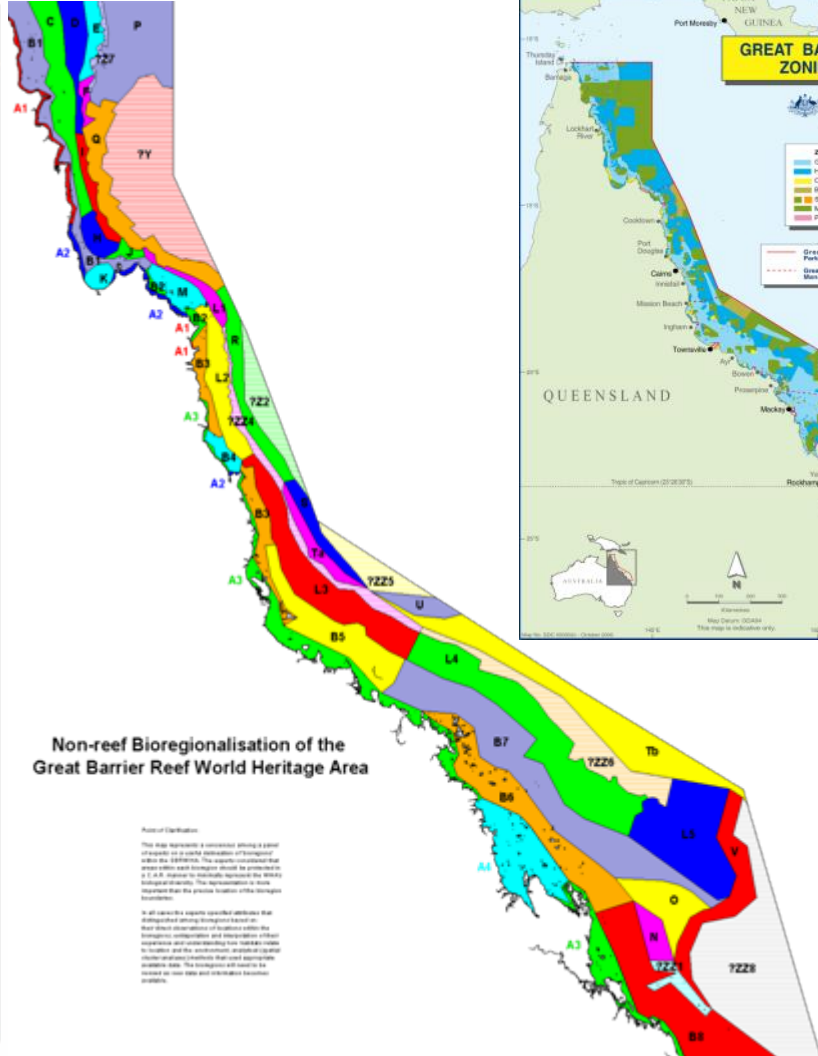
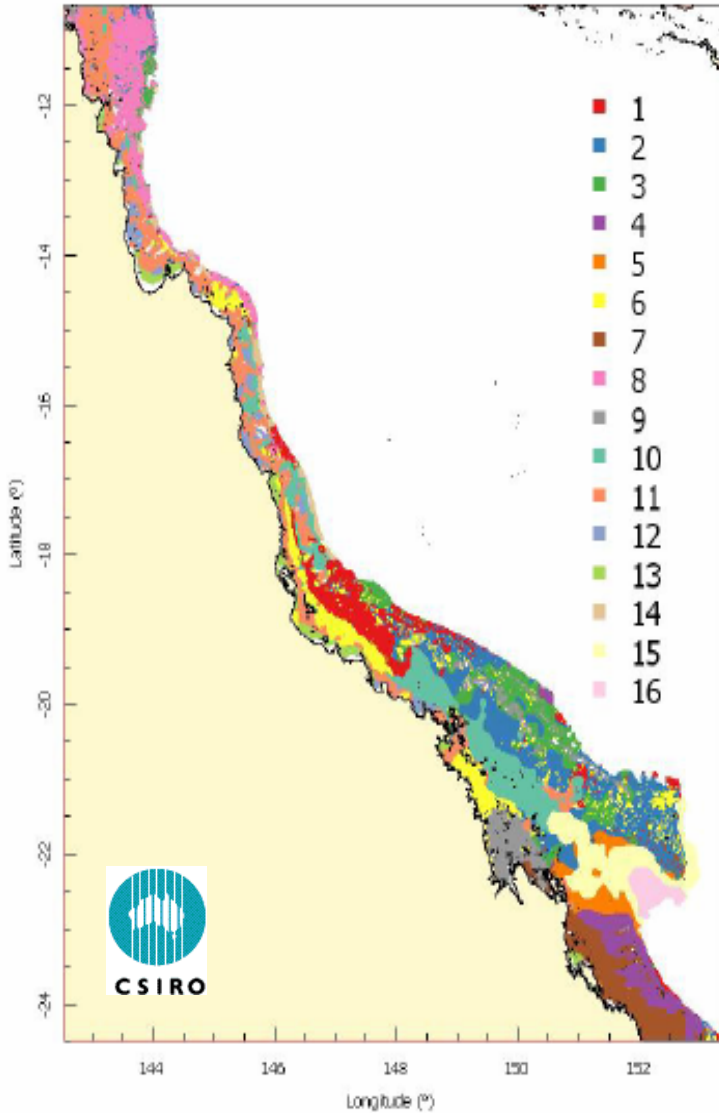


Australian Government  
Great Barrier Reef  
Marine Park Authority



GBR  
Seabed  
Biodiversity  
Project

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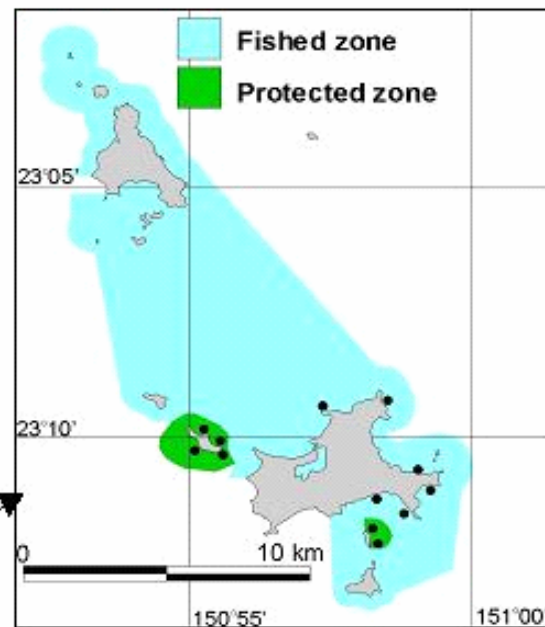
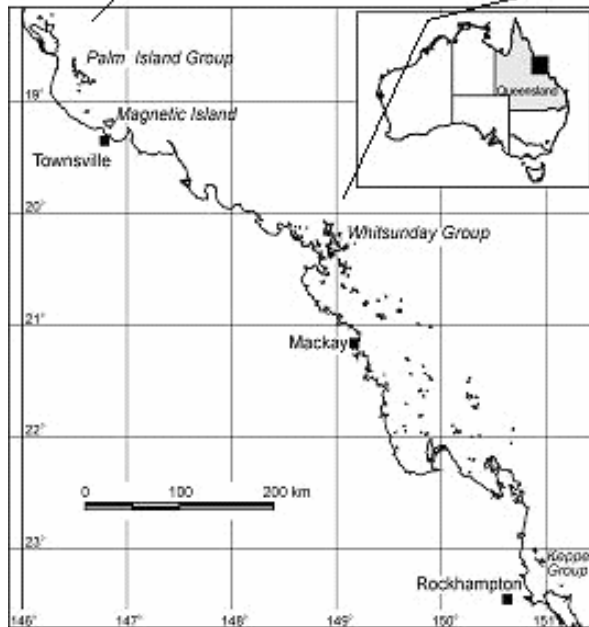
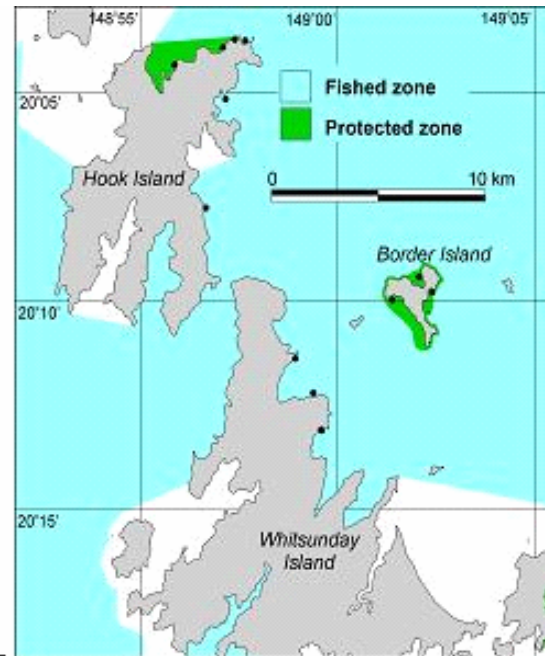
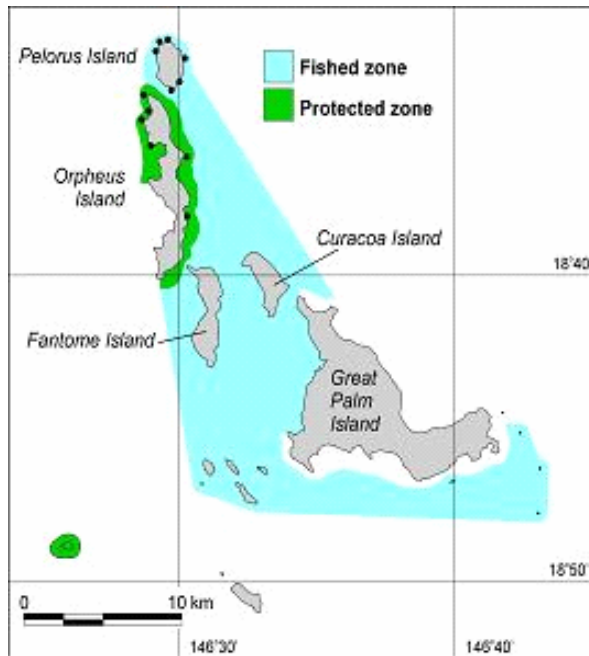


Result: the GBR Zoning Plan (2003) has met its targets for conserving marine biodiversity and habitat diversity

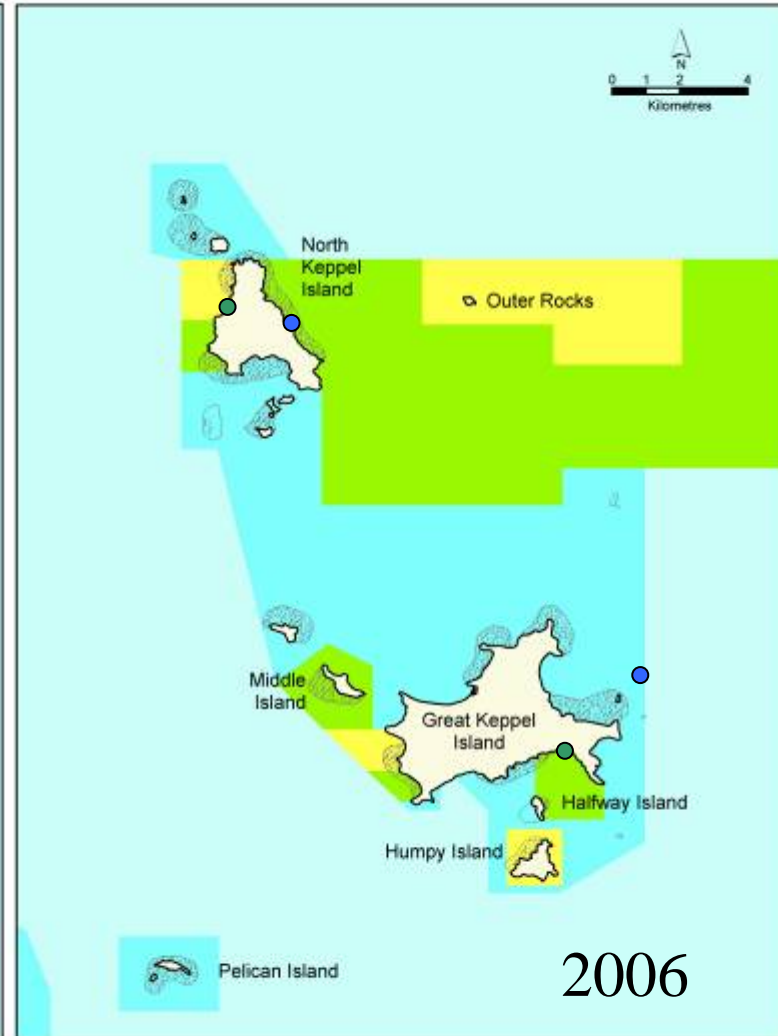
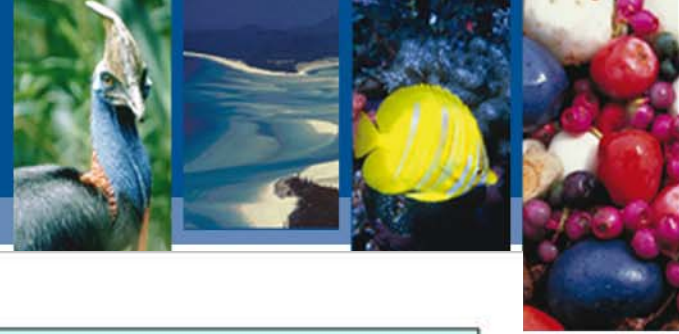
Next question: What impact is the GBR Zoning Plan (2003) having on marine biodiversity?

Operational question: Do Marine Protected Areas ('No-take' Zones) have a measurable effect on local and regional marine biodiversity?

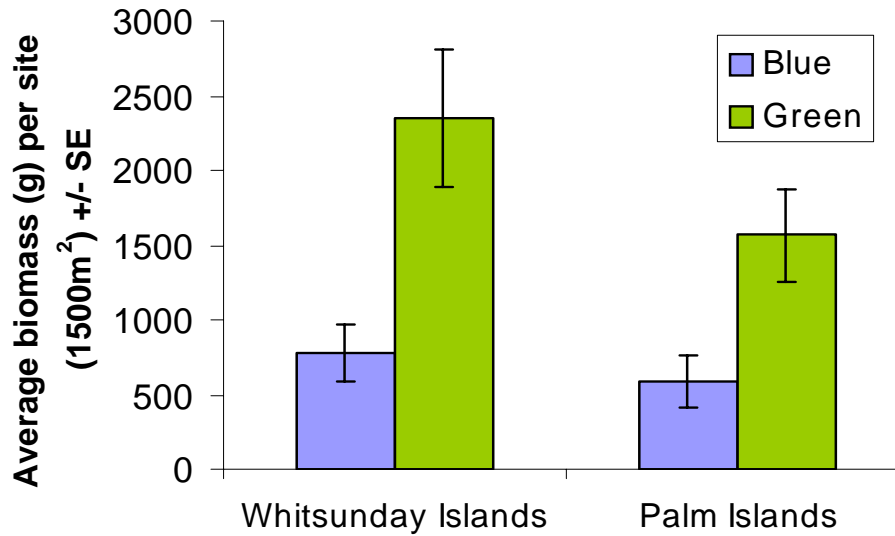




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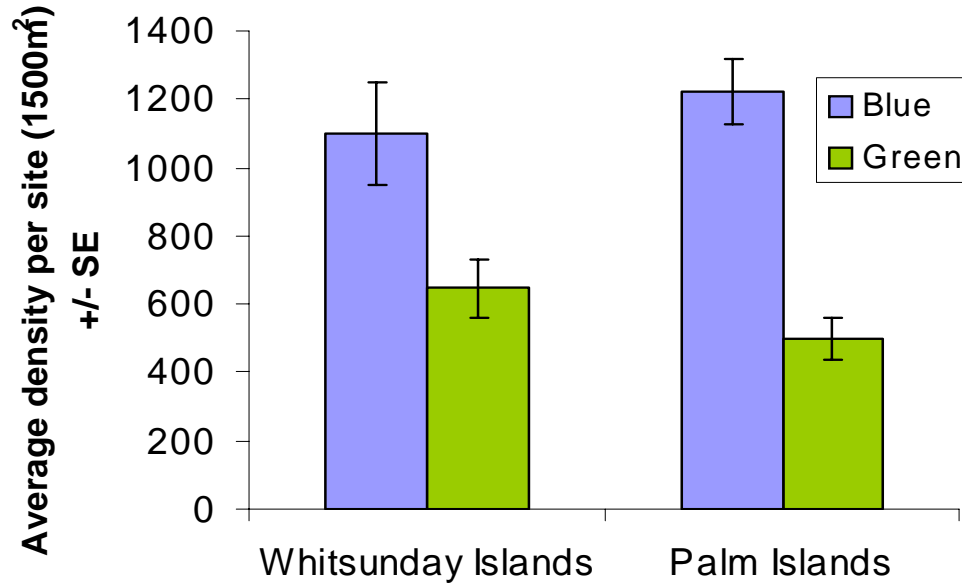
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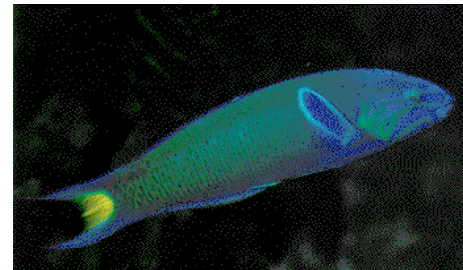
More apex  
predators in 'no-  
take' zones



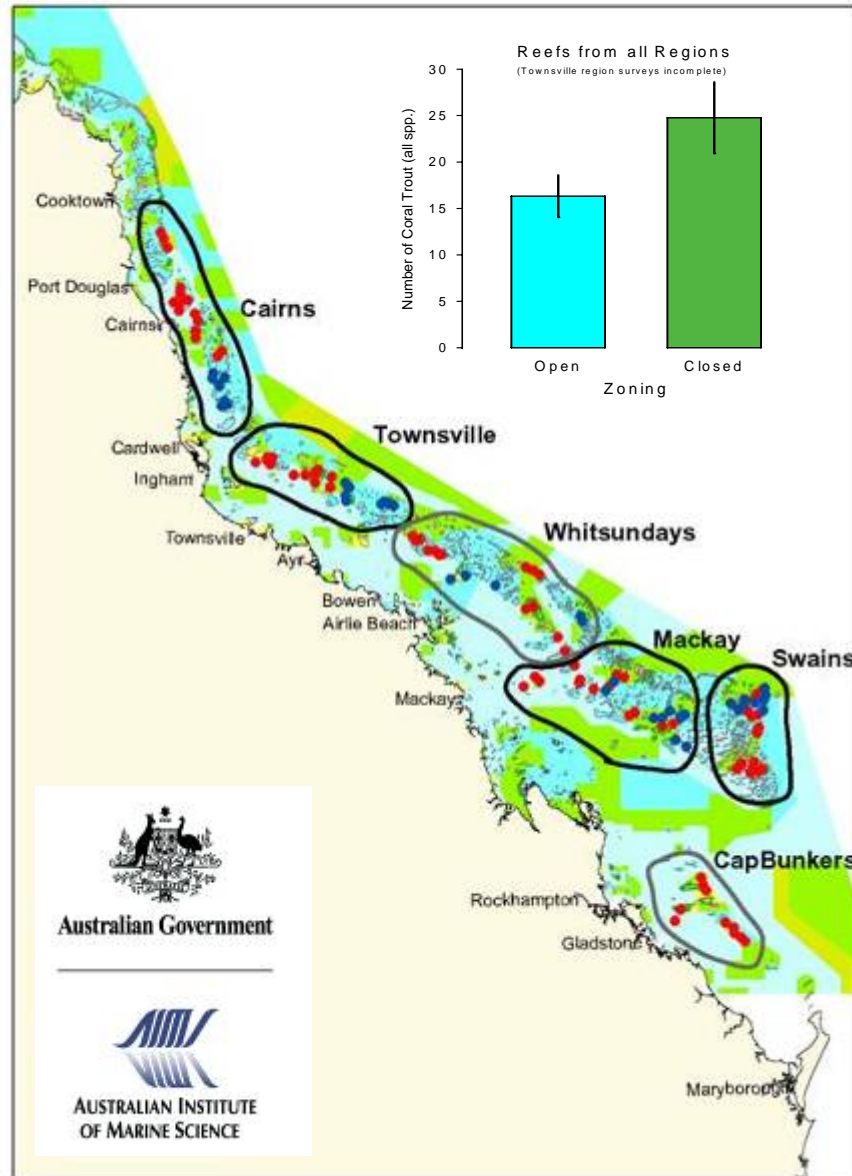
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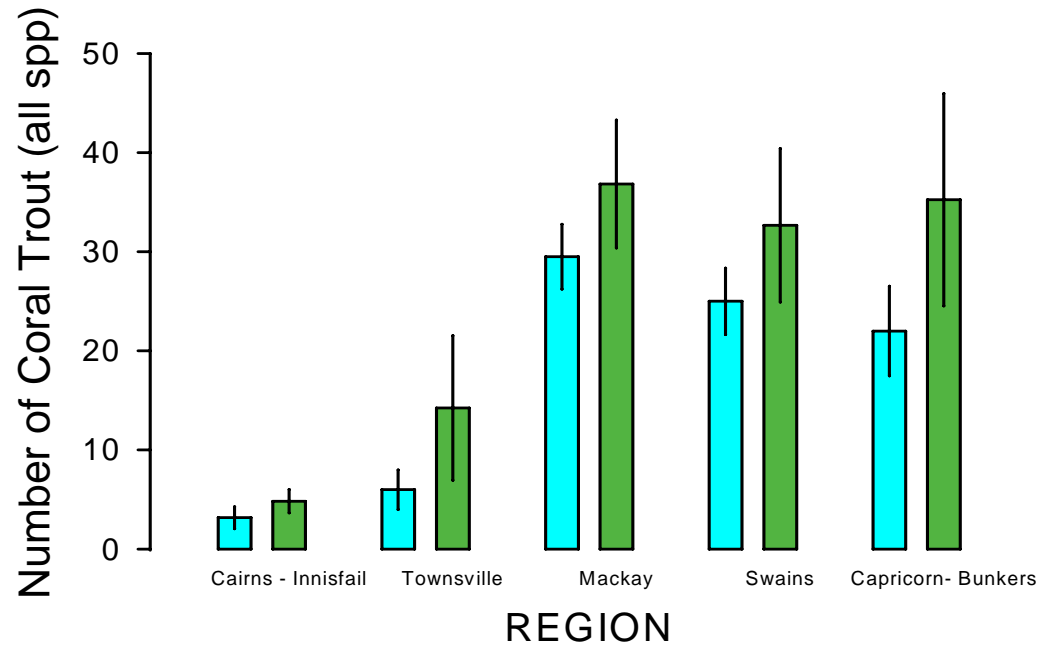
First evidence  
of trophic  
cascades



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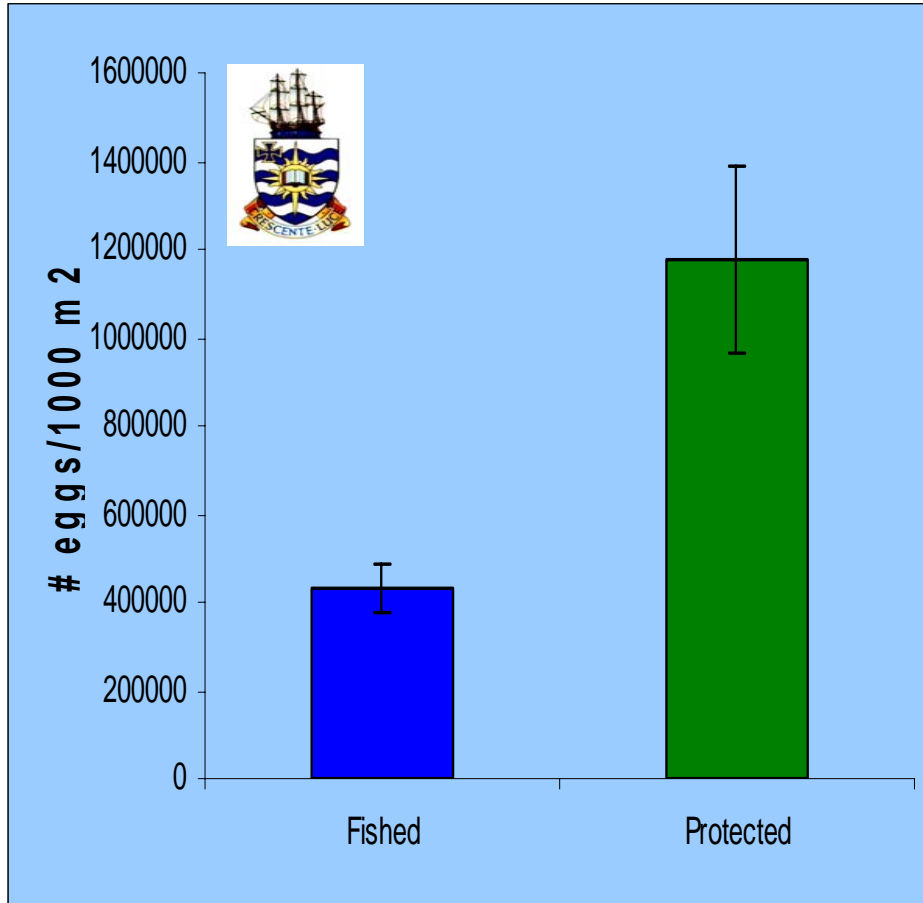
## Effects of zoning by REGION (Townsville region surveys incomplete)



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Release in 1984





## SUMMARY

The GBR Zoning Plan (2003) has protected 33% of the GBR with MPAs designed to rebuild natural resilience

The 'no-take' zones are recovering towards their undisturbed state; i.e. more apex predators and trophic cascades throughout the food web

Reasonable evidence that 'no-take' zones will influence GBR populations and communities at larger scales

Potentially a more ecologically resilient GBR better able to face the challenges of 2050

