



Australian Government

Great Barrier Reef
Marine Park Authority

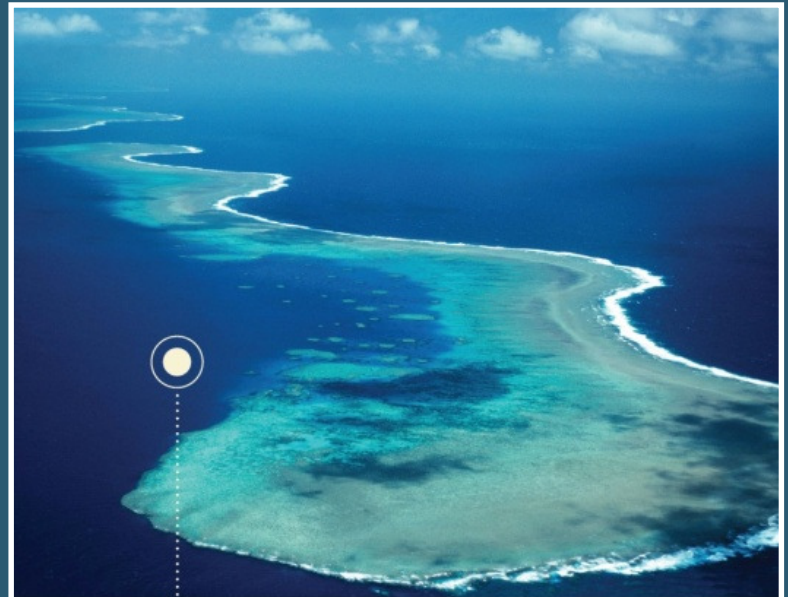
Building Great Barrier Reef ecosystem resilience





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GREAT BARRIER REEF

OUTLOOK REPORT 2009





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Factor	Main origin	Effectiveness of protection and management measures						Overall risk
		Context	Planning	Inputs	Processes	Outputs	Outcomes	
Climate change*	Global	Very poor	Poor	Poor	Poor	Poor	Poor	Very high
Catchment runoff (water quality)	Great Barrier Reef catchment	Very poor	Poor	Poor	Poor	Poor	Poor	Very high
Direct use – extractive	Great Barrier Reef Region	Fishing	Poor	Poor	Poor	Poor	Poor	High
		Traditional use (some)	Poor	Poor	Poor	Poor	Poor	
		Scientific research (some)	Very poor	Very poor	Very poor	Very poor	Very poor	
Coastal development	Great Barrier Reef catchment	Poor	Poor	Poor	Poor	Poor	Poor	Medium
Direct use – non-extractive	Great Barrier Reef Region	Traditional use (some)	Poor	Poor	Poor	Poor	Poor	Low
		Recreation (not including fishing)	Poor	Poor	Poor	Poor	Poor	
		Ports and shipping	Poor	Poor	Poor	Poor	Very poor	
		Commercial marine tourism	Very poor	Poor	Very poor	Very poor	Very poor	
		Defence	Very poor	Very poor	Very poor	Very poor	Very poor	
		Scientific research (some)	Very poor	Very poor	Very poor	Very poor	Very poor	

Management effectiveness



- Very high:
 - Climate change
 - Catchment runoff
- High:
 - Direct use-extractive
- Medium:
 - Coastal development
- Low:





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Impacts on environmental values

- "Climate change, particularly rising sea temperatures and ocean acidification, has already affected the Great Barrier Reef ecosystem and over the next 50 years it is likely to significantly affect most components of the ecosystem."





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Impacts on environmental values

- "Coastal development is contributing to the modification and loss of coastal habitats that support the Great Barrier Reef."
- "As the coastal population continues to grow there will be increasing use of the Great Barrier Reef and therefore the potential for further damage"

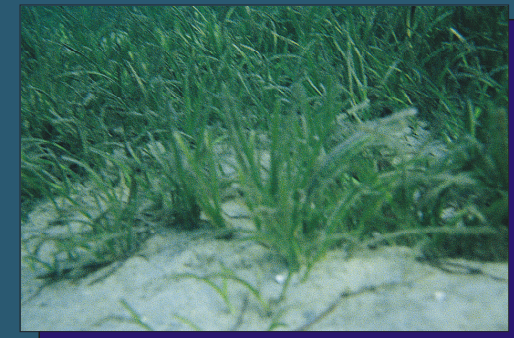


Improving water quality



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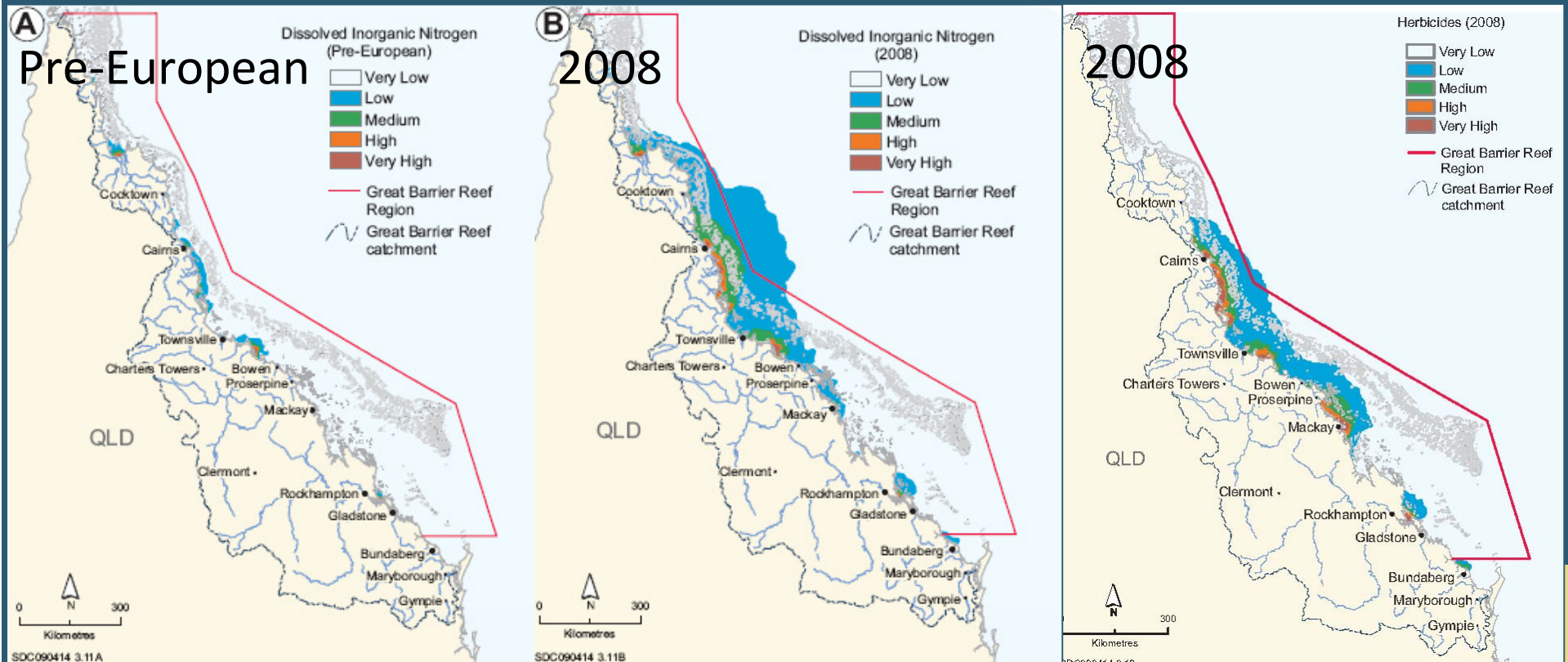
- Maintain, enhance and protect aquatic ecosystems in the Marine Park
- Good quality water vital



Catchment runoff



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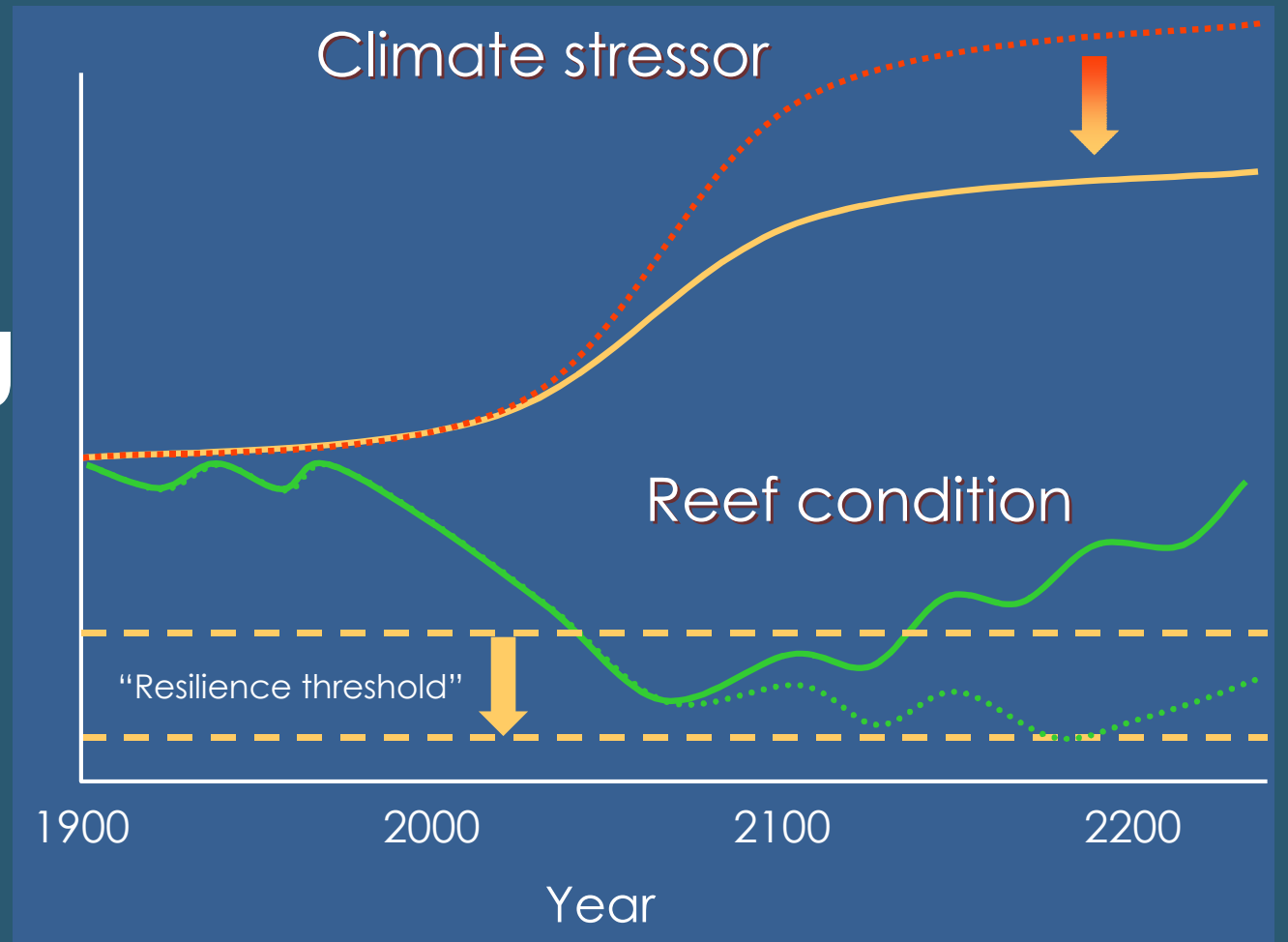
Stressors

- Reduce rate and magnitude of change

Building

Increase resilience

- Refugia
- Water quality
- Biodiversity
- Connectivity



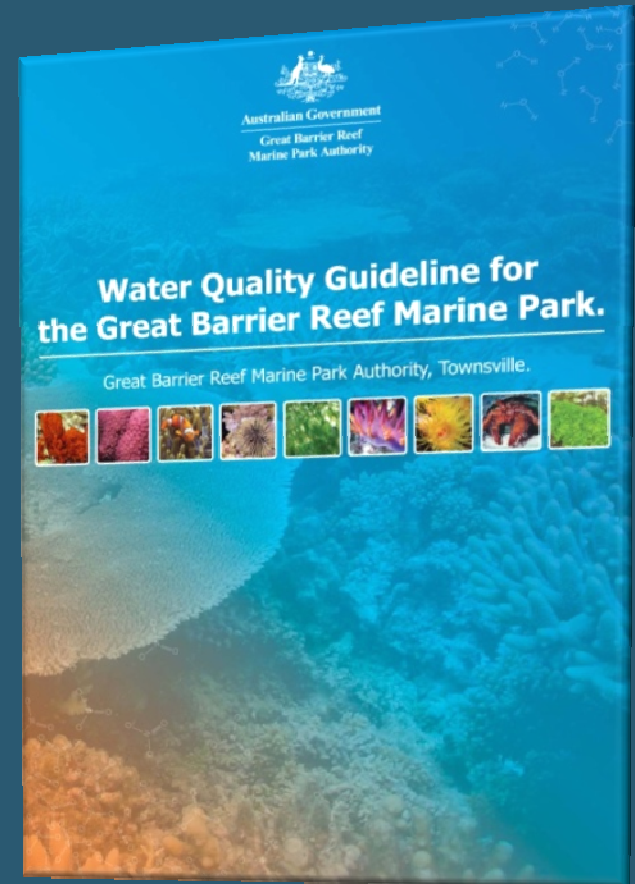


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www.gbrmpa.gov.au

Guidelines

- Diffuse land source
- Common pesticides
- Published biological effects
- Trigger values





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Our Community
Our Reef
Our Future



Reef Guardian



“Achieve better environmental outcomes for the Great Barrier Reef through local government actions in natural resource management and improvements in local government and community capacity”





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Being a Reef Guardian

- “Achieve better environmental outcomes for the Great Barrier Reef through local government actions in natural resource management and improvements in local government and community capacity”





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Objectives

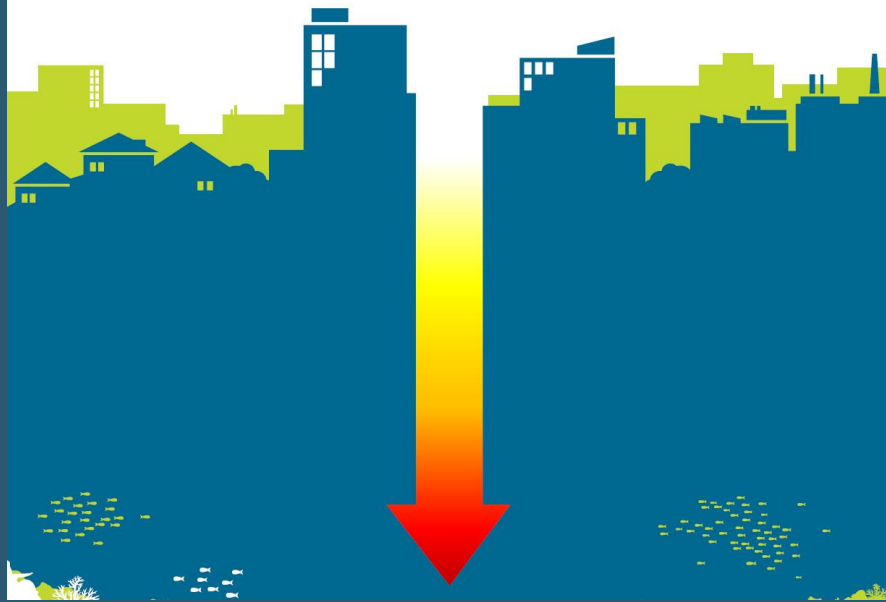
- Partnerships
- Environmental stewardship
- Best management practices
- Local Governments role
- Information sharing





Land, Water, Waste and Community

Current best practice for Local Governments
motivated towards Reef protection



1. LAND MANAGEMENT

Key project themes:

- Vegetation management projects
- Pest management projects
- Resource assessment projects
- Erosion – construction
- Erosion - coastal.

2. WASTE MANAGEMENT

Key project themes:

- Waste avoidance
- Waste reuse
- Recycling programs
- Recovery of energy
- Disposal.

3. WATER MANAGEMENT

Key project themes:

- Wastewater and trade waste treatment projects
- Urban stormwater treatment projects
- Monitoring projects
- Waterways rehabilitation projects.

4. COMMUNITY EDUCATION AND CAPACITY BUILDING

Key project themes:

- Education, awareness raising and knowledge building
- Fostering behavioural change
- Community involvement
- Capacity building in the community.

Overall conclusion



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• "The outlook for the Great Barrier Reef ecosystem is at a crossroad, and it is decisions made in the next few years that are likely to determine its long-term future.

• Unavoidably, future predictions of climate change dominate most aspects of the Great Barrier Reef's outlook over the next few decades.

• The extent and persistence of the damage to the ecosystem will depend to a large degree

