

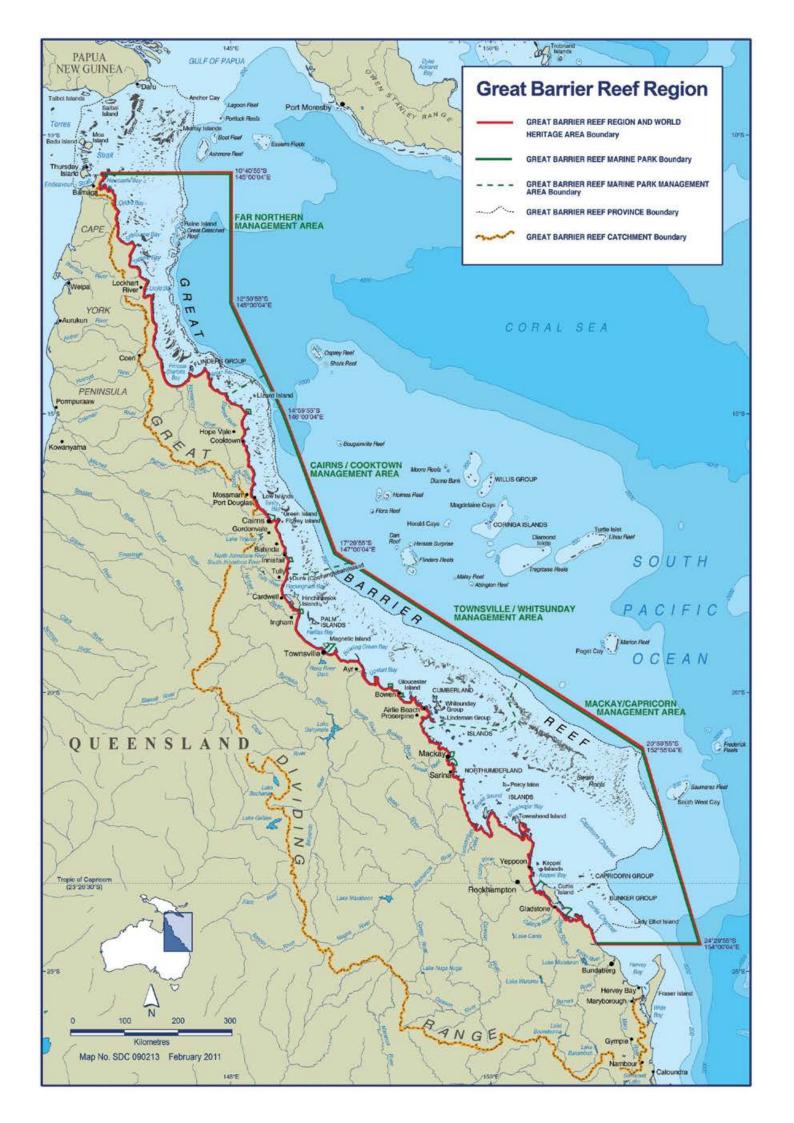


**Australian Government** 

Great Barrier Reef Marine Park Authority

# GREAT BARRIER REEF REGION Strategic Assessment In Brief







### **PREFACE**

The Great Barrier Reef is an amazing natural treasure and one of the most biologically diverse areas on Earth.

Internationally acclaimed as a natural wonder, it's important to communities and industries for both recreation and their livelihoods.

It is a place of great significance to its Traditional Owners who have a unique and continuing connection with the area.

Like many similar coral reef ecosystems throughout the world, the Reef faces a number of threats — climate change, extreme weather, declining water quality, coastal development and illegal fishing.

To secure the Reef's future, the Great Barrier Reef Marine Park Authority worked with the Queensland Government and the Commonwealth Department of the Environment to draft a comprehensive strategic assessment of the Great Barrier Reef World Heritage Area and adjacent coastal zone.

This comprehensive assessment also forms part of the Australian Government's response to the World Heritage Committee's concerns about the impact of development on the World Heritage Area.

We have undertaken an assessment of the Great Barrier Reef Region — the marine component.

It assesses and recommends improvements to how we manage Australia's national environmental assets — matters of national environmental significance — within the Great Barrier Reef Region.

It considers the area's outstanding universal value, those exceptional qualities that underpinned the decision to list the Great Barrier Reef as a World Heritage Area in 1981.

The strategic assessment takes a big picture approach to protecting the Reef's environment and heritage, instead of a site-based or project-by-project approach to protecting and managing the Reef.

It comprehensively and systematically identifies natural and heritage values across the World Heritage Area and the impacts affecting these values.

It also evaluates how effectively existing and emerging risks to the Reef are being managed, and recommends improvements to strengthen how we protect and manage the Region's values into the future.

Terms of reference, which were developed with input from the public and were approved by the Federal Environment Minister, guided development of these draft reports.

The findings of the strategic assessment have informed development of a draft program report.

The program report describes how we will strengthen our management arrangements to improve protection of the Great Barrier Reef and its outstanding universal value.

This in-brief presents an overview of both reports, which will be available for public consultation until 31 January 2014.

Your feedback is important and will be considered before the reports are finalised.

We encourage you to review the draft reports and have your say on the future management of the Reef through our submissions website www.reefhaveyoursay.com.au

**Dr Russell Reichelt** 

Chairman, Great Barrier Reef Marine Park Authority

As the world's largest coral ecosystem, the Great Barrier Reef is an international icon and is one of the best known World Heritage Areas.

Its health is declining and without additional management intervention the Region's ecosystem is likely to continue to deteriorate.

While evidence indicates actions to date have delivered benefits for the Reef's resilience, much more is required to halt and reverse this decline.

A legacy of past activities, combined with continuing impacts and a decade of extreme weather, is taking a heavy toll.

Strong steps are needed now to secure the long-term future of the Reef.

### STRATEGIC ASSESSMENT

The comprehensive strategic assessment of the Great Barrier Reef World Heritage Area and adjacent coastal zone is being undertaken by the Australian and Queensland governments.

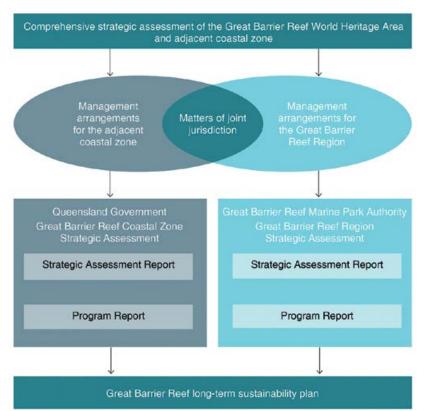
There are two parts to the comprehensive strategic assessment:

- Great Barrier Reef Region Strategic Assessment led by the Great Barrier Reef Marine Park Authority —
  looking at the marine component and the arrangements in place to manage and protect the Great Barrier
  Reef Region.
- Great Barrier Reef Coastal Zone Strategic Assessment led by the Queensland Government focusing on management arrangements in coastal areas adjacent to the Region.

The assessments are being carried out under Part 10 of the *Environment Protection and Biodiversity Conservation Act 1999*.

The comprehensive strategic assessment is an opportunity for us to evaluate and improve our effectiveness in managing risks to the Reef from activities on the land and on the water.

There are two reports for each assessment: a Strategic Assessment Report and a Program Report. Both are available for public consultation until 31 January 2014.



The outcomes of the comprehensive assessment will inform development of a long-term sustainability plan for the Great Barrier Reef World Heritage Area.

The findings of each assessment are presented in individual reports. The areas of overlap and joint management responsibility are addressed in both strategic assessments.



### **REEF VALUES**

Protecting the Reef's values — such as its biodiversity, geomorphological features, Indigenous and historic heritage and community benefits — are central to the assessment.

These values underpin the seven matters of national environmental significance relevant to the Region, as defined in the Environment Protection and Biodiversity Conservation Act:

- · world heritage properties
- · the Great Barrier Reef Marine Park
- · national heritage places
- · Commonwealth marine areas
- · listed migratory species
- · listed threatened species and ecological communities
- · wetlands of international importance

These values are found throughout the Region. They are interconnected and overlap and there is no part that does not contain values of national significance. Combined, they contribute to the Great Barrier Reef's outstanding universal value, which led to its inscription as a World Heritage Area in 1981.



# **CONDITION OF THE REEF**

While the outstanding universal value of the World Heritage Area remains largely intact, the overall health of the Reef, especially in the southern two-thirds of the Region, south of about Cooktown and Port Douglas, has declined significantly.

In the northern third of the Region, values generally remain in better condition. Habitats further offshore and in deeper water have also been subject to fewer impacts.

Legacy issues, such as catchment clearing and harvesting of iconic species, are still affecting the Reef. Some of these issues go back decades, even to the late 1880s, and their effects are likely to continue long into the future.

A history of increased nutrient and sediment loads entering the Region, combined with a decade of extreme weather, has affected the Region's ecosystem.

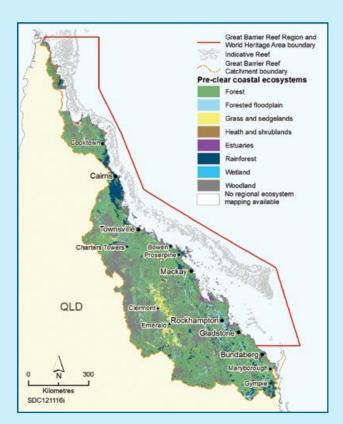
Terrestrial habitats along the Great Barrier Reef coast have been substantially modified, particularly south of about Port Douglas. This reduces the ability of habitats, such as wetlands and connecting water bodies, to support the healthy functioning of the Reef.

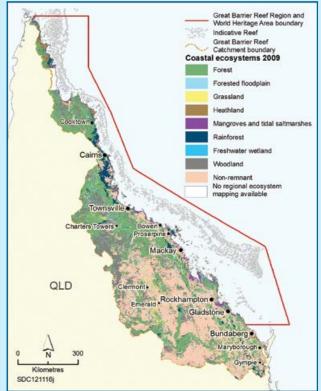
While the condition of some of the Region's biodiversity has improved, such as humpback whales which are increasing in abundance, other elements have deteriorated.

Key habitats such as coral reefs and seagrass meadows are in serious decline, while populations of some iconic and highly vulnerable animals are on a downward trend.

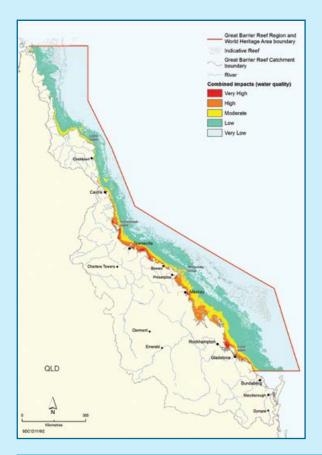
This includes southern dugong populations, some species of marine turtle, and some offshore and pelagic-foraging seabirds.

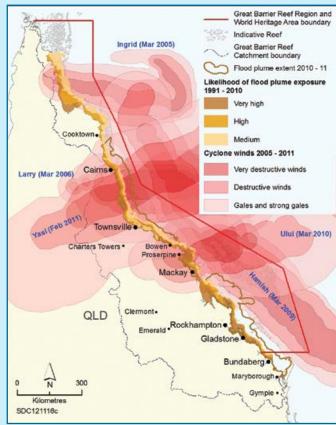






Before European settlement there were extensive areas of forests, woodlands and forested floodplains across much of the catchment (left-hand map). Much of the area's natural vegetation has now been modified (pink areas on the right-hand map), particularly in the south of the catchment.





The cluster of cyclones and flood events in recent years has seriously affected the condition of many Reef habitats and species. The effects of sediments, nutrients and pesticides in catchment run-off (left-hand map) are highest inshore in the southern two-thirds of the Region. The effects of cyclones (right-hand map) have been more widespread. (Left-hand map from Waterhouse et al. 2013)



Photographs of the reef flat at Stone Island, offshore Bowen, illustrate the decline in the condition of inshore reefs. Taken from same location in 1893, 1915, 1994 and 2012, it shows the disappearance of a vibrant fringing coral reef (2012 photograph courtesy of the University of Queensland)

A number of natural processes vital to the healthy functioning of the marine environment, such as sedimentation, nutrient cycling and connectivity, are also in decline. Again this is particularly evident in the inshore areas of the southern two-thirds of the Region.

The Great Barrier Reef retains the amazing natural beauty for which it is famous. However, its underwater aesthetic value has been reduced in the southern inshore area, largely as a result of coral declines.

Traditional Owners with connections to the Region maintain their cultural practices and customs. However, Indigenous values are closely tied to land and sea country, and many have deteriorated as changes in the environment reverberate profoundly through their culture and heritage, both now and in the past.

### THREATS TO THE REEF

In 2009, our *Great Barrier Reef Outlook Report* identified climate change, continued declining water quality from catchment run-off, loss of coastal habitats from coastal development, remaining impacts from fishing and illegal fishing and poaching as the key issues reducing the Reef's resilience or ability to withstand threats.

Climate change is still the most serious threat facing the Reef and is likely to have far reaching consequences for the Region's environment.

Future climate change predictions indicate sea level and sea temperature rises will continue and the ocean will become gradually more acidic. More frequent and severe extreme weather is also predicted.

Sediments and nutrients in catchment run-off and the loss of connectivity between coastal and marine environments will continue to affect the Reef, particularly its southern inshore areas.

While agricultural practices in the Region are improving, and the loads of sediments and nutrients being washed into the Region are decreasing, there is likely to be a lag of some decades before water quality in the Region significantly improves.

In turn, high concentrations of nutrients in Reef waters are likely to promote continued, more-frequent outbreaks of the coral-eating crown-of-thorns starfish.

The operation of ports and further port development will require significant additional capital and maintenance dredging.





While dredging and sea dumping do not introduce additional loads, these activities redistribute and resuspend sediments and nutrients in inshore areas.

While the full extent of any effects on the Region's values is not well understood, uncertainty about the additional effects of sea dumping is a key concern, particularly given the potential for large volumes of proposed dredge material to be dumped and resuspended in areas of the Region already in poor condition.

Of particular concern is the accumulating effect of impacts on values and that several of the most significant impacts on the Reef are operating over broad scales, affecting a large area of the Region.

It is clear that a business-as-usual approach to managing these impacts will not be enough. Additional management intervention is required to protect matters of national environmental significance.

### LOSS OF RESILIENCE

There is increasing evidence the Reef's resilience is being lost, although the extent of that loss varies considerably between different species and habitats and between localities.

This loss of resilience cannot be attributed to any single cause, but is almost certainly the result of cumulative impacts, many of which are human in origin.

The accumulation of impacts, through time and over an ever-increasing area, is diminishing the ecosystem's ability to recover from disturbances. This is a key concern given resilience is the Region's insurance against future climate change-related pressures.

## MANAGING MULTIPLE IMPACTS

Managing the multiple impacts affecting the Reef requires a multi-pronged approach. By working together to improve the health of the ecosystem, declines in the Great Barrier Reef can be reversed.

A concerted international effort to reduce global climate change, combined with action at the national, state and local levels to build the Reef's resilience by reducing impacts, is vital to protecting the Great Barrier Reef's outstanding universal value.

There is a need to actively restore habitats and ecosystem processes which support the Reef's biodiversity, recognising regional and local differences in the condition of values and the type and severity of impacts affecting them.

In the northern third of the Region, the values are generally in good and very good condition and the impacts affecting them less severe.

For that area, the management focus will be on maintaining and enhancing the Reef's health.

In contrast, in the southern two-thirds where values are mostly in poorer condition and impacts are more severe, restoring the condition of values and reducing impacts will be the primary focus.

Understanding and protecting the Region's rich heritage values and community benefits needs to be improved and better integrated into planning and assessment decision making.

Critically, managing cumulative impacts needs to be improved and mechanisms developed which will deliver net environmental benefits across the Region.

These improvements will be vital to protecting the Reef's outstanding universal value and restoring the Reef's health and resilience for generations to come.



# **THE NEXT 25 YEARS**

The draft Strategic Assessment Report has informed a draft Program Report for the Great Barrier Reef Region.

The Program Report describes our management arrangements and future commitments to protect and manage the Great Barrier Reef and its outstanding universal value.

Our vision of a healthy Great Barrier Reef for future generations relies on continuing and enhancing our comprehensive management foundation to protect biodiversity and heritage values and provide for ecologically sustainable use.

It also requires strengthened engagement and collaboration with others to reduce the risks to the Reef and restore its condition.

Our future program for managing the Great Barrier Reef includes a number of new initiatives.



### **OUR MANAGEMENT FOUNDATION**

We will continue to use our comprehensive management foundation to protect and manage the Region.

- We will continue working with the Queensland Government, through the Great Barrier Reef Intergovernmental Agreement and its joint Field Management Program. This long-term cooperative partnership is fundamental to protecting and managing the Reef.
- We will continue to use our comprehensive range of regulatory tools, such as our zoning plan, plans of management, permits, policies, Traditional Owner agreements and compliance, and adapting them as required, to address emerging risks and changing circumstances.
- We will improve our foundational management by developing regionally-based standards for ecosystem
  health; streamlining and enhancing our regulatory tools; improving assessment of matters of national
  environmental significance; strengthening protection and management of heritage values and improving our
  compliance program.
- We will update out heritage strategy and work with Traditional Owners to develop a comprehensive framework to promote and coordinate the contributions of Traditional Owners to Reef management.
- We will use our non-regulatory approaches to enhance protection measures within the Region and influence activities which affect the Region but fall outside our jurisdictional control.
- We will strengthen and focus engagement activities to improve our influence on high risk impacts affecting the Region's values.
- We will continue to work with Traditional Owners, the community, industry and government agencies to
  encourage stewardship and best practice and find pragmatic solutions to secure the future health of the
  Reef.
- We will use the best available information to underpin our management activities, including information on the Great Barrier Reef, its values, the processes that support it and the impacts that are affecting it.
- We will strengthen our current knowledge, innovation and integration activities by improving identification and understanding of the values relevant to matters of national environmental significance; improving alignment and coordination of research priorities; working with Traditional Owners to better identify Indigenous heritage values and better integrating knowledge into management.



### STRENGTHENING OUR MANAGEMENT

The key initiatives to strengthen our capacity to reduce impacts on the Reef and enhance the condition of matters of national environmental significance are:

- Adopting a management framework that is focused on clear outcomes for the future of the Reef's values
  and driven by specific measurable targets. These outcomes will guide management actions and decision
  making. Measurable targets will be established for a small number of key habitats, species, heritage values
  and community benefits, as well as some of the key risks.
- Developing a cumulative impact assessment policy to provide a transparent, consistent and systematic
  approach to assessing cumulative impacts across jurisdictions from activities within and adjacent to the
  Region. This policy will ensure cumulative impacts are appropriately considered in regulatory processes and
  provide greater certainty about assessment requirements for development activities.
- Introducing a net benefit policy to guide actions required to restore ecosystem health and manage financial contributions to that recovery. This policy will provide a strategic and coordinated approach to delivering actions required to produce an overall or 'net' improvement to the condition of values. It will complement and support Australian and Queensland government offsets policies and restoration programs. Through the policy, priority will be given to actions to restore ecosystem health and resilience, particularly in inshore areas in the southern two-thirds of the Region. This will be fundamental to protecting all matters of national environmental significance and the community benefits they support.
- Introducing a Reef recovery program. We will collaborate with government agencies, Traditional Owners, industries and communities to implement on-ground actions to address local issues at a local scale protecting and restoring biodiversity hotspots and sites of high environmental value, and re-establishing connectivity and the functioning of coastal ecosystems.
- Establishing a Reef-wide integrated monitoring and reporting program to improve integration and coordination of monitoring programs to provide comprehensive and systematic monitoring and reporting of key values, processes and impacts. The results will be fundamental in assessing management effectiveness.

We will place immediate focus on implementing the key initiatives for outcomes and targets, the cumulative impact assessment policy and the net benefit policy.

Measures to strengthen our management foundation will be integrated into our ongoing management, with plans to achieve key improvements within five years.

We are seeking endorsement of these measures by the Commonwealth Minister for the Environment under the Environment Protection and Biodiversity Conservation Act.

If endorsed, these improvements will inform decision making under that Act and significantly strengthen overall protection and management of matters of national environmental significance.

It is anticipated our comprehensive adaptive management arrangements, based on the five-yearly cycle of our statutory Outlook Report, will provide sufficient flexibility to deal with changing circumstances over the life of the management program and allow it to be changed as required.

We are committed to implementing the outcomes of the strategic assessment in collaboration with the Queensland Government and other Australian Government agencies. This includes developing and implementing a long-term sustainability plan for the World Heritage Area.

# **PUBLIC CONSULTATION**

- The Great Barrier Reef is an amazing natural icon and many people throughout Australia and the world care about the Reef and its future. Both the marine and coastal zone draft strategic assessment and program reports are available for public consultation until 31 January 2014, and this is your chance to have a say on the Reef's future.
- Submissions from anyone interested in the Reef, or who use the Reef for recreation or their livelihoods, can be made online at www.reefhaveyoursay.com.au.
- Copies of the reports and supporting materials are available at this website. Hard copy reports can be viewed at more than 30 exhibition points.
- Community information sessions will also be held in the weeks after the consultation period opens. Details of these sessions are available on the website or by phoning 1300 854 427.
- Once the consultation period closes, public feedback will be considered before the reports are finalised. The final reports will be submitted to the Minister for the Environment for endorsement. The reports endorsed by the Minister will be made publicly available. These reports guide the future management of the Great Barrier Reef to ensure this great Australian icon is protected for future generations.

Online submissions: www.reefhaveyoursay.com.au

**Email:** feedback@reefhaveyoursay.com.au

**Phone:** 1300 854 427



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www.gbrmpa.gov.au