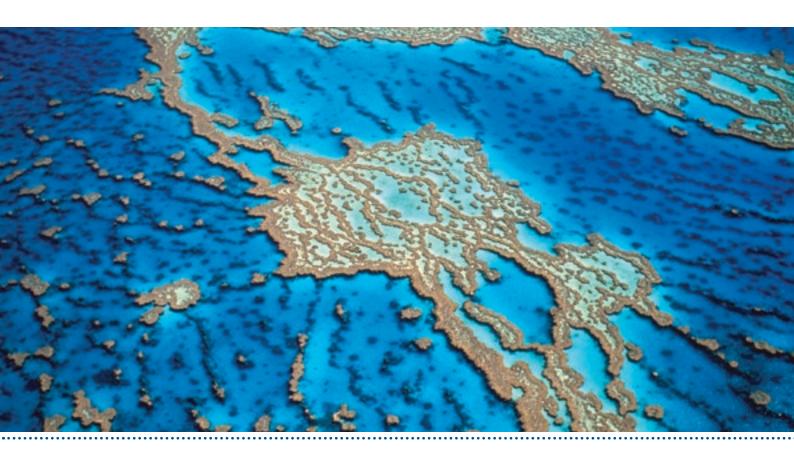


# **STATE PARTY REPORT**

# ON THE STATE OF CONSERVATION OF THE GREAT BARRIER REEF WORLD HERITAGE AREA (AUSTRALIA)

**PROPERTY ID N154** 



IN RESPONSE TO THE WORLD HERITAGE COMMITTEE DECISION WHC 38 COM 7B.63

FOR SUBMISSION BY 30 JANUARY 2015

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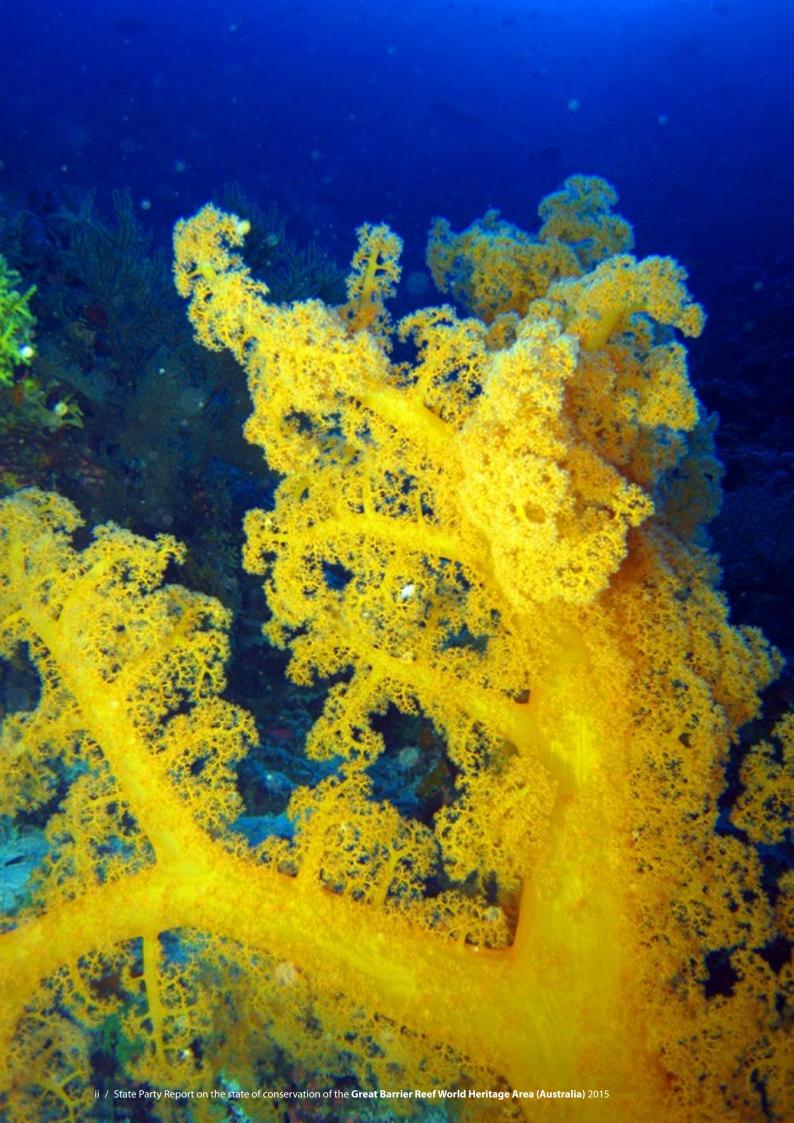
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IN RESPONSE TO THE WORLD HERITAGE COMMITTEE DECISION WHC 38 COM 7B.63

FOR SUBMISSION BY 30 JANUARY 2015





The Hon Greg Hunt MP Minister for the Environment:

January 30 2015

Mr Kishore Rao Director World Heritage Centre UNESCO 7 place de Fontenoy 75353 Paris 07 SP FRANCE

Dear Mr Rao

I am pleased to submit Australia's 2015 State Party Report on the state of conservation of the Great Barrier Reef World Heritage Area in response to the World Heritage Committee decision **38 COM 7B.63**.

The Great Barrier Reef remains the best managed marine ecosystem in the world. Through the projected \$2 billion to be invested over the next decade and strong legislation, the Australian and Queensland governments are committed to the ongoing preservation of this natural wonder.

We have heard the concerns of the World Heritage Committee, and we have acted with renewed vigour.

We have responded to all of the recommendations of the Committee and those of the 2012 World Heritage Centre/IUCN Reactive Monitoring Mission. In fact, we have gone further, and done so with the valuable support and advice of the World Heritage Centre and IUCN.

Our management responses draw on the findings of the peer-reviewed *Great Barrier Reef Outlook Report* 2014, prepared by the Great Barrier Reef Marine Park Authority, and the Australian and Queensland governments' two-year strategic environmental assessment which examined the state of the property and made recommendations for management improvements.

Outlook 2014 found that the Outstanding Universal Value and integrity of the property remain in good condition, and the system of protection and adaptive management for the property has improved substantially since the property's inscription on the World Heritage List in 1981. Outlook 2014 also found that the northern third and southern offshore areas of the ecosystem are in good condition while, in the inshore southern two-thirds, cumulative impacts have resulted in continued deterioration in some areas. Of these impacts, Outlook 2014 found the long term effects of climate change, and immediate considerations around land-based run-off, coastal land-use change and some aspects of direct use were the most significant.

Through a partnership approach with key stakeholders, we have systematically and comprehensively addressed each of the concerns raised by the World Heritage Committee and have embodied our future management intentions in the Reef 2050 Long-Term Sustainability Plan, which will drive management of the Reef well into the future.

Less than 18 months ago the Australian Government was faced with five major industrial ports proposing to dispose of dredge material in the Great Barrier Reef Marine Park. This has now been reduced to zero dredge disposal. On 12 November 2014, I also announced that the Australian Government would permanently ban the disposal of material from capital dredging in the Great Barrier Reef Marine Park.

We have backed our commitments with resources. We have established the \$40 million Reef Trust focused on improving species protection, coastal habitats and the quality of water entering the Great Barrier Reef. This commitment is part of the Australian and Queensland governments' joint investment in actions to ensure the Reef's health. As at June 2013, the annual sediment load has been reduced by 11 per cent, pesticides by 28 per cent, and nitrogen by 10 per cent compared to a 2009 baseline. On current projections around \$2 billion will be spent on this important work over the coming decade.

In the light of the strength of this response and Australia's acknowledged track record in responsibly managing this international icon in the interests of future global generations, Australia firmly believes that the property does not warrant inclusion on the List of World Heritage Properties in Danger.

Australia acknowledges that there is a lot of public interest and debate around the protection and conservation of this global wonder. Every year, more than 2 million people visit this natural treasure and experience its beauty from above and below the water and leave with memories that will last them a lifetime. Australia has heard the concerns of its people and the international community loud and clear and is working harder than ever to address those concerns so that the intrinsic value of the Reef is maintained and future generations can experience this stunning coral reef ecosystem and create their own memories for years to come.

Our vision is to ensure the Great Barrier Reef continues to improve on its Outstanding Universal Value every decade between now and 2050 to be a natural wonder for each successive generation.

Yours sincerely

regtunt

Greg Hunt

# Acknowledgements

The Australian Government Department of the Environment prepared this report with assistance from Australian and Queensland government agencies.

# Abbreviations and acronyms

Commonwealth, Cth	The Commonwealth of Australia, the Australian Government
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
GBRMPA	Great Barrier Reef Marine Park Authority
GBRWHA	Great Barrier Reef World Heritage Area (see also Figure 4 in Appendix 1)
IUCN	International Union for Conservation of Nature
The Marine Park	Great Barrier Reef Marine Park
The Mission, the Reactive Monitoring Mission	2012 World Heritage Centre / IUCN Reactive Monitoring Mission to the Great Barrier Reef
The Plan	Reef 2050 Long-Term Sustainability Plan
Queensland, Qld	The State of Queensland
The Reef	The Great Barrier Reef
The Region	Great Barrier Reef Region as defined in the <i>Great Barrier Reef Marine Park Act</i> 1975 (see also Figure 3 in Appendix 1)
The Report, the Outlook Report	Great Barrier Reef Outlook Report 2014
State Party	Australia



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# **Executive summary**

More than three decades after the Great Barrier Reef's inscription on the World Heritage List, it remains one of the most spectacular places on Earth. Australia affords the highest priority to protecting and conserving this vast 348 000 km<sup>2</sup> property. Australia is taking strong action to build and sustain the health and resilience of the Reef so that it retains the Outstanding Universal Value for which it was listed.

The 2012 World Heritage Centre / IUCN Reactive Monitoring Mission to the Great Barrier Reef concluded that the property did not meet the requirements for inscription on the List of World Heritage in Danger but risked meeting those requirements if remedial measures were not undertaken. Australia has responded comprehensively to all the recommendations of the World Heritage Committee since 2011 and the 2012 Reactive Monitoring Mission and is delivering significant changes in management of the Reef.

Australia published the independent, peer-reviewed Outlook Report 2014 which assesses the overall performance of all measures to protect and manage the Reef as a key input for any changes to Reef management by government. The highest risks to the Reef identified by the Report are the long term risks associated with climate change and the immediate threats of poor water quality from land-based run off, coastal land use change, and some remaining impacts of fishing including illegal fishing. For each of these, Australia is implementing a significant program of investment and action that is delivering results. For example, water quality leaving the catchments has improved with the annual sediment load reduced by 11 per cent, pesticides by 28 per cent, and nitrogen by 10 per cent compared to a 2009 baseline. Acknowledging that it will take time to turn around the overall outlook for the Reef and to improve its resilience and capacity to recover, the Report confirmed the Reef system as a whole retains its Outstanding Universal Value and the property remains in good condition.

A \$40 million Reef Trust has been established to fund restoration actions along the Reef as part of a projected \$2 billion investment by government over the next decade. The Australian and Queensland governments are finalising a new Reef 2050 Long-Term Sustainability Plan (intended to be released in February 2015) to guide governments, the community and industry in their work to achieve clear targets for improving the condition of the Reef. The Plan was developed with the support of a Partnership Group comprising Traditional Owners and industry, community, science and conservation stakeholders.

The Australian and Queensland governments have taken significant action to limit the impact of ports and port development on the Great Barrier Reef. In September 2013 there were five major capital dredging projects either planned or under active assessment that would dispose of dredge material in the Marine Park. The Australian and Queensland governments have reduced that number to zero. Australia has committed to permanently ban the disposal of material in the Marine Park from major capital dredging projects. The Australian Government will use its regulatory powers to put this ban in place in the first half of 2015.

With strong action being taken to address the threats to the Reef, Australia considers that the property does not warrant inclusion on the List of World Heritage in Danger. The next Outlook Report, in 2019, will be followed by a review of the Reef 2050 Long-Term Sustainability Plan. This comprehensive assessment of the condition, trend and management of risks to the property and review of the effectiveness of the Plan will provide an excellent basis for the World Heritage Committee's next consideration of the state of conservation of the property and its outlook.

# Résumé

Plus de trois décennies après son inscription sur la liste du patrimoine mondial, la Grande barrière de corail demeure l'un des endroits les plus spectaculaires de la terre. L'Australie donne la plus haute priorité à la protection et à la conservation de cette propriété vaste de 348 000 km<sup>2</sup>. L'Australie prend des mesures importantes pour développer et préserver la santé et la durabilité de la barrière de corail, afin qu'elle préserve cette valeur universelle incomparable qui lui a value d'être inscrite sur cette liste.

Le centre du patrimoine mondial 2012 / La mission réactive de contrôle IUCN sur la Grande barrière de corail ont conclus que cette propriété ne remplissait pas les conditions pour être inscrite sur la liste du patrimoine mondial en danger, mais qu'elle risquait d'y apparaître si des mesures correctives n'étaient pas entreprises. L'Australie a répondu de manière exhaustive à toutes les recommandations du Comité du patrimoine mondial depuis 2011 et la mission de surveillance réactive de 2012 a permis d'apporter des modifications significatives à la gestion de la barrière de corail.

L'Australie a publié un Rapport indépendant sur les perspectives qui a été évalué par la communauté scientifique; celui-ci évalue les performances globales de toutes les mesures prises pour la protection de la barrière de corail en tant qu'élément clé de tout changement à sa gestion par le gouvernement. Les plus grands risques pour la barrière de corail identifiés par ce rapport sont les risques à long termes associés au changement climatique, ainsi que la menace posée par la faible qualité des eaux d'écoulement, l'utilisation des terrains côtiers, et l'impact résiduel de la pêche, y compris de la pêche illégale. Pour chacun de ces risques, l'Australie instaure un programme d'investissement et d'actions importantes qui portent leurs fruits. Par exemple, la qualité de l'eau qui s'écoule des bassins versants s'est améliorée avec une réduction annuelle de 11 pourcent de la charge en sédiments, 28 pourcent en pesticides et 10 pourcent en azote par rapport à une ligne de base de 2009. Tout en reconnaissant qu'un certain temps sera nécessaire pour restaurer une meilleure perspective pour la barrière de corail et améliorer sa résilience et sa capacité à se régénérer, le rapport a confirmé que le système de la barrière de corail conserve dans son ensemble une valeur universelle exceptionnelle, et que cette propriété demeure en bon état.

Un fond de 40 millions de dollars pour la barrière de corail a été mis en place pour en financer les actions de restauration, dans le cadre d'un investissement gouvernemental estimé à 2 milliards de dollars pour la décennie à venir. Les gouvernements d'Australie et du Queensland sont en train de finaliser un nouveau Plan 2050 de durabilité à long terme pour la barrière de corail (devant être lancé en février 2015) afin de guider les gouvernements, la communauté et l'industrie dans leur tâche d'obtention de clairs objectifs d'amélioration de l'état de la barrière de corail. Le plan a été développé avec le soutien d'un groupe de partenariat comprenant les propriétaires traditionnels, de même que les acteurs industriels, communautaires, scientifiques et conversationnistes.

Les gouvernements d'Australie et du Queensland ont pris des mesures significatives pour limiter l'impact des ports et des développements portuaires sur la Grande barrière de corail. En septembre 2013 cinq importants projets de dragage qui auraient déversé leurs boues dans le parc naturel maritime étaient au stade de la planification ou de l'évaluation. Les gouvernements de l'Australie et du Queensland ont réduit ce chiffre à zéro. L'Australie s'est engagée à interdire de manière permanente le déversement des matières issues d'importants projets de dragage dans le parc naturel maritime. Le gouvernement australien utilisera ses pouvoirs de réglementation pour mettre en place cette interdiction lors du premier semestre 2015.

Grâce aux importantes mesures mises en œuvre pour répondre aux menaces encourues par la barrière de corail, l'Australie considère que cette propriété n'a pas à être incluse sur la liste du patrimoine mondial en danger. Le prochain rapport des perspectives, en 2019, sera suivi d'un examen du Plan 2050 de durabilité à long terme pour la barrière de corail. Cette évaluation exhaustive de l'état, des tendances et de la gestion des risques pour cette propriété, de même que l'examen de l'efficacité du plan, formeront une excellente base pour le prochain examen du statut de conservation de la propriété, ainsi que son avenir, par le Comité du patrimoine mondial.

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# 1. Introduction

# 1.1 The Great Barrier Reef World Heritage Area

The Great Barrier Reef World Heritage Area is a massive, complex system with a maze of 3000 coral reefs and 1050 islands spread over 348 000 km<sup>2</sup>—an area the size of the Philippines, Japan or Italy. It extends more than 2300 km along Australia's north-east coast and is up to 250 km wide (see Figure 4 in Appendix 1). The coastal zone adjacent to the Reef is not heavily developed and is home to about one million people. Within the Reef catchment less than 3 per cent of the land is developed for urban, port or industrial purposes; the main land use is agriculture.

In 1975 Australia enacted the *Great Barrier Reef Marine Park Act 1975*, establishing the Great Barrier Reef Marine Park Authority and enabling creation of the Great Barrier Reef Marine Park. In 1981 the Reef was inscribed on the World Heritage List on the basis of all four natural heritage criteria.

For more than 100 years, the Reef region has been a dynamic, multi-use area. Tourism, fishing, shipping and ports, recreation, defence, traditional use and research play an essential role in the region's economy and history. It is effectively managed across three levels of government (Commonwealth of Australia, State of Queensland and multiple local governments) with the active involvement of a diverse range of stakeholders and community interest groups. Australia continues to protect and manage the Reef in a way that enables sustainable development in the region to ensure it remains economically vibrant. Management has strengthened and adapted over time with improvements in scientific knowledge.

This report provides an update to the World Heritage Committee of recent progress including:

- completing comprehensive strategic environmental assessments and the Outlook Report 2014
- strengthening planning and protection, including through development of the new Reef 2050 Long-Term Sustainability Plan
- amending the Queensland *Environmental Protection Act 1994* to formally recognise the property and provide higher significant penalties for wilful environmental harm
- committing to new domestic and international action to address climate change, including the \$200 million pledged to the Green Climate Fund, meeting Australia's 2020 emissions reduction targets and mitigating climate change through the new \$2.55 billion Emissions Reduction Fund
- reducing the number of major capital dredging projects proposing to deposit material in the Marine Park from five to zero and putting a permanent ban on disposal of material in the Marine Park from major capital dredging projects
- restricting any significant new port development within and in areas adjoining the property to within the existing long-established port areas, and
- providing ongoing significant investment for the management and understanding of the Reef, projected to be in the order of \$2 billion over the next decade.

# 1.2 Australia's continuing progress and commitment to action

Since submitting the 2014 State Party Report, Australia has taken further significant action to address the threats facing the Reef. An overview table of progress against 2011–2014 World Heritage Committee decisions and 2012 Reactive Monitoring Mission recommendations is at Appendix 2. All the associated research and best practice management information has been publicly released so others can also benefit from this expertise.

In the past 12 months Australia has:

- reduced from five to zero the number of major capital dredging proposals that were either planned or under active assessment in September 2013 and that were proposing disposal of dredge material in the Great Barrier Reef Marine Park
- completed the EPBC Act Referral Guidelines for the Outstanding Universal Value of the Great Barrier Reef World Heritage Area (May 2014)
- amended Queensland's major projects legislation to protect matters of national environmental significance,<sup>1</sup> including the Great Barrier Reef Marine Park, and to maintain public consultation and review rights to meet EPBC Act requirements (May 2014)
- released an interim Reef Trust Investment Strategy (July 2014)
- completed the comprehensive strategic environmental assessments of management of the Great Barrier Reef Region and adjacent coastal zone (August 2014)
- released the five-yearly Great Barrier Reef Outlook Report (August 2014)
- released the combined 2012 and 2013 Reef Plan Report Card on water quality (August 2014)
- delivered the *Independent review of the institutional and legal mechanisms that provide coordinated planning, protection and management of the Great Barrier Reef World Heritage Area* (September 2014)
- delivered the North-East Shipping Management Plan (October 2014), and
- committed to introduce a regulation to ban disposal in the Great Barrier Reef Marine Park of material from major capital dredging projects (November 2014).

Decisive actions have included:

- releasing the Queensland Ports Strategy foreshadowing comprehensive legislation covering the planning, regulation and management of ports with a prohibition on significant port development outside existing long-established port areas
- establishing the Gladstone Healthy Harbour Partnership, the Mackay Whitsunday Healthy Rivers to Reef Partnership and the Great Barrier Reef Partnership Group
- notifying an intention to extend restrictions on shipping to the Coral Sea, adjacent to the property, through creation of a new Particularly Sensitive Sea Area
- amending Queensland's *Environmental Protection Act 1994* to formally recognise the property and raise maximum penalties for wilful environmental harm to over \$710 000 for individuals and \$3.56 million for corporations, plus costs of restoration
- developing innovative new financing arrangements, such as the \$40 million Reef Trust, to increase the effectiveness of investments in water quality and other protections

<sup>1</sup> Under the EPBC Act an action will require approval from the Minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance. Listed matters of national environmental significance include World Heritage properties and the Great Barrier Reef Marine Park. A significant impact is an impact which is important, notable, or of consequence, having regard to its context of intensity.

- establishing a new National Dugong and Turtle Protection Plan to better protect dugong and turtle
  populations off Far North Queensland and the Torres Strait from the threats of poaching, illegal hunting and
  marine debris, and
- continuing a crown-of-thorns starfish (COTS) control programme to manage COTS predation on high-value tourism reefs, and licensing tourism operators to undertake this activity.

## 1.3 Australia's history of strong management

Australia is an island nation and management of the marine environment has always been a priority: the nation has the third largest marine jurisdiction in the world. Expertise, lessons learned and technical insights from Australian programmes, management approaches and research are shared with partners in the Pacific and the Coral Triangle and across the globe. An extensive network of marine reserves has been created throughout Australia's marine jurisdiction, including the Coral Sea Marine Reserve adjacent to the Reef. Australia is active in the Southern Ocean under the Convention for the Conservation of Antarctic Marine Living Resources.

Australia's recent actions to enhance protection and management of the property build on its already strong management, adapted and developed over the past four decades. Appendix 3 contains a detailed chronology of key management initiatives over the past four decades.

## 1.3.1 Protection and legislation

Australia established the Great Barrier Reef Marine Park Act and the **Great Barrier Reef Marine Park Authority** (GBRMPA) in 1975. Over the succeeding 40 years, GBRMPA has developed world-class expertise in tropical marine ecosystem management. Under Queensland's *Marine Parks Act 2004*, protection extends into coastal and tidal waters. Many of the islands within the property are national parks and there are also extensive areas of national park and other protected land along the adjacent coast (see Figure 4 in Appendix 1).

The Great Barrier Reef Marine Park and the Great Barrier Reef Coastal Marine Park together comprise about 99 per cent of the World Heritage Area. The Marine Park was progressively declared from 1979 to 2001 and significant additional protection measures have been added over time (see Appendix 3). The need for a collaborative approach to the management of the property was recognised early with the establishment of an extensive **Intergovernmental Field Management Programme** in 1982.

In 1999 the legislative protection of the property was strengthened when its Outstanding Universal Value was recognised as a matter of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999.* 

## 1.3.2 Spatial planning

Zoning plans for the Great Barrier Reef Marine Park were progressively introduced as sections of the Marine Park were declared; the first came into effect in 1981. In 2004, the Great Barrier Reef Marine Park Zoning Plan 2003 came into effect as the property's first integrated zoning plan.

Through that plan Australia placed 33 per cent of the Marine Park in highly protected areas (IUCN Category 1a) which are closed to fishing and where many other activities may only be undertaken with a permit. Highly protected areas had previously covered around 5 per cent of the Marine Park.

The Great Barrier Reef Marine Park Zoning Plan is complemented by the Great Barrier Reef Coast Marine Park Zoning Plan in adjacent coastal waters.

Under Queensland's *Nature Conservation Act 1992* the majority of Great Barrier Reef islands and over 5 per cent of the area of coastal catchments have been protected by national park or similar conservation tenure that prevents development. Over the past two years, 70 000 hectares have been added to this protected area network. Outside the conservation estate, planning and development is controlled through the *Sustainable Planning Act 2009*, with planning schemes that establish zones for rural, urban, industrial and other forms of development.

### 1.3.3 Fishing and tourism

Australia has taken further action to reduce the impacts of commercial fishing throughout the property, including through establishing sustainability-focused management plans for the major fisheries operating in the region. Commitments were made for the compulsory use of turtle excluder and by-catch reduction devices in all relevant commercial fishing jurisdictions in 2000. Over the past three years, the Queensland Government has undertaken a \$9 million buyback scheme for net fisheries licences to reduce fishing pressure. In support of the 2003 rezoning of the Marine Park, the Australian Government spent \$220 million under the Great Barrier Reef Structural Adjustment package to reduce fishing pressure and underpin industry sustainability through a range of measures, including buying back fishing licences and reducing fishing pressure in the Region.

Since the 1990s the **marine tourism industry** has been a key partner in the protection and management of the Reef, working in collaboration with GBRMPA. Plans of management for the Marine Park have addressed the growth in tourism over the last several decades.

## 1.3.4 Water quality

The **Reef Water Quality Protection Plan**, introduced in 2003 and reviewed in 2009 and 2013, is improving the quality of water in the Reef through better land management in Reef catchments. Its primary focus is reduction of diffuse source pollution (nutrients, pesticides and sediment) from broadscale land use. **Annual Reef Report Cards** have shown significant improvements in water quality (http://www.reefplan.qld.gov.au/measuring-success/ report-cards/2012-2013-report-card.aspx). Work continues to meet the plan's ambitious targets. As at June 2013, the annual sediment load had been reduced by 11 per cent, pesticides by 28 per cent, and nitrogen by 10 per cent compared to a 2009 baseline.

Investments from a range of partners and the Australian Government into more effective ways of managing crown-of-thorns starfish (COTS) outbreaks have assisted farmers and land managers to implement techniques to reduce run off to the Reef catchment that contribute to outbreaks. Investment has also facilitated the development of a new single injection control method that significantly increases the efficiency of control programmes. Tourism operators have been licensed to undertake this activity in high value tourism reefs.

## 1.3.5 Cumulative impact, ports and shipping

A key focus of the Reef 2050 Long-Term Sustainability Plan will be on building the property's resilience, improving water quality and ecosystem health and **reducing direct, indirect and cumulative impacts.** Australia is developing guidelines for assessing cumulative impacts (such as climate change pressures) on matters of national environmental significance, including ecosystem and heritage values in the property.

In September 2013 there were five major capital dredging projects either planned or under active assessment that proposed to dispose of dredge material in the Great Barrier Reef Marine Park. The Australian and Queensland governments have reduced that number to zero (see Appendix 5). Australia has committed to **ban the disposal of dredge material** in the Great Barrier Reef Marine Park from major capital dredging projects.

In 2014 Australia proposed to **restrict any significant new port development** in areas within and adjoining the property (see Appendix 2). Under proposed legislation which will deliver Queensland's Ports Strategy, there will be **no new port development** within the Great Barrier Reef World Heritage Area **outside existing long-established port priority areas**, with a review in 2022. A new and more rigorous approach to port planning, including the development of master plans at existing ports, will protect both land and marine environmental values. Any new developments inside port limits and within the Great Barrier Reef Marine Park must also be consistent with the *Great Barrier Reef Marine Park Act 1975*, its Regulations and Zoning Plan. Port boundaries will be subject to a statutory public consultation process and subsequently defined in port master plans.

Capital dredging for the development of new, or expansion of existing, port facilities will only be permitted within the four priority ports of Townsville, Abbot Point, Hay Point / Mackay and Gladstone with a review in 2024. The Port of Rockhampton, which includes Fitzroy Delta, Keppel Bay and North Curtis Island, is not proposed as a priority port.

Australia has been at the forefront of international **action to reduce the impacts of shipping**. Australia's proposal for the Reef to be declared the **world's first Particularly Sensitive Sea Area** by the International Maritime Organisation in 1990 helped reduce the potential vulnerability of the Reef to shipping. Australia introduced compulsory ship pilotage between Cape York and Cairns in 1991. The 2003 Zoning Plan restricts international shipping to the Designated Shipping Area. Other measures to minimise the risks posed by shipping include mandatory ship reporting and a vessel tracking system. The 2014 North-East Shipping Management Plan outlines existing, new and strengthened management measures to ensure shipping within the Reef, Torres Strait and Coral Sea continues to be conducted to the highest standards possible.

## 1.4 The Reef 2050 Long-Term Sustainability Plan

The new Reef 2050 Long-Term Sustainability Plan will build on past management, recent recommendations from the comprehensive strategic assessment, findings of the Report and other new activities to present an **integrated management framework** for the future. Australia intends to provide the Plan to the World Heritage Centre in February 2015.

The Plan has been developed by the Australian and Queensland governments with the support of a Partnership Group comprising Traditional Owners and industry, community, science and conservation stakeholders and informed by public consultation. It **sets clear targets to guide actions** and investments by governments and all sectors of industry and the community.

The Plan will provide a comprehensive strategy to maintain and protect the Outstanding Universal Value of the property into the future. It will guide and focus management actions on key priorities and provide a **framework for all parties to work together** to achieve the following vision:

To ensure the Great Barrier Reef continues to improve on its Outstanding Universal Value every decade between now and 2050 to be a natural wonder for each successive generation to come.

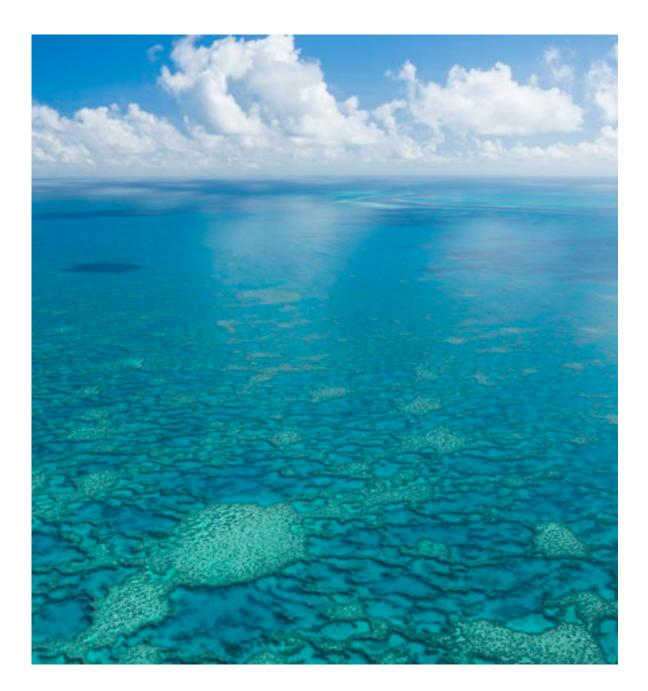
This vision will be achieved under a framework that sets out desired outcomes, objectives, targets and actions and will be underpinned by an Integrated Monitoring and Reporting Programme as part of a system of adaptive management. To achieve this vision, the Plan recognises that tangible results need to be delivered to improve Reef health each decade between now and 2050.

The **Great Barrier Reef Ministerial Forum,** which is made up of Australian and Queensland government ministers, will oversee implementation of the Plan. The Plan will be a schedule to the Great Barrier Reef

Intergovernmental Agreement 2009, signed by the Prime Minister of Australia and the Premier of Queensland. This gives it the highest status available under Australia's federated system of government.

Integral to this approach is the development of finer scale local, regional and sectoral implementation plans for key activities. These plans will outline how avoidance, mitigation, management and restoration actions combine to ensure development is sustainable. Progress in implementing the Plan will be **reported annually** to the Great Barrier Reef Ministerial Forum and made public; the first report is due in December 2015.

The Plan recognises that it is vital to engage the community as a partner in the protection and management of the Reef. Outcomes will be achieved with **significant leadership and involvement from industry and all sectors of the community** through a continuing collaborative approach.



# The state of conservation of the Great Barrier Reef World Heritage Area

Since the World Heritage Committee last met in June 2014, GBRMPA, as the independent management authority for the Great Barrier Reef, has released the Great Barrier Reef Outlook Report 2014, a peer-reviewed document that draws on the best available published science, research and information to describe the current state and outlook for the Reef.

The Report forms part of GBRMPA's statutory reporting obligations and thus covers a broader range of values than those for which the Reef was inscribed on the World Heritage List. The Report explicitly assesses the Reef's heritage values, including the Outstanding Universal Value of the property. This follows amendment of the Great Barrier Reef Marine Park Regulations in 2013 in response to a 2012 recommendation of the World Heritage Committee. As a result, all future Outlook Reports will address the condition and trend of the Outstanding Universal Value of the property.

The Australian and Queensland governments also completed a comprehensive strategic environmental assessment of the property and adjacent coastal zone which examined planning processes and management arrangements. The Report built on this assessment.

## 2.1 Overall findings of the Great Barrier Reef Outlook Report 2014

The *Great Barrier Reef Outlook Report 2014* is available at http://www.gbrmpa.gov.au/managing-the-reef/great-barrier-reef-outlook-report.

The Report assessed the condition and trend of the Reef based on the Statement of Outstanding Universal Value adopted by the World Heritage Committee in 2012. It concluded that:

- the **Outstanding Universal Value** of the property remains in good condition, although the property is under pressure
  - the assessment against criterion vii (natural beauty and natural phenomena), criterion ix (ecological and biological processes) and criterion x (habitats for in situ conservation of biological diversity) is Good; and against criterion viii (major stages of the Earth's evolutionary history) is Very good. However, declines in some species and habitats and some ecosystem processes, especially in inshore areas of the southern two-thirds of the property, are noted
  - the integrity of the property remains in Good condition, and
  - the system of protection and management for the property has improved substantially since the property's inscription on the World Heritage List in 1981.

Based on the findings of the Report, it is clear that if the Great Barrier Reef were to be nominated for inscription on the World Heritage List today it would meet all four of the natural heritage criteria and the conditions of integrity, and the adaptive and restorative management of the property would continue to be recognised as world leading.

A technical summary of the methodology and analysis that underpinned GBRPMA's conclusion that the Outstanding Universal Value of the property remains in good condition is included at Appendix 4.

The Report found that the property **continued to face a number of significant pressures**. It concluded that the overall outlook for the Reef is poor, has worsened since 2009, and is expected to further deteriorate in the future; and that greater reductions of all threats at all levels—Reef-wide, regional and local—are required to prevent the projected declines in the Reef and to improve its capacity to recover.

This was consistent with the findings of the 2012 Reactive Monitoring Mission, which identified climate change, catchment run-off, coastal development, ports and shipping and direct extractive use as the most significant pressures to the long-term conservation of the property. In a similar vein, IUCN's World Heritage Outlook 2014 assessed the property as being of High Concern.

The risks affecting the property's ecosystem and heritage values arise from a number of sources, both within and beyond its boundaries. These pressures are acting in combination to affect, sometimes significantly, the long-term outlook for the Region and the prospects for the Outstanding Universal Value of the property.

As a State Party to the World Heritage Convention, Australia is doing everything it can to address the legacy of **over a century of cumulative impacts on the Reef** and change its poor outlook. Under the framework of the new Reef 2050 Long-Term Sustainability Plan, Australia will continue to identify, manage and reduce pressures and improve the condition of the Reef over time to ensure its Outstanding Universal Value is maintained.

#### Assessment of protection and management

The 2012 Reactive Monitoring Mission noted that Australia's efforts to conserve the property as a whole since it was inscribed on the World Heritage List were remarkable. The planning framework for surveillance, and the monitoring and evaluation of the property were highly sophisticated. The 2012 Reactive Monitoring Mission also noted that Australia was dealing with previously identified threats effectively and indications were such that they were likely to be further improved in the future.

As part of the Report, a comprehensive *Independent assessment of management effectiveness for the Great Barrier Reef Outlook Report 2014*<sup>2</sup> was undertaken by four independent reviewers (see http://hdl.handle.net/11017/2857). The assessment concluded that, while many of the management measures implemented in the Region and beyond are making a positive difference (for example the Great Barrier Reef Marine Park Zoning Plan 2003 and the Reef Water Quality Protection Plan 2013), knowledge and understanding of the cumulative impacts of the multitude of uses and activities is still developing. It also found that management measures have improved in a number of areas since the Outlook Report 2009. For example, planning effectiveness has improved for the management of traditional use and land-based run-off, where investment of resources is paying dividends. In addition, understanding of the scope of the Region's heritage values has been considerably strengthened.

<sup>2</sup> M. Hockings, A. Leverington, C. Trinder and J. Polglaze (2014) Independent assessment of management effectiveness for the Great Barrier Reef Outlook Report 2014, GBRMPA, Townsville

The independent assessment refers to other positive trends including:

- GBRMPA has a planned and systematic approach to respond to climate change impacts on the Region, with an emphasis on adaptation and improving resilience
- GBRMPA contributes significantly to the development of international best practice for managing adaptation responses to climate change and extreme weather issues as they relate to the Reef ecosystem
- individual Great Barrier Reef ports are assessed as generally well managed, and further effective implementation is expected now that the Queensland Ports Strategy is in place
- shipping within the Region is generally well regulated and well managed, and
- continuing investment in management of the Reef, combined with improvements in land management and voluntary behaviour change as a result of stewardship initiatives, is beginning to effectively address some threats.

At the time of inscription on the World Heritage List in 1981 IUCN asked whether the Reef's complicated zoning system and large size would allow it to be effectively managed and protected as a World Heritage site.<sup>3</sup> IUCN's World Heritage Outlook 2014 states that, 30 years after inscription, the answer is yes, but the enormous size of the property and surrounding development pressures mean that **there will always be protection and management challenges.**<sup>4</sup> IUCN noted that GBRMPA has often been cited as a leader in protected area management and protection and the national *Environment Protection and Biodiversity Conservation Act 1999* is cited as an example of exemplary legislation for World Heritage. IUCN found that there are some strategic issues that must be resolved to ensure long-term conservation and, although GBRMPA has taken massive and innovative measures in order to protect the property, until the status of values is shown to improve some concerns remain.<sup>5</sup>

Australia concurs with this assessment, recognising that the substantial reforms and investment made to address the legacy of past activities will take many years to deliver their full benefits.

# 2.2 Assessment of the condition of the GBRWHA against the criteria for the inscription of properties on the List of World Heritage in Danger

The 2012 Reactive Monitoring Mission concluded that the property did not meet the requirements for inscription on the List of World Heritage in Danger, but risked meeting those requirements if remedial measures were not undertaken. In Australia's comprehensive response to the Mission's recommendations and all the requests of the World Heritage Committee since 2011, Australia has taken **unprecedented action** by conducting a comprehensive strategic environmental assessment, strengthening legislation, sustaining investment and enhancing management of the Reef and the adjacent coastal zone.

Australia has used the findings of the Report and the 2014 strategic environmental assessment of the Reef Region conducted by GBRMPA to assess the condition of the property against the criteria for the inscription of properties on the List of World Heritage in Danger (Operational Guidelines for the Implementation of the World Heritage Convention, paragraphs 180–182).

<sup>3</sup> IUCN (2014) World Heritage Outlook: Great Barrier Reef Protection and Management

<sup>4</sup> IUCN (2014) World Heritage Outlook: Great Barrier Reef Protection and Management

<sup>5</sup> IUCN (2014) World Heritage Outlook: Great Barrier Reef Protection and Management

On the basis of the analysis presented in Figure 1 below and the technical assessment summarised by GBRMPA at Appendix 4, Australia's view is that the property does not meet the requirements of the Operational Guidelines for Inscription of a Property on the List of World Heritage in Danger. The Reef is an enormous area with a complex mosaic of habitats. The attributes that contribute to its Outstanding Universal Value are distributed across its entire extent, meaning that localised declines in condition in one area do not substantially affect its overall Outstanding Universal Value. Already the Reef is demonstrating recovery from the decade of extreme weather that contributed significantly to its current condition and the decline recorded since the Outlook Report 2009.

Australia has undertaken and, through the new Reef 2050 Long-Term Sustainability Plan, will continue to implement significant work and investment for the conservation of the property, both on its own initiative and in its comprehensive response to the concerns outlined by the World Heritage Committee since 2011. This effort is focused on ensuring that the poor outlook for the property does not materialise. Given this level of commitment, Australia is not requesting assistance for the property and considers that further 'major operations' as foreseen in Operational Guidelines paragraph 177c are not necessary at this time.

Figure 1: Great Barrier Reef World Heritage Area: Assessment against the criteria for the inscription of properties on the List of World Heritage in Danger (Operational Guidelines for the Implementation of the World Heritage Convention, paragraphs 180–182)

#### **180.** In the case of **natural properties:**

<u>180. a) ASCERTAINED DANGER</u>—The property is faced with specific and proven imminent danger, such as:

180. a) i) A serious decline in the population of the endangered species or the other species of Outstanding Universal Value for which the property was legally established to protect, either by natural factors such as disease or by manmade factors such as poaching

The zoning for the Great Barrier Reef Marine Park and the Great Barrier Reef Coastal Marine Park sets a global standard for marine reserve networks recognised as having a wide range of benefits for biodiversity conservation.<sup>6</sup> The Region's species diversity remains high<sup>7</sup> and there have been no records of species extinction.<sup>8</sup> There are four examples of species showing good recovery after past serious declines: humpback whales, estuarine crocodiles, loggerhead turtles and green turtles (southern stock).<sup>9</sup> The region's mangrove forests remain very diverse, with at least 39 mangrove species and hybrids recorded.<sup>10</sup>

The condition and trend data remain a cause for concern, which is why such significant improvements in management measures have been made. Declines have been primarily in the southern inshore two-thirds of the Region. For example, significant declines have been recorded in most hard corals and seagrasses, some fishes and sharks, dugong and some seabird populations.<sup>11</sup>

<sup>6</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p28

<sup>7</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p95

<sup>8</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p95

<sup>9</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p35

<sup>10</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p95

<sup>11</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p14

180. a) ii) Severe deterioration of the natural beauty or scientific value of the property, as by human settlement, construction of reservoirs which flood important parts of the property, industrial and agricultural development including use of pesticides and fertilizers, major public works, mining, pollution, logging, firewood collection, etc.

#### Superlative natural phenomena or areas of aesthetic value (criterion vii) GOOD<sup>12</sup>

The strategic environmental assessment conducted by GBRMPA considered 13 key components under **criterion vii**. Five components were assessed as being in very good condition, three in good condition and five in poor condition. The overall condition was assessed as **Good**. This assessment was confirmed in the Report.

The natural beauty of large areas of the property remains spectacular, especially offshore coral reefs in the far north and aerial vistas, as well as neighbouring islands. The Reef remains visible from space and technological advances make these images more detailed and more accessible to the community.<sup>13</sup>

The scenic beauty of the Reef's islands is part of the property's natural beauty. Hinchinbrook Island is protected and managed as a national park and retains its spectacular natural scenery. The majority of the Whitsunday Islands are protected and managed as national parks. There have been some changes to island scenery, such as on the small number of resort islands.<sup>14</sup>

Many of the natural phenomena remain intact.<sup>15</sup> Some natural phenomena are improving (for example migrating humpback whales) or are recovering (for example nesting numbers of at least two species of marine turtles). <sup>16</sup>

Since 1986 hard coral cover has declined, particularly in areas south of Cooktown, reducing underwater aesthetic value in some areas—as has increasing turbidity in inshore areas. The natural beauty of the property is also being affected by the presence of marine debris, especially on beaches.<sup>17</sup> Increasing infrastructure along the coastline and on islands and increased shipping traffic have degraded some of the attributes identified as contributing to top-rating views.<sup>18</sup>

<sup>12</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p101

<sup>13</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p93

<sup>14</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p94

<sup>15</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p94

<sup>16</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p94

<sup>17</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p93

<sup>18</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p93

#### Major stages of the Earth's evolutionary history (criterion viii) VERY GOOD<sup>19</sup>

The strategic environmental assessment conducted by GBRMPA considered six key components under **criterion viii**. Three components were assessed as being in very good condition and three in good condition. The overall condition was assessed as **Very good**. This assessment was confirmed in the Report.

The Reef is the world's largest coral reef ecosystem. It remains an outstanding example of an ecosystem that has evolved over millennia. It represents the major stages in the Earth's history, the record of life, geological processes in the development of landforms, and geomorphic and physiographic features.<sup>20</sup>

Almost all geomorphological evolutionary processes remain intact. Examples of all stages of reef development remain, although the overall health of reefs, especially in the southern two-thirds of the property, has declined. Although little is known about geomorphological features such as palaeochannels, karstic features, submarine channels and turbidite deposits, their depth and distance from shore mean they are likely to be rarely affected by direct use or flow-on effects from the catchment.<sup>21</sup>

#### Ecological and biological processes (criterion ix) GOOD<sup>22</sup>

The strategic environmental assessment conducted by GBRMPA considered eight key components under **criterion ix**. One component was assessed as being in very good condition, six in good condition and one in poor condition. The overall condition was assessed as **Good**. This assessment was confirmed in the Report.

The diversity of the Reef ecosystem reflects the maturity of an ecosystem that has evolved over millennia<sup>23</sup> and many ecosystem processes remain in good condition,<sup>24</sup> with most geomorphic, physical, chemical and ecological processes in good condition.<sup>25</sup> The continuing good and very good condition of almost all processes in the northern third of the Region and in offshore areas means that the ecosystem in these areas continues to be healthy.<sup>26</sup> While improved land management practices are beginning to reduce the amounts of nutrients and sediments leaving the catchment, there is likely to be a long lag time between a reduction in pollutants flowing into the Region and improvements in related marine processes.<sup>27</sup>

Some ecosystem processes, such as sedimentation, nutrient cycling and recruitment, have deteriorated.<sup>28</sup> Any processes associated with species groups that are in decline (for example corals and seagrasses) are likely also to have declined. In the inshore southern two-thirds there are particular concerns about some processes, such as connectivity, nutrient cycling and sedimentation, principally associated with land-based activities in the catchment.<sup>29 30</sup> See also 180 a) i) above.

<sup>19</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p101

<sup>20</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p94

<sup>21</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p95

<sup>22</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p101

<sup>23</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p95

<sup>24</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p101

<sup>25</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p95

<sup>26</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p69

<sup>27</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p69

<sup>28</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p101

<sup>29</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p95

<sup>30</sup> GBRMPA (2014) Great Barrier Reef Region Strategic Assessment: Strategic assessment report, pp7–37

#### Habitats for in situ conservation of biological diversity (criterion x) GOOD<sup>31</sup>

The strategic environmental assessment conducted by GBRMPA considered 11 key components under **criterion x**. One component was assessed as being in very good condition, seven in good condition and three in poor condition. The overall condition was ranked as **Poor**. The Report assessed this criterion as **Good** based on additional data available after completion of the strategic environmental assessment which indicated habitat recovery following the cyclone and flood events of 2010–2011.

The Reef remains one of the world's most unique and biologically diverse ecosystems, containing a rich mosaic of habitats. At the scale of the whole Great Barrier Reef Region, the majority of its habitats are assessed to be in good to very good condition.<sup>32</sup>

Some key habitats are under pressure, especially in the southern two-thirds of the Region, where land-based run-off has affected inshore habitats and a combination of severe weather and outbreaks of crown-of-thorns starfish has affected coral cover.<sup>33</sup>

Habitats for seabird nesting remain in generally good condition,<sup>34</sup> the calving habitats for the humpback whale are well protected,<sup>35</sup> and plant diversity is generally well protected, with about one-third of the islands contained within national parks.<sup>36</sup> The nesting habitats for marine turtles are generally in good condition<sup>37</sup> but projected changes to environmental conditions such as sea-level rise and increasing air temperature are predicted to affect them in the future.<sup>38</sup>

<sup>31</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p101

<sup>32</sup> Sinclair Knight Merz (2014) Great Barrier Reef strategic assessment independent review, p12

<sup>33</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p95

<sup>34</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>35</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>36</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>37</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>38</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

180. a) iii) Human encroachment on boundaries or in upstream areas which threaten the integrity of the property

#### Assessment of integrity GOOD<sup>39</sup>

The strategic environmental assessment conducted by GBRMPA considered three components contributing to integrity: inclusion of all elements necessary to express its Outstanding Universal Value, adequacy of size to ensure complete representation of the features and processes which convey the property's significance, and protection from the adverse effects of development and/or neglect. Two components were assessed as being very good and one as poor. The overall condition of integrity was assessed as **Good**. This assessment was confirmed in the Report.

The property continues to include all attributes necessary to express its Outstanding Universal Value<sup>40</sup> and the property is afforded a high level of protection and management.<sup>41</sup> At the time of inscription it was considered that to include virtually the entire Reef ecosystem within the property was a way of ensuring the integrity of the coral reefs in all their diversity.<sup>42</sup> The property is of sufficient size to ensure the complete representation of the features and processes which convey its significance.<sup>43</sup> While some habitats, populations and processes are under pressure, the attributes of Outstanding Universal Value remain largely intact overall.<sup>44</sup> The area has remained at about 348 000 km<sup>2</sup>, with minor changes as a result of reclamation along the coast (approximately 8 km<sup>2</sup>).<sup>45</sup> Factors external to the property such as climate change, coastal development and land-based run-off are affecting its overall integrity, as are some impacts of direct use.<sup>46 47</sup>

Resilience and risk were assessed as part of the strategic environmental assessment and Report. There is increasing evidence of loss of resilience and recovery capacity, although the extent of that loss varies considerably between ecosystem components and between localities.<sup>48</sup> The loss is unlikely to be related to any single cause but is almost certainly the consequence of cumulative pressures over time.<sup>49</sup>

<sup>39</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p101

<sup>40</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>41</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>42</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>43</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>44</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>45</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>46</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p101

<sup>47</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

<sup>48</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p243

<sup>49</sup> GBRMPA (2014) Great Barrier Reef Region Strategic Assessment: In brief, p7

180. b) POTENTIAL DANGER-The property is faced with major threats which could have deleterious effects on its inherent characteristics. Such threats are, for example:

180. b) i) a modification of the legal protective status of the area;

The property is protected by an internationally recognised, world-class system of environment and heritage protection legislation. The *Environment Protection and Biodiversity Conservation Act 1999* is the primary legislation through which Australia implements its World Heritage obligations.

The property is designated a Marine Park under the *Great Barrier Reef Marine Park Act 1975*. Under Queensland's *Marine Parks Act 2004*, marine park protection extends into coastal and tidal waters through the Great Barrier Reef Coastal Marine Park. About one-third of the property's islands are protected as national parks. In addition, approximately 70 islands are included in the Great Barrier Reef Marine Park.

The Great Barrier Reef Marine Park is protected under the *Environment Protection and Biodiversity Conservation Act 1999* as a matter of national environmental significance. This same protection also extends to World Heritage (specifically) and threatened and migratory species (important elements of the property's Outstanding Universal Value). Changes have been made to Queensland legislation to strengthen protection of the property, requiring the state to meet national requirements for the protection of matters of national environmental significance.

The Queensland Government has a range of legislative and non-legislative mechanisms that provide a robust regulatory and management system for the Reef. Key pieces of legislation include the *Environmental Protection Act 1994, Nature Conservation Act 1992, Vegetation Management Act 1999, Coastal Protection and Management Act 1995, Water Act 2000, State Development and Public Works Organisation Act 1971* and *Sustainable Planning Act 2009.* The Queensland Government—including the Department of Environment and Heritage Protection, Department of Natural Resources and Mines, and Department of State Development, Infrastructure and Planning—is well resourced to administer these Acts and uses a range of tools to encourage and ensure compliance.

Recent changes to Queensland's *Environmental Protection Act 1994* have increased protection for the Reef. The maximum penalties for serious environmental harm to the Reef by individuals have increased from \$470 000 to \$700 000, while corporations will face fines of more than \$3.5 million, up from \$2.3 million. Gaol terms have also increased from two to five years. Courts will have to consider potential harm to the Reef as an aggravating factor when sentencing companies or people caught breaking environmental law.

180. b) ii) planned resettlement or development projects within the property or so situated that the impacts threaten the property;

Through the coastal zone component of the comprehensive strategic environmental assessment, the Queensland Government committed to ensuring that development in the Reef coastal zone occurs in a sustainable manner and that negative impacts on Outstanding Universal Value are avoided.

World Heritage values and the Great Barrier Reef Marine Park are matters of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999*. Any development project which may have an impact on these matters is subject to rigorous environmental assessment and may be refused if necessary. If approved, such projects are subject to strict enforceable conditions.

Through bilateral agreement processes with the Queensland Government, these strict requirements have been incorporated into Queensland legislation.

#### 180. b) iii) outbreak or threat of armed conflict;

#### Not applicable.

180. b) iv) the management plan or management system is lacking or inadequate, or not fully implemented.

An independent assessment conducted as part of the Report found that management measures have improved in a number of areas since the Outlook Report 2009, including planning effectiveness for the management of land-based run-off and traditional use.<sup>50</sup>

IUCN rated the protection and management of the property as effective.<sup>51</sup> It concluded that the enormous size of the property and surrounding development pressures means that there will always be protection and management challenges.<sup>52</sup> GBRMPA has often been cited as a leader in protected area management and protection and the EPBC Act used as an example of exemplary legislation for World Heritage.<sup>53</sup>

Activities within the property are comprehensively managed and direct use is sustainable. The remoteness of some of the property poses challenges for managing agencies.<sup>54</sup> However, this remoteness also affords it a level of protection from human impacts.

Australia intends to release a Reef 2050 Long-Term Sustainability Plan to further improve the management of the property. The Plan will coordinate actions to better guide management of the Great Barrier Reef World Heritage Area and associated management activities in its adjacent catchment. It includes areas under the jurisdictions of both the Australian and Queensland governments. The Plan addresses the management of all values of the World Heritage Area, from species and habitats to Indigenous values and historic heritage. It focuses on protecting those attributes that contribute to the Outstanding Universal Value and integrity of the World Heritage Area.

<sup>50</sup> M. Hockings, A. Leverington, C. Trinder and J. Polglaze (2014) *Independent assessment of management effectiveness for the Great Barrier Reef Outlook Report 2014*, GBRMPA, Townsville

<sup>51</sup> IUCN (2014) World Heritage Outlook: Great Barrier Reef—Protection and management

<sup>52</sup> IUCN (2014) World Heritage Outlook: Great Barrier Reef—Protection and management

<sup>53</sup> IUCN (2014) World Heritage Outlook: Great Barrier Reef—Protection and management

<sup>54</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p96

180. b) v) threatening impacts of climatic, geological or other environmental factors.

Climate change is the most significant threat to coral reefs worldwide. Ocean acidification, sea temperature increases, altered weather patterns (such as more intense storms) and rising sea levels all threaten the Reef. The Reef Region remains one of the most resilient tropical marine ecosystems in the world but there is increasing evidence that the Reef's resilience is being eroded.<sup>55</sup> The comprehensive strategic environmental assessment of the Reef and its coastal zone concluded that a concerted international effort to reduce global climate change, combined with action at national and local levels to build the Reef's resilience by reducing direct and indirect impacts, is the best insurance for protecting the Reef's Outstanding Universal Value.<sup>56</sup>

Australia is committed to achieving a successful global climate change agreement at the Conference of the Parties meeting in Paris at the end of 2015 that will see all countries commit to reduce emissions. Australia has more than met its Kyoto Protocol 1 target. Further information on Australia's domestic and international response to climate change, including Australia's commitment of \$2.55 billion to an Emissions Reduction Fund and its pledge of \$200 million to the Green Climate Fund, is included in Section 3.1.

The Report provides a detailed assessment of the impacts of climate change on the ecosystem and heritage values of the Region. Climate change also has indirect effects on these values by changing the way people interact with the Region and by affecting other factors, like land-based run-off.<sup>57</sup>

The new Reef 2050 Long-Term Sustainability Plan will provide a framework and a wide range of actions to build the Reef's resilience and improve its outlook, including in terms of dealing with the effects of climate change.

**181.** In addition, the threats and/or their detrimental impacts on the integrity of the property must be those which are amenable to correction by human action. In the case of natural properties, most threats will be manmade and only very rarely a natural factor (such as an epidemic disease) will threaten the integrity of the property. In some cases, the threats and/or their detrimental impacts on the integrity of the property may be corrected by administrative or legislative action, such as the cancelling of a major public works project or the improvement of legal status.

Australia is taking concerted action to address the key threats to the property as identified through the comprehensive strategic environmental assessment, the Report and the development of a new Reef 2050 Long-Term Sustainability Plan. Actions have included reducing sediment, nutrient and pesticide loads from run-off in the adjacent catchment, reducing the number of major capital dredging proposals to dispose of material in the Marine Park from five to zero, and moving to put a permanent ban on disposal of material in the Marine Park from major capital dredging projects. The legislative protection for the property under Queensland law has been strengthened.

<sup>55</sup> GBRMPA (2014) Great Barrier Reef Region Strategic Assessment: Program report, p12

<sup>56</sup> GBRMPA (2014) Great Barrier Reef Region Strategic Assessment (11.5.1), pp11-6

<sup>57</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p155

**182.** The Committee may wish to bear in mind the following supplementary factors when considering the inclusion of a cultural or natural property in the List of World Heritage in Danger:

182. a) Decisions which affect World Heritage properties are taken by Governments after balancing all factors. The advice of the World Heritage Committee can often be decisive if it can be given <u>before</u> the property becomes threatened.

Australia has listened carefully to and acted on the advice of the World Heritage Committee. It has sustained its substantial investment in the protection and management of the Reef and is implementing legislative and policy changes to the way the Reef is protected. Most threats are pre-existing, the legacy of over a century of European settlement, and—as is identified elsewhere in this report—such legacy threats can take many years to overcome. The overview table of Australia's progress against 2011–2014 World Heritage Committee decisions and 2012 Mission recommendations in Appendix 2 sets out the comprehensive body of work undertaken by the Australian and Queensland governments and their partners.

182. b) Particularly in the case of <u>ascertained danger</u>, the physical or cultural deteriorations to which a property has been subjected should be judged according to the <u>intensity</u> of its effects and analyzed case by case.

The majority of the property (northern inshore, northern offshore and southern offshore) is in good condition. The comprehensive legislative protection arrangements in place are focused on reducing the intensity of—and, where feasible, eliminating—the threats facing the property. Given the long lag time between taking action and seeing improvements in the marine environment, Australia considers that the next five-yearly Outlook Report for the Reef, to be released in 2019, will provide an excellent basis for the World Heritage Committee's next consideration of the state of conservation of the property and its outlook.

182. c) Above all in the case of potential danger to a property, one should consider that:

182. c) i) the threat should be appraised according to the normal evolution of the social and economic framework in which the property is situated;

The property extends almost the entire length of the state of Queensland, being more than 2300 km long and up to 250 km wide (see Appendix 1). Australia and Queensland depend on the economic benefits derived from the sustainable use of the Reef as well as from land uses in the adjoining catchments. Australia is taking measures to ensure that uses avoid impacts on the Outstanding Universal Value of the property and to address legacy and cumulative impacts. Adaptive and progressive improvement of management systems and legislative protection, informed by the best available science, has been a feature of the governance of the Reef region since the Marine Park Act was enacted in 1975. This effort has been intensified through the completion of the comprehensive strategic environmental assessment of the Reef and the adjacent coastal zone and is being crystallised through the new Reef 2050 Long-Term Sustainability Plan.

182. c) ii) it is often impossible to assess certain threats—such as the threat of armed conflict—as to their effect on cultural or natural properties;

Australia has a world-leading approach to threat identification through the Outlook Report.

182. c) iii) some threats are not imminent in nature, but can only be anticipated, such as demographic growth.

The Report includes a comprehensive assessment of the likelihood of threats to the property. These threats will be addressed through the actions set out in the new Reef 2050 Long-Term Sustainability Plan.

182. d) Finally, in its appraisal the Committee should take into account <u>any cause of unknown or</u> <u>unexpected origin</u> which endangers a cultural or natural property.

Not applicable.



# 3. Current conservation issues

The 2012 Reactive Monitoring Mission and the Outlook Report 2014 identified the greatest long-term and immediate pressures on the Reef as:

- **climate change** (long term)—sea temperature increase, altered weather patterns, ocean acidification, and sea-level rise
- land-based run-off (immediate)—nutrients (including links to crown-of-thorns starfish outbreaks), sediments, pesticides, and marine debris
- coastal land-use changes (immediate)—clearing and modifying coastal habitats, artificial barriers to flow
- ports and dredging (immediate)-including disposal and re-suspension of dredge material, and
- **direct use** (immediate)—such as **shipping**, **tourism** and some remaining impacts of **fishing**, and illegal fishing and poaching.

## 3.1 Addressing climate change

The biggest long-term threat to coral reefs worldwide is climate change—and the Great Barrier Reef is no exception. Damage to reefs as a consequence of climate change comes from ocean acidification, sea temperature increases, altered weather patterns (such as more intense storms) and rising sea levels. A concerted international effort to reduce the effects of global climate change will provide the best protection for coral reefs. The Australian Government is committed to effective climate change mitigation and adaptation, both internationally and domestically. Australia has a proven track record of contributing to the international response to climate change. This is occurring through efforts to secure a strong and effective new global climate agreement under the United Nations Framework Convention on Climate Change, through practical cooperation with regional partner countries, and through supporting developing countries to take actions that reduce emissions, build climate resilience and foster economic growth.

#### 3.1.1 Mitigation

The Australian Government is focused on undertaking practical mitigation actions.

Domestically, Australia is committed to reducing its emissions to 5 per cent below 2000 levels by 2020—a reduction of 19 per cent from business-as-usual levels. Australia has met its Kyoto Protocol 1 target. Australia's 2020 target will be delivered through a \$2.55 billion Emissions Reduction Fund creating positive incentives to cut emissions, including through land sector activities, cleaning up power stations, capturing landfill gas, and energy efficiency. The Emissions Reduction Fund also includes a safeguard mechanism to ensure that emissions reductions paid for by the Government are not offset by a significant rise in emissions elsewhere in the economy. The safeguard mechanism will commence in July 2016.

There will be ongoing monitoring and evaluation of the performance of the Emissions Reduction Fund to ensure its continuous improvement, with an operational review to be conducted in late 2015. The Emissions Reduction Fund is legislated and will support Australian businesses and households to improve practices and undertake investment to reduce emissions. As part of work towards a new global climate agreement for the post-2020 period, in 2015 the Australian Government will review its international targets and settings, taking into account action by all major economies and Australia's key trading partners.

Demonstrating Australia's commitment to play its part in the global response to climate change, the Australian Government has pledged \$200 million to the Green Climate Fund. The pledge will support private sector led economic growth in the Indo-Pacific region, with a particular focus on investment in infrastructure, energy, forestry and emissions reduction. This builds on the successful Asia Pacific Rainforest Summit to reduce deforestation in rainforests, leading to reduced carbon dioxide emissions and increased carbon sequestration through a \$6 million investment to reduce illegal logging.

## 3.1.2 Adaptation

Australia supports climate change adaptation internationally through practical co-operation with regional partner countries, especially in the Pacific; and through supporting developing countries to take actions that reduce emissions, build climate resilience and foster economic growth.

The Australian Government supports science and practical steps to adapt to climate change at home. It has committed \$9 million over three years (2014–2017) to continue funding for the National Climate Change Adaptation Research Facility to integrate its research into decision-making by governments, businesses and households, emphasising support for managing the Australian coastal zone under climate change and sea-level rise.

The National Environmental Science Programme also plays a significant role in improving understanding of the impacts of climate change on the Reef. This programme is a long-term commitment to environment and climate research with annual funding of \$142.5 million over six years. The outcomes of research hubs on tropical water quality, northern biodiversity and earth systems will support actions to build the resilience of the Reef.

The Queensland Government is developing a partnership-driven adaptation strategy to reduce risks to the State's economy, environment, infrastructure and communities from current and future climate impacts. This strategy will incorporate measures which contribute to the resilience of the Reef. In addition, a number of local government councils are preparing coastal hazard management plans and other initiatives in response to the anticipated effects of climate change.

These actions build from or relate directly to actions in the Great Barrier Reef Climate Change Adaptation Strategy and Action Plan (2012–2017). This strategy outlines how GBRMPA, in collaboration with industry, science and community partners, will work to improve the resilience of the Reef so it is better able to cope with stress and reduce the impacts of climate change.

The new Reef 2050 Long-Term Sustainability Plan will outline a number of actions to build the Reef's resilience and improve its capacity to respond to climate change.

Long-term coral monitoring by the Australian Institute of Marine Science suggests that if crown-of-thorns starfish (COTS) outbreaks can be reduced, coral cover will increase, despite the impacts of storms, cyclones and bleaching events, reinforcing the need for continuing action to reduce fertiliser run-off which is implicated in COTS outbreaks.

## 3.2 Managing land-based run-off

Australia has made significant investment over more than a decade to improve the quality of water in the Reef through improved land management in reef catchments under the Reef Water Quality Protection Plan.

The Reef Water Quality Protection Plan is a collaborative programme of coordinated projects and partnerships aimed at improving the quality of water entering the Reef. Governments have invested in excess of \$375 million over the past five years and a similar level of expenditure is projected for another five years. By June 2013 a total of 59 per cent of horticulture producers, 49 per cent of sugar cane growers and 30 per cent of graziers had adopted improved land management practices.

The latest Reef Report Card for 2012 and 2013 (released in June 2014) showed that efforts are paying off. The decline in the quality of water entering the Reef has been halted and reversed. The Report Card shows that the **annual sediment load had been reduced by 11 per cent, pesticides by 28 per cent, and nitrogen by 10 per cent compared to a 2009 baseline** http://www.reefplan.qld.gov.au/measuring-success/report-cards.aspx.

The current water quality issues reflect a legacy of more than a century of land-use change in the catchment. While contemporary land management practices have improved significantly in the last decade, land-based run-off will continue to have an influence on the health of the Reef and will be a focus of continuing action and investment. Australia continues to work towards the Reef Water Quality Protection Plan goal '*that by 2018, the quality of water entering the reef from broadscale land use has no detrimental impact on the health and resilience of the Great Barrier Reef*'.

Urban diffuse sources and point sources of pollution such as sewage, waste from ore processing as part of mining, and aquaculture are dealt with effectively under a range of legislation, regulations and strategies.

New initiatives include \$55 million in the Queensland Government's 2014 State Budget for expansion of best management practice programmes, research and education for Reef catchment farms, and the Australian Government's \$40 million Reef Trust. These initiatives respond to ongoing concerns over water quality in the property and support a growing suite of actions being taken across government, agricultural sectors, researchers and community organisations.

The Australian Government is continuing crown-of-thorns starfish (COTS) control programmes, investing \$10.5 million over 2012–2015 to protect high-value reefs and increase knowledge of COTS biology. These projects aim to maintain coral cover on targeted reefs at levels well above the 20 per cent considered essential for reef health and resilience.

Another water quality issue is that of marine debris—plastic bags, micro-plastics, bottles, ropes and nets from both land-based and sea-based sources—which can injure and kill dugong, turtles, seabirds and other marine wildlife. The Australian Government is providing \$700 000 over 2014–2016 to GBRMPA to facilitate the clean-up of marine debris. It is also undertaking a major review of the national Threat Abatement Plan for the Impacts of Marine Debris on Vertebrate Marine Life.

# 3.3 Coastal land-use change: improved assessment and planning

Australia has made substantial progress in improving assessment and planning for the property. This has involved working to ensure that Outstanding Universal Value is a central consideration in the protection and management of the Reef, as well as undertaking a comprehensive strategic environmental assessment as a contribution to the preparation of the Reef 2050 Long-Term Sustainability Plan. The vision for the Plan gives prominence to the maintenance of Outstanding Universal Value. The Reef is protected as a matter of national environmental significance under the national *Environment Protection and Biodiversity Conservation Act 1999*.

In 2014, the EPBC Act Referral Guidelines for the Outstanding Universal Value of the Great Barrier Reef World Heritage Area were finalised. The Referral Guidelines are based on the Statement of Outstanding Universal Value of the GBRWHA approved by the World Heritage Committee in 2012. They provide guidance on the concept of Outstanding Universal Value, the types of actions that may require statutory environmental impact assessment and how to avoid, reduce or manage impacts on the Outstanding Universal Value of the property. These guidelines are available at http://www.environment.gov.au/resource/epbc-act-referralguidelines-outstanding-universal-value-great-barrier-reef-world-heritage.

The Australian and Queensland governments have committed to developing Cumulative Impact Assessment Guidelines and a Net Benefit Policy to support assessment and planning in and around the property.

A key focus of the new Reef 2050 Long-Term Sustainability Plan will be to ensure that the Reef continues to support a wide range of sustainable economic, social, cultural and traditional activities through improved planning and decision-making and an outcomes-focused approach.

Australian and Queensland government bilateral agreements covering environmental assessment processes were updated in 2014. The Queensland Government has amended its legislation and regulations to match the specific requirements of the EPBC Act. These include amendment of the *State Development and Public Works Organisation Act 1971* and the *Environmental Protection Act 1994*. In approving bilateral agreements, Australia's Environment Minister must be satisfied that accredited State processes meet the standards set by the EPBC Act and therefore satisfy Australia's obligations under relevant international agreements, including the World Heritage Convention.

Bilateral agreements do not affect the powers of GBRMPA. The Authority retains responsibility to make independent decisions under the *Great Barrier Reef Marine Park Act 1975*.

## 3.3.1 Managing coastal development

As shown by the map (Figure 4) in Appendix 1, there is a mosaic of protected areas along the Queensland coast contributing to the protection of the Reef. In addition, the comprehensive strategic environmental assessment of the Great Barrier Reef World Heritage Area and coastal zone provides a sound basis for planning and assessment decisions and has informed the development of the new Reef 2050 Long-Term Sustainability Plan.

In 2011 Australia formalised a procedure for providing quarterly notification reports of proposed developments within or outside the property to the World Heritage Centre. Notification reports and a full list of proposed actions relating to the Reef that require environmental impact assessment under the EPBC Act (as at 30 January 2015) are available at:

http://www.environment.gov.au/heritage/about/world/notification-development-proposals.

Current referrals under the EPBC Act can be reviewed online at: http://www.environment.gov.au/protection/environment-assessments. Key assessments, including the Abbot Point projects, are explained in more detail at: http://www.environment.gov.au/protection/assessments/key-assessments.

Permits granted by the Great Barrier Reef Marine Park Authority can also be viewed online at: http://www.gbrmpa.gov.au/zoning-permits-and-plans/permits/reef-permits.

Australia has embedded the 'avoid, mitigate, offset' hierarchy of principles in its planning and assessment processes, with avoidance and mitigation strategies being the primary strategies for managing potential impacts. Offsets provide environmental benefits to counterbalance the impacts that remain after avoidance and mitigation measures. Offsets do not mean that proposals with unacceptable impacts will be approved. They are an additional tool that can be used during the environmental impact assessment process.

Through the coastal zone component of the comprehensive strategic environmental assessment, the Queensland Government committed to ensuring that development in the Reef coastal zone occurs in a sustainable manner and that negative impacts on Outstanding Universal Value are avoided. This included the following enhancements to its current management:

- add to the coastal zone protected area estate
- require port master planning that considers potential marine-based as well as land-based environmental impacts
- meet the standards required by the EPBC Act for protection of matters of national environmental significance, and
- develop a Direct Benefit Management Plan for environmental offsets to maximise benefits to the Reef's health and resilience.

## 3.3.2 Management of greenfield areas

In the context of the management of the Reef and greenfield areas on the adjacent coastline, there is a comprehensive suite of legislation in place protecting against adverse impacts.

Under Australia's federal structure, the Queensland Government has responsibility for land tenure, natural resources management and land-use planning in the coastal zone and catchments. There is a range of state laws which cover all aspects of environmental protection, planning and development assessment. For example, over a third of the Queensland coast is in legally protected areas.

Queensland's land use planning system includes a State Planning Policy that requires local governments, when making planning and development decisions, to meet 'state interest' policy objectives. These include policies relating to biodiversity—the 'avoid, minimise and offset' hierarchy applies to development that may have a significant impact on matters of national and state environmental significance—and water quality objectives when urban development is undertaken.

Land development must be consistent with the planning system under the *Sustainable Planning Act 2009* (*Qld*) and an environmental impact assessment is required for any project which may have a significant environmental impact.

Where matters of national environmental significance such as World Heritage properties and the Great Barrier Reef Marine Park may be affected, the EPBC Act is triggered either directly or through bilateral agreement arrangements with the Queensland Government.

## 3.4 Limiting impacts of ports and dredging

The Australian and Queensland governments are taking action to limit the impact of ports and port development on the Reef. Further information on this issue is provided in section 1.3.5 and Appendices 2 and 3.

In September 2013 there were five major capital dredging projects either planned or under active assessment that proposed to dispose of dredge material in the Great Barrier Reef Marine Park. The Australian Government has reduced that number to zero (see Appendix 5).

The Australian Government is also using its regulatory powers to ban the disposal of capital dredge material in the Great Barrier Reef Marine Park from any future major port development.

Port planning and port operations in and around the World Heritage Area continue to be improved through implementation of the Queensland Ports Strategy, the principles developed through the Independent Review of the Port of Gladstone, and partnership models such as the Gladstone Healthy Harbour Partnership.

Under proposed legislation which will deliver Queensland's Ports Strategy, there will be no new port development within the Great Barrier Reef World Heritage Area outside existing long-established port priority areas, with a review in 2022. A new and more rigorous approach to port planning, including development of master plans at existing ports, will protect both land and marine environmental values. Any new development inside port limits and within the Great Barrier Reef Marine Park must also be consistent with the *Great Barrier Reef Marine Park Act 1975*, its Regulations and Zoning Plan. The four priority ports are Townsville, Abbot Point, Hay Point / Mackay and Gladstone. The Port of Rockhampton, which includes Fitzroy Delta, Keppel Bay and North Curtis Island, is not proposed as a priority port.

Greenfield areas will be protected by a prohibition in the proposed legislation that will restrict significant port development within and adjoining the property to within existing port limits, with review in 2022. These maritime boundaries are clearly defined by legislation, including the Queensland *Transport Infrastructure Act 1994* and Transport Infrastructure (Ports) Regulation 2005.

### 3.4.1. Abbot Point

In response to the World Heritage Committee's decision of June 2014 (38 COM 7B.63), the Queensland Government announced a new policy in October 2014 for the land-based disposal of dredge material from the Abbot Point development. In response to this policy, the Abbot Point port development proponent has submitted new project proposals to the Australian Government for assessment. The Abbot Point Port and Wetland Strategy includes a commitment to work with the community and experts to preserve and enhance the coastal Caley Valley Wetlands. Location of the onshore placement ponds will affect a small area of wetland—between 2 and 3 per cent of the total area—and a programme of rehabilitation and conservation has been proposed to mitigate this impact. The scale of the proposed developments at Abbot Point has been reduced significantly, with the overall volume of proposed capital dredging reduced from the original 38 million m<sup>3</sup> to 1.7 million m<sup>3</sup>.

### 3.4.2 Proposed port projects in the Fitzroy Delta and on Cape York Peninsula

The Fitzroy Terminal proposal (EPBC 2011/6069) and the Wongai proposal (EPBC 2011/6092) were referred to the Australian Government for assessment in 2011 (see Appendix 5). On 5 May 2014 the coordinated project declaration for the Fitzroy Coal Terminal proposal lapsed. A process to withdraw/lapse the project under the EPBC Act has commenced.<sup>58</sup>

<sup>58</sup> Projects that are lapsed or withdrawn under Queensland or federal environmental impact assessment processes cannot lawfully proceed.

The Wongai proposal adjacent to the Reef on Cape York Peninsula triggered seven matters of national environmental significance and represents a greenfield development. There has been little progress on the Wongai assessment since late 2011 and, should the proponent fail to meet the mid-2015 timeframe, the Australian Government will seek to lapse this project.

#### 3.4.3 Other port developments

On 4 December 2014 the North Queensland Bulk Ports Corporation, on behalf of the project proponents, requested that the Dudgeon Point Coal Terminals Project in the Port of Hay Point be withdrawn from assessment under national environmental law. This project included a proposal to undertake capital dredging of 13 million m<sup>3</sup>.

## 3.5 Ensuring direct use is sustainable

#### 3.5.1 Shipping management

Australia's economy depends heavily on shipping, although by global standards shipping movements are low. The four largest ports in the Reef region (Gladstone, 20 berths; Townsville, 10 berths; Hay Point, six berths; and Abbot Point, two berths) are small compared to the megaports of China, Singapore, Europe and the United States, which each have 75 to 250 shipping berths. The Reef's ports will remain small even after current expansion plans are completed.

The number of shipping incidents is very low and existing measures are significantly reducing risks. Nonetheless, in recognition of the importance of the Reef, Australia has prepared the North-East Shipping Management Plan, released on 7 October 2014. The Shipping Plan enhances ship safety and environmental protection in the north-east region of Australia. It specifically considers shipping-related risks to the Outstanding Universal Value of the GBRWHA and identifies measures, implemented through a work programme, for preventing or mitigating ship-sourced pollution and other environmental impacts of shipping.

Since commencing preparation of the Shipping Plan in 2012, substantial progress has been made on the 63 actions it contains. The North-East Shipping Management Plan is available at www.amsa.gov.au/forms-and-publications/Publications/AMSA439.pdf.

#### 3.5.2 Fisheries management

Research demonstrates that the rezoning of the Marine Park in 2003 is having a positive impact on fish stocks not just in the Green Zones (Figure 4, Appendix 1) but also in other areas still subject to fishing. The 2003 Zoning Plan excludes commercial, charter and recreational fishing from one-third of the Marine Park, with trawling excluded from about two-thirds. There is strong evidence that this has resulted in consistently more and larger coral trout and other target fish in zones protected from fishing. Increased reproduction in these no-take zones also appears to benefit fish populations in the entire ecosystem, in turn benefiting overall ecosystem health and resilience.<sup>59</sup> Other regulatory requirements include compulsory licensing for commercial and charter fishers, total allowable catch limits and quotas for commercial operators, possession limits, size limits, restrictions of fishing apparatus, and seasonal closures for all fishers. Significant commercial fisheries also require vessel monitoring systems to be fitted.

<sup>59</sup> GBRMPA (2014) Great Barrier Reef Outlook Report 2014, p234

The Reef Guardian Fishers programme is helping to develop an appropriate electronic data collection method which includes vessel-monitoring capacity for use in the reef line and net fisheries. This is an example of how government is working in partnership with industry on best practice management. Over the past three years, the Queensland Government has undertaken a \$9 million buyback scheme for net fisheries to reduce effort. In addition, in March 2014 the Queensland Government commissioned a wide-ranging review of fisheries management in Queensland. The aim of this review is to modernise and simplify Queensland's fisheries management systems, reduce the regulatory burden on fishers and ensure the ongoing ecological and economic sustainability of fisheries.

## 3.6 Ongoing investment

Australia continues to provide significant resourcing for management of the property.

Currently governments are contributing around \$200 million a year to support the resilience of the Reef. This investment is delivered by multiple partners through a number of different activities (Figure 2). The current level of investment is projected to continue, bringing the total to \$2 billion over the next 10 years.

Implementation of the new Reef 2050 Long-Term Sustainability Plan will be underpinned by an investment framework which is evidence based, scientifically robust and developed and implemented in a phased approach. A key first step will be the development of an investment baseline.



Government / agency	(\$m)	Category	Focus
Australian Government Department of the Environment: Reef investments including the Reef Trust and Reef Programme	55	Management Research On-ground delivery	<ul> <li>Programmes and projects to address the threats of declining water quality and climate change to the Great Barrier Reef World Heritage Area and to enhance the Reef's resilience through ecosystem rehabilitation and species protection. Key components include:</li> <li>funding on-ground water quality, systems repair, urban and species protection activities</li> <li>water quality monitoring and reporting</li> <li>research and development for water quality improvements and enhancing the Reef's resilience</li> <li>crown-of-thorns starfish control and research, and</li> <li>Land and Sea Country Indigenous Partnerships Programme.</li> </ul>
Australian Institute of Marine Science	15.1	Research	Research that supports both the protection and sustainable use of our marine heritage.
Australian Maritime Safety Authority	21.5	Management On-ground delivery	Promoting maritime safety and protection of the marine environment, preventing and combating ship-sourced pollution in the marine environment, providing infrastructure to support safety of navigation in Australian waters, and providing a national search and rescue service to the maritime and aviation sectors.
Australian Research Council Centre for Excellence for Coral Reef Studies	2	Research	Integrated research for sustainable use and management of coral reefs.
Great Barrier Reef Marine Park Authority	30	Management On-ground delivery	Management of the Great Barrier Reef Marine Park. Services to protect and manage the Reef including permitting, field management, and education.
Maritime Safety Queensland	28	Management On-ground delivery	Promoting maritime safety and the protection of the marine environment, preventing and combating ship-sourced pollution in the marine environment, and providing infrastructure to support safety of navigation in Queensland waters.

#### Figure 2: Government financial support for the Reef in 2014–15

Government / agency	(\$m)	Category	Focus
National Environmental Research Programme / National Environmental Science Programme	3.5	Research	Provision of science through the Tropical Ecosystems Hub of the National Environmental Research Programme on issues of concern for the management, conservation and sustainable use of the World Heritage listed Great Barrier Reef and its catchment.
Queensland Department of the Environment and Heritage Protection	13	Management On-ground delivery Research	Programmes including education and outreach, research, and development of industry-led best management practice programmes, coastal planning and management.
Queensland Department of Natural Resources and Mines	16	Management Monitoring On-ground delivery	On-ground water quality, systems repair, hydrological monitoring and reporting.
Queensland Department of Science, Information Technology, Innovation and the Arts	1	Management	Water quality report card modelling.
Queensland Department of Agriculture, Fisheries and Forestry	11	Management Research On-ground delivery	Best management practice extension in agriculture and fisheries protection and management in the Great Barrier Reef region.
Queensland Department of the Premier and Cabinet	9	Management On-ground delivery	Reef Water Quality Protection Plan coordination and Queensland's contribution to field management of the Great Barrier Reef Marine Park.
Total	205.1		

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## 3.7 Strengthened legislation and governance

An independent review of the institutional and legal mechanisms that provide coordinated planning, protection and management of the property was conducted in 2014. The review was commissioned in response to Recommendation 11 of the report of the 2012 Reactive Monitoring Mission and is available at http://www.environment.gov.au/marine/gbr/publications/independent-review.

The review found that much of the complexity in the management system is driven by the constitutional arrangements of Australia and the sheer size of the property. The potential to simplify management is therefore limited. Additional regulatory instruments for climate change and agriculture would need to be carefully considered to ensure their practicality and effectiveness. The independent review identified that 'legislation for the protection and management of the Reef is generally comprehensive' and that 'although there is sound evidence that the condition of the Reef is declining, this does not appear to be solely a consequence of gaps in the legislation or institutional management arrangements, which were generally found to be robust'.<sup>60</sup>

The review found that the 2009 Intergovernmental Agreement is effective in achieving a high level of collaboration and cooperation. Efforts to streamline decision-making processes were supported. Finally, the review noted that managing the coastal interface is a significant and complex long-term challenge for the protection and management of the property.

Detail of recent legislative changes can be found in Figure 1 (see 180. b) i) in Section 2.2) and in Section 3.3 above.

## 3.8 Conclusion

Australia has responded comprehensively to all the requests of the World Heritage Committee since 2011 and the recommendations of the 2012 Reactive Monitoring Mission and has taken unprecedented action to address the World Heritage Committee's concerns (see Appendix 2).

This concerted action has been brought together under the new Reef 2050 Long-Term Sustainability Plan, which establishes a framework that sets out desired outcomes, objectives, targets and actions for protecting the property's Outstanding Universal Value and will be underpinned by an integrated monitoring and reporting programme.

The next five-yearly Outlook Report for the Reef, to be released in 2019, will provide a clear indication of progress in implementing the Plan and will inform its review. This comprehensive assessment of the condition, trend and management of risks to the values, including the Outstanding Universal Value, of the property will provide an excellent basis for the World Heritage Committee's next consideration of the state of conservation of the property and its outlook.

<sup>60</sup> Tingay, A., Yeates, M., Cooper, S., Stella, T., Zammit, C., Huber, M., Alexander, S. 2014, Institutional and legal mechanisms that provide coordinated planning, protection and management of the Great Barrier Reef World Heritage Area.

## References

Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Outlook Report 2014*, GBRMPA, Townsville. http://hdl.handle.net/11017/2855

The independent, peer-reviewed Outlook Report 2014 was prepared by GBRMPA based on the best available published science, research and information to describe the current state of and outlook for the Reef.

Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Outlook Report 2014: In brief*, GBRMPA, Townsville. http://hdl.handle.net/11017/2856

The brief version of the Outlook Report 2014 presents the key findings of the full Report supported by a selection of the evidence used.

Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Region Strategic Assessment: Strategic assessment report*, GBRMPA, Townsville. http://hdl.handle.net/11017/2861 and http://www.environment.gov.au/marine/gbr/comprehensive-strategic-assessment

This strategic assessment of the Great Barrier Reef Region prepared by GBRMPA takes a comprehensive look at the Reef's values, the threats to those values and what is needed to manage and protect them. The report forms part of the comprehensive strategic assessment of the Great Barrier Reef World Heritage Area carried out under Part 10 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Region Strategic Assessment: Program report*, GBRMPA, Townsville. http://elibrary.gbrmpa.gov.au/jspui/handle/11017/2860 and http://www.environment.gov.au/marine/gbr/comprehensive-strategic-assessment

The report outlines the Great Barrier Reef Marine Park Authority's 25-year management program to protect and manage the Great Barrier Reef, including relevant matters of national environmental significance. The report forms part of the comprehensive strategic assessment of the Great Barrier Reef World Heritage Area carried out under Part 10 of the EPBC Act.

Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Region Strategic Assessment: Supplementary report,* GBRMPA, Townsville. http://hdl.handle.net/11017/2864

The supplementary report outlines how the three-month public consultation for the strategic assessment was undertaken and how views and comments expressed were considered in finalising the Great Barrier Reef Strategic Assessment report and the program report. This report also describes the key findings from two independent reviews commissioned to inform the strategic assessment process and provides the GBRMPA's response to these findings.

Great Barrier Reef Marine Park Authority 2014, *Great Barrier Reef Region Strategic Assessment: In brief*, GBRMPA, Townsville. http://hdl.handle.net/11017/2866

Hockings, M., Leverington, A., Trinder, C., and Polglaze, J. 2014, *Independent assessment of management effectiveness for the Great Barrier Reef Outlook Report 2014*, GBRMPA, Townsville. http://hdl.handle.net/11017/2857

An independent assessment of management effectiveness prepared to inform the *Great Barrier Reef* Outlook Report 2014.

Osipova, E., Shi, Y., Kormos, C., Shadie, P., Zwahlen, C. and Badman, T. 2014, *IUCN World Heritage Outlook 2014: A conservation assessment of all natural World Heritage sites*, IUCN, Gland, Switzerland. https://portals.iucn.org/library/sites/library/files/documents/2014-039.pdf

Queensland Government Department of State Development, Infrastructure and Planning 2014, *Great Barrier Reef coastal zone strategic assessment* http://www.environment.gov.au/marine/gbr/comprehensive-strategic-assessment

The strategic assessment of the Great Barrier Reef coastal zone was prepared by the Queensland Government in accordance with the EPBC Act.

Queensland Government Department of State Development, Infrastructure and Planning 2014, *Great Barrier Reef coastal zone strategic assessment program report* http://www.environment.gov.au/marine/gbr/comprehensive-strategic-assessment

The program report of the strategic assessment of the Great Barrier Reef coastal zone prepared by the Queensland Government describes Queensland's planning and development framework relevant to the management of the Great Barrier Reef coastal zone.

Queensland Government Department of State Development, Infrastructure and Planning 2014, *Great Barrier Reef coastal zone strategic assessment: Supplementary report* http://www.environment.gov.au/marine/gbr/comprehensive-strategic-assessment

The supplementary report of the strategic assessment of the Great Barrier Reef coastal zone prepared by the Queensland Government provides further information in response to matters raised as part of the public consultation and the recommendations of the independent review.

Sinclair Knight Mertz 2014, *Great Barrier Reef Region Strategic Assessment – Independent Review Report 2014* http://www.environment.gov.au/resource/great-barrier-reef-region-strategic-assessment-independent-review-report

Sinclair Knight Merz (SKM) was engaged by the Department to complete an independent review of the draft *Great Barrier Reef Region Strategic Assessment* (version dated 03/02/14). This report outlines the findings of the independent review.

Tingay, A., Yeates, M., Cooper, S., Stella, T., Zammit, C., Huber, M., Alexander, S. 2014, *Institutional and legal mechanisms that provide coordinated planning, protection and management of the Great Barrier Reef World Heritage Area.* 

http://www.environment.gov.au/system/files/resources/8b9fd5af-99ce-4a18-9ca5-6bb1829fd9e1/files/gbr-independent-review.pdf

Jacobs was engaged by the Department of the Environment to complete an independent review of the institutional and legal mechanisms that provide coordinated planning, protection and management of the Great Barrier Reef World Heritage Area. The review was commissioned in response to Recommendation 11 of the World Heritage Committee's report on a reactive monitoring mission to the Great Barrier Reef.

# Appendices



# Appendix 1: Maps

Figure 3: Map of Great Barrier Reef World Heritage Area, Region and Marine Park boundaries / Carte de la Zone de patrimoine mondial de la Grande barrière de corail, de la région et des limites du Parc Marin

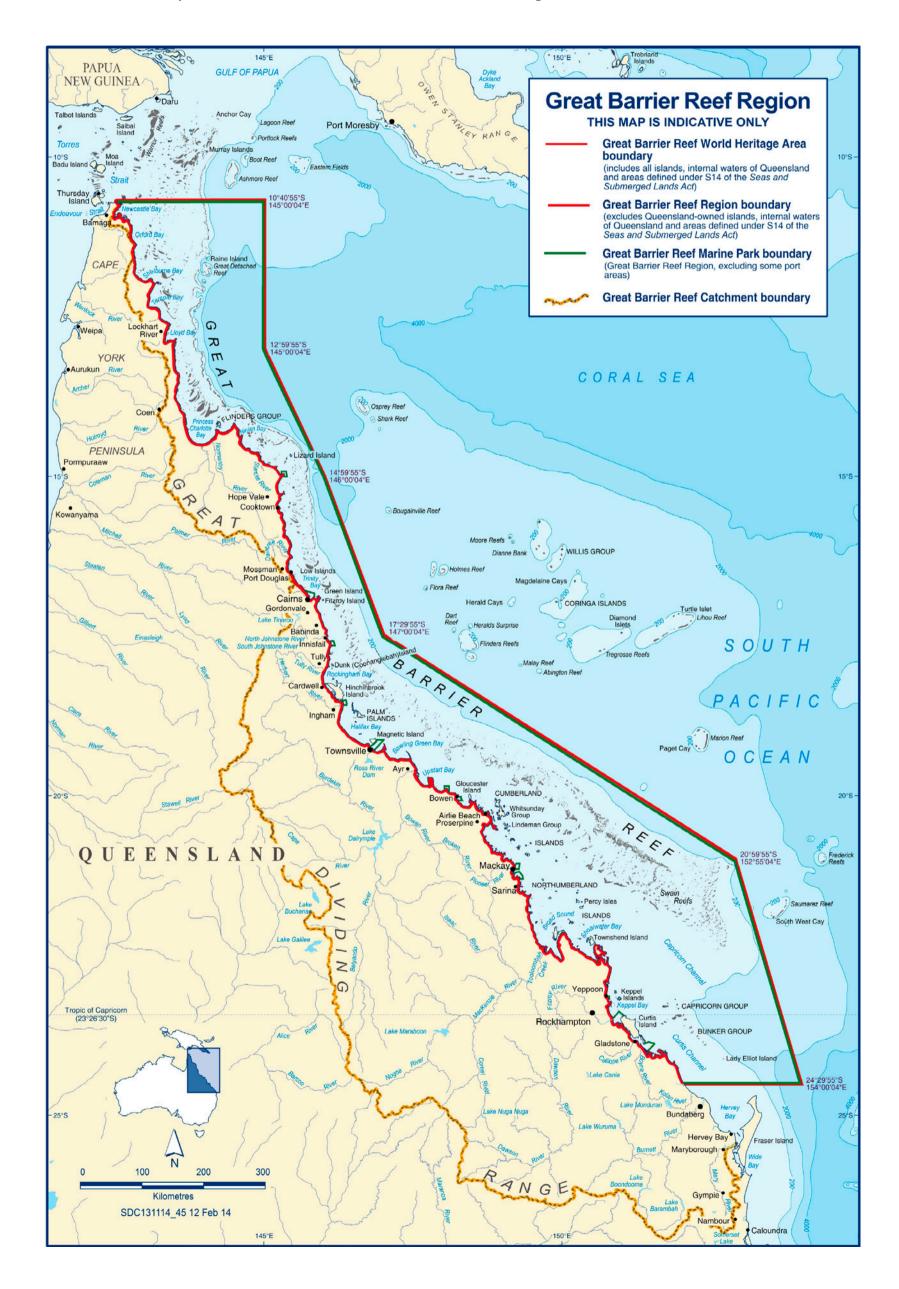
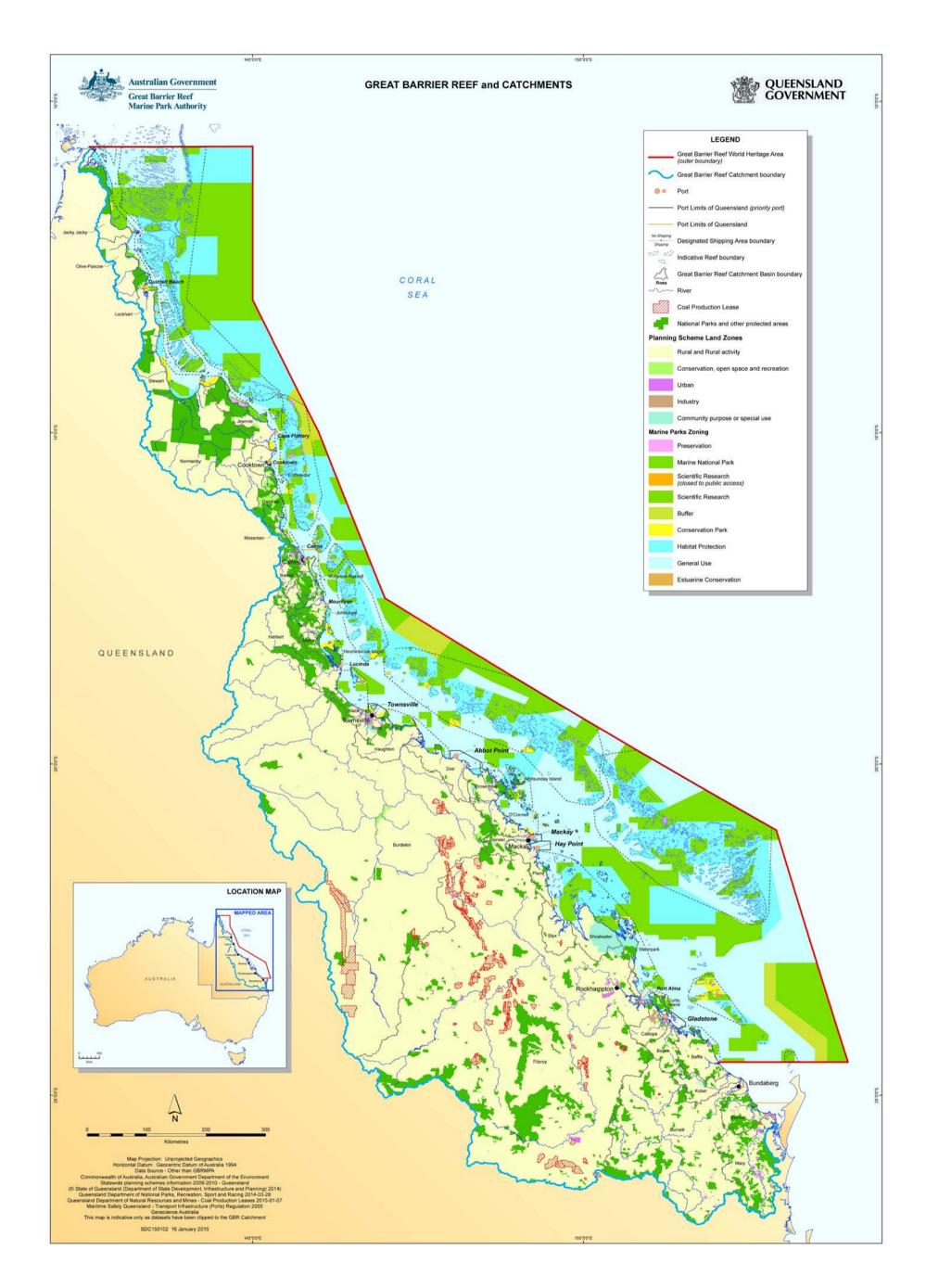


Figure 4: Zoning of the Great Barrier Reef and catchments / Le zonage de la Grande barrière de corail et des captages



# Appendix 2: Overview of Australia's progress against the 2011–2014 World Heritage Committee decisions and 2012 Mission recommendations

Subject (synthesis of World Heritage Committee decisions and Mission recommendations)	Status	Summary of Australia's progress	2014
1. MAINTAINING AND ENHANCING	G OUTSTANI	DING UNIVERSAL VALUE	
1.1 Ensure all components of the Outstanding Universal Value of the Great Barrier Reef World Heritage Area (GBRWHA) are clearly defined and form a central element within the protection and management system	In place	<ul> <li>In 2014 the EPBC Act Referral Guidelines for the Outstanding Universal Value of the Great Barrier Reef World Heritage Area were finalised. The guidelines are based on the Statement of Outstanding Universal Value of the GBRWHA approved by the World Heritage Committee in 2012. http://www.environment.gov.au/resource/epbc-act-referral-guidelines-outstanding-universal-value-great-barrier-reef-world-heritage.</li> <li>In the Strategic Environmental Assessment the Queensland Government and GBRMPA committed to explicit consideration of Outstanding Universal Value in decision-making and planning.</li> <li>The Reef 2050 Long-Term Sustainability Plan and the North-East Shipping Management Plan explicitly consider the Outstanding Universal Value and integrity of the GBRWHA.</li> </ul>	
1.2 No development to impact individually or cumulatively on the Outstanding Universal Value of the property	In place	<ul> <li>The <i>Environment Protection and Biodiversity Conservation Act 1999</i> ensures that the protection of the values of World Heritage properties is achieved in environmental assessment decisions. Developments with an unacceptable impact on the Reef are not approved.</li> <li>The <i>Great Barrier Reef Marine Park Act 1975</i> requires consideration of the potential impact of proposed activities on the heritage values of the Marine Park.</li> <li>The Strategic Environmental Assessment includes commitments to prepare Cumulative Impact Assessment Guidelines and a Net Benefit Policy to guide decision-making. www.environment.gov.au/environment-assessments.</li> </ul>	7
1.3 Ensure legislation remains strong and adequate to maintain and enhance Outstanding Universal Value	In place	<ul> <li>Australia has a comprehensive legislative regime in place, including the following:</li> <li>Development proposals considered under national and state laws are assessed with enhanced consideration and understanding of the Outstanding Universal Value of the GBRWHA, utilising the EPBC Act Referral Guidelines for the Outstanding Universal Value of the Great Barrier Reef World Heritage Area.</li> <li>Australia will deliver a single streamlined process for environmental assessments and approvals (a 'One-Stop Shop') that maintains existing high environmental standards including explicit consideration of the Outstanding Universal Value and integrity of the property. The Australian Government will continue to provide guidance where it has expertise and Queensland will retain the capacity to seek advice from the Commonwealth. www.environment.gov.au/one-stop-shop.</li> <li>The Queensland Government has amended legislation to reflect this commitment, allowing for the judicial review of approval decisions in relation to matters of national environmental significance, and to provide the power to put conditions in place to protect matters of national environmental significance, including World Heritage properties. The Queensland Government has amended the <i>Environmental Protection Act 1994</i> to formally recognise the GBRWHA with maximum penalties for wilful environmental harm raised to over \$710 000 for individuals and \$3.56 million for corporations plus costs of restoration. Gaol terms have also increased from two to five years.</li> <li>Australia has committed to a permanent ban on the disposal of material in the Great Barrier Reef Marine Park from major capital dredging projects.</li> </ul>	

38 COM 7B.63 para #	2013 37 COM 7B.10 para #	2012 36 COM 7B.8 para #	Mission recommendation #	2011 35 COM 7B.10 para #
		_		
		7	9	
' & 8a	ба	5 & 6	2, 7, 8 & 13	
	6с		9	

Subject (synthesis of World Heritage Committee decisions and Mission recommendations)	Status	Summary of Australia's progress	2014 38 COM 7B.63 para #	2013 37 COM 7B.10 para #	2012 36 COM 7B.8 para #	Mission recommendation #	2011 35 COM 7B.10 para #
2. IMPROVED ASSESSMENT AND P	LANNING						
2.1 Strategic environmental assessment and Reef 2050 Long-Term Sustainability Plan— to be completed against defined criteria for success, fully address direct, indirect and cumulative impacts and lead to concrete measures for conservation of Outstanding Universal Value	Significant progress	Australia has completed a <b>strategic environmental assessment</b> of the Reef, which was the largest and most comprehensive analysis ever undertaken in Australia. The Queensland Government and GBRMPA have committed to a raft of improvements to their management frameworks as a result. These form the foundation for the Reef 2050 Long-Term Sustainability Plan. http://www.environment.gov.au/protection/assessments/strategic/great-barrier-reef.	3&7	3	6 & 8	5, 8, 10 & 11	3
3. RIGOROUS MANAGEMENT OF P	ORTS AND S	HIPPING					
3.1 Integrated approach to planning, regulation and management of ports and shipping activity	In place	<ul> <li>The Australian Government will introduce a regulation to prevent the disposal of material in the Great Barrier Reef Marine Park from major capital dredging projects in the first half of 2015.</li> <li>The North-East Shipping Management Plan, which establishes further protections, was released by the Australian Maritime Safety Authority (AMSA) in October 2014. http://www.amsa.gov.au/forms-and-publications/Publications/AMSA439.pdf.</li> </ul>		4		3 & 13	
		<ul> <li>Through the Queensland Ports Strategy, released in June 2014, the Queensland Government has committed to introduce comprehensive legislation covering the planning, regulation and management of ports, with a prohibition on significant port development outside existing long-established port areas.</li> <li>http://www.dsdip.qld.gov.au/queensland-ports-strategy/infrastructure-and-planning/infrastructure-planning-and-reform/queensland-ports-strategy.html.</li> </ul>					
3.2 Manage development in Gladstone Harbour and on Curtis Island	Significant progress	<ul> <li>The Independent Review of the Port of Gladstone was completed and reports released in two stages (July and November 2013). www.environment.gov.au/gladstonereview and www.healthyharbour.org.au/.</li> <li>A further review of the bund wall at Gladstone was released in May 2014. http://www.environment.gov.au/topics/marine/gbr/gladstone-bund-wall-review.</li> <li>Improving port operation and managing concerns identified by the Independent Review of the Port of Gladstone are supporting the work of the new Gladstone Healthy Harbour Partnership and other efforts to protect the GBRWHA. www.rc.ghhp.org.au.</li> </ul>		4	9	3	2
3.3 No port development outside existing and long-established port areas	Significant progress	<ul> <li>Under legislation foreshadowed in the Queensland Ports Strategy, greenfield areas will be protected through a prohibition in the proposed legislation that will restrict significant port development within and adjoining the Great Barrier Reef World Heritage Area to within existing port limits, with a review in 2022. www.dsdip.qld.gov.au/infrastructure-and-planning/queensland-ports-strategy.html.</li> <li>Under legislation foreshadowed in the Queensland Ports Strategy, there will be no dredging for the development of new or the expansion of existing port facilities within the Great Barrier Reef World Heritage Area outside the existing long established port priority areas of Townsville, Abbot Point, Hay Point / Mackay and Gladstone, with a review in 2024.</li> </ul>	5 & 8a	4 & 6b	5	2, 3 & 4	
3.4 Port plans to exclude development in areas within port limits that are zoned as being 'of conservation significance'	Significant progress	<ul> <li>Any development inside port limits and within the Marine Park must be consistent with the <i>Great Barrier Reef Marine Park Act 1975</i>, its Regulations and the Marine Park zoning plan.</li> <li>An action of the Reef 2050 Long-Term Sustainability Plan is to adopt the best practice principles identified in the Gladstone Independent Review Reports and integrate them into port planning and development.</li> </ul>	8b				

Subject (synthesis of World Heritage Committee decisions and Mission recommendations)	Status	Summary of Australia's progress	2014 38 COM 7B.63 para #	2013 37 COM 7B.10 para #	2012 36 COM 7B.8 para #	Mission recommendation #	2011 35 COM 7B.10 para #
4. WATER QUALITY IMPROVEMENT	TS—ENHANC	CED MONITORING, REPORTING AND ACTION					
4.1 Improve Reef water quality	In place	<ul> <li>The latest Report Card (2012–13) shows the quality of water from broadscale land use entering the Reef is improving. This is the result of an investment by the Australian and Queensland governments of more than \$375 million over five years, complemented by substantial real and in-kind investment by industry. Water quality will continue to be a focus for the new \$40 million Reef Trust. http://www.reefplan.qld.gov.au/measuring-success/report-cards.aspx.</li> <li>The Reef Water Quality Protection Plan 2013 (Reef Plan) was endorsed and released by the Australian and Queensland governments, guided by a revised Scientific Consensus Statement, and is backed by substantial investment.</li> </ul>	4	5	3	1	
5. STRENGTHENED GOVERNANCE	E AND RESOU	·					
5.1 Independent review of the overall institutional and management arrangements for the GBRWHA	In place	<ul> <li>The Independent Review of the Institutional and Legal Mechanisms that provide Coordinated Planning, Protection and Management of the Great Barrier Reef World Heritage Area was completed in September 2014. http://www.environment.gov.au/marine/gbr/publications/independent-review.</li> </ul>	6			11	
5.2 Overall protection and management of the property, including ensuring adequate resources	Significant progress	<ul> <li>Ongoing significant investment is being made in the management and understanding of the Reef, projected to be in the order of \$2 billion over the next decade.</li> <li>Strong protection and management are already in place and will continue to be improved via the Reef 2050 Long-Term Sustainability Plan.</li> <li>The new Reef Trust has been established with an initial contribution of \$40 million.</li> <li>The Reef 2050 Long-Term Sustainability Plan includes measures to support the resilience of the Reef. Over \$200 million is being spent by the Australian and Queensland governments in 2014–2015 on reef protection and management.</li> <li>The Queensland Government has completed implementation of a \$9 million buyback of commercial net fishing authorities and is undertaking a comprehensive review of fisheries management.</li> </ul>	3&4	7	8	1 & 12	
5.3 Full implementation of Committee requests and Mission recommendations	Complete	<ul> <li>Australia is fully implementing the World Heritage Committee decisions and Mission recommendations and is taking action to maintain the Outstanding Universal Value and integrity of the GBRWHA.</li> <li>A strong foundation of existing protection and management of the property remains firmly in place and continues to be built upon.</li> <li>Australia's 2012, 2013 and 2014 State Party Reports demonstrate significant progress on Reef protection and implementation of Committee requests and Mission recommendations. www.environment.gov.au/world-heritage/gbr.</li> </ul>	9 & 10	6 & 8	4 & 10	2, 6, 9 & 15	
6. ADDRESSING CLIMATE CHANG	E						
6.1 Address climate change and other forms of environmental degradation	In place	<ul> <li>In 2011 the World Heritage Committee welcomed Australia's commitment to improve the property's resilience and its ability to adapt to climate change and other forms of environmental degradation following extreme weather events.</li> <li>Climate change is a global problem, and global action is required. The Australian Government is playing its part internationally by working constructively towards a new global climate change agreement that involves all countries and by pledging \$200 million to the Green Climate Fund.</li> <li>Domestically Australia is meeting its 2020 emissions reduction targets and will mitigate climate change through the new \$2.55 billion Emissions Reduction Fund, which was passed by the Australian Parliament in November 2014.</li> </ul>					6

Subject (synthesis of World Heritage Committee decisions and Mission recommendations)	atus Summary of Australia's progress		2014 38 COM 7B.63 para #	2013 37 COM 7B.10 para #	2012 36 COM 7B.8 para #	Mission recommendation #	2011 35 COM 7B.10 para #
7. REGULAR REPORTING							
7.1 World Heritage Centre / IUCN Reactive Monitoring Mission	<ul> <li>The Australian Government invited a joint www.whc.unesco.org/download.cfm?id_doc</li> </ul>	World Heritage Centre / IUCN Reactive Monitoring Mission to the property in March 2012. cument=117104.					5
7.2 Inform Committee of developments that may affect Outstanding Universal Value	potential impact on World Heritage propert	ed <b>regular quarterly reports</b> to the World Heritage Centre on proposed developments being assessed for any ties and the outcomes of each assessment. tage/about-australias-heritage/world-heritage/notification-development-proposals.				15	4
7.3 Share best practices and success stories with other World Heritage sites facing similar management challenges	<ul> <li>Australia hosted the 2014 IUCN World Par</li> <li>Australia (through GBRMPA) co-hosted the</li> <li>Australia's investment in the Coral Triangle expertise in the conservation and wise mana</li> <li>Research and reports developed as part of the</li> </ul>	nd success stories through international symposiums and workshops. ks Congress in Sydney, which included field trips to the Reef. e International Coral Reef Initiative for 2012–14, in partnership with the Government of Belize. Initiative seeks to foster sustainable economic opportunities for people in the region and to share Australia's agement of natural resources including marine parks. he strategic environmental assessment are available on websites so they can be accessed by other World ww.environment.gov.au/marine/gbr/publications.				14	
7.4 Include in future Outlook Reports a specific assessment of the condition, trends, threats and prospects for the Outstanding Universal Value of the GBRWHA	influencing factors, resilience, risks, and l	tions were amended in 2013 to require Outlook Reports to include <b>assessments of the current state</b> , <b>ong-term outlook</b> of the Region's heritage values. These assessments were included in the 2014 Outlook gbrmpa.gov.au/managing-the-reef/great-barrier-reef-outlook-report.			7	6	
7.5 Submit State Party reports, Great Barrier Reef Outlook Report 2014 and other reports	including responses to all of the World Heri	clear progress on reef protection, assessment, planning and investment itage Committee's requests since 2011. www.environment.gov.au/world-heritage/gbr. was provided to the World Heritage Centre in September 2014.	9 & 10	8	10 &11	6 &15	7

# Appendix 3: Chronology of key management responses to emerging issues, 1970s to present

Over the past 40 years, management arrangements have been continually adapted to address the highest risks.

1970s	1980s	1990s	2000s	Present
Protection and legislation	Spatial planning	Fisheries and tourism	Water quality	Cumulative impact, ports and dredging
<ul> <li>Great Barrier Reef Marine Park established and protected by law</li> <li>Ban on mining</li> <li>Australian and Queensland Government management arrangements established</li> </ul>	<ul> <li>New spatial planning to address tourism growth</li> <li>Increased integration of science to underpin management decisions</li> <li>Comprehensive management framework established</li> </ul>	<ul> <li>Continuous improvement in commercial fisheries (introducing by-catch reduction devices)</li> <li>Partnership between the Great Barrier Reef Marine Park Authority and the tourism industry commences</li> <li>Plans of management address rapid growth in tourism</li> <li>Ban on mining extended to entire Great Barrier Reef Region</li> </ul>	<ul> <li>Improved management practices to reduce pollutant loads in land-based run-off from agriculture, point sources, including sewage treatment upgrades</li> <li>Improvements in catchment run-off and cumulative impacts of coastal development on ecosystem function</li> <li>Focus on climate change and linkages between terrestrial and marine systems</li> <li>Revised zoning arrangements implemented</li> </ul>	<ul> <li>Comprehensive strategic environmental assessment</li> <li>Streamlining and reducing duplication across jurisdictions</li> <li>Banning disposal of material in the Great Barrier Reef Marine Park from major capital dredging projects</li> <li>Legislating to restrict significant port development to within existing port limits, with a review in 2022</li> <li>Legislating to prohibit the disposal of material from major proposals involving capital dredge from development of new, or expansion of existing port facilities outside the existing long established port priority areas of Townsville, Abbot Point, Hay Point / Mackay and Gladstone, with a review in 2024</li> </ul>

1970s	1980s	1990s	2000s	Present
Protection and legislation	Spatial planning	Fisheries and tourism	Water quality	Cumulative impact, ports and dredging
Legislative/policy action				
<ul> <li><i>Great Barrier Reef Marine Park</i> <i>Act 1975</i> (Cth)</li> <li>Great Barrier Reef Marine Park Authority established</li> <li>Intergovernmental Agreement—Emerald Agreement</li> </ul>	<ul> <li>Inscribed on World Heritage List</li> <li><i>Environment Protection (Sea</i> <i>Dumping) Act 1981</i>(Cth)</li> <li>Marine Park sections proclaimed and zoning plans developed</li> <li>Joint field management arrangements with Queensland Government established</li> <li>Joint permit arrangements between Great Barrier Reef Marine Park Authority and Queensland Government</li> <li>Research and monitoring programmes initiated</li> </ul>	<ul> <li>Nature Conservation Act 1992 (Qld)</li> <li>Fisheries Act 1994 (Qld)</li> <li>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</li> <li>25-Year Strategic Plan</li> <li>Plans of management for Cairns Area and Whitsundays (Cth)</li> <li>Declaration of Particularly Sensitive Sea Area for shipping</li> <li>Compulsory pilotage</li> <li>Dugong Protection Areas</li> <li>Environmental management charge</li> <li>Cooperative Research Centre</li> </ul>	<ul> <li>Consolidated Great Barrier Reef Marine Park Zoning Plan 2003 (Cth)</li> <li><i>Marine Parks Act 2004</i> (Qld)</li> <li>Great Barrier Reef Coast Zoning Plan 2004 (Qld)</li> <li>Reef Vessel Tracking System (2004)</li> <li>Plans of management for Hinchinbrook and Shoalwater Bay (Cth)</li> <li>Reef Water Quality Protection Plan</li> <li>Aquaculture Regulations (Cth)</li> <li>Traditional Use of Marine Resources Agreements and sea country partnerships</li> <li>Best practices and stewardship</li> <li>Reef Guardian programme</li> <li>Great Barrier Reef Climate Change Vulnerability Assessment and Action Plan</li> <li>Outlook Report 2009</li> <li>Great Barrier Reef Intergovernmental Agreement 2009</li> <li>Research partnerships</li> </ul>	<ul> <li>Comprehensive strategic environmental assessment for the Great Barrier Reef World Heritage Area and adjacent coastal zone</li> <li>Climate Change Adaptation Strategy 2012–2017</li> <li>Informing the outlook for Great Barrier Reef coastal ecosystems</li> <li>Biodiversity Conservation Strategy and vulnerability assessments</li> <li>Water quality improvement plans</li> <li>Outlook Report 2014</li> <li>Responding to the 2011–2014 recommendations of the World Heritage Committee</li> <li>Reef Trust</li> <li>North-East Shipping Management Plan 2014</li> <li><i>Environmental Protection</i> Act 1994 (Qld) and State Development and Public Works Organisation Act 1971 (Qld) amended to meet EPBC Act standards</li> <li>Reef 2050 Long-Term Sustainability Plan</li> </ul>

# Appendix 4: Findings of the *Great Barrier Reef Outlook Report 2014* in relation to Outstanding Universal Value

## **GBRMPA January 2015**

The Great Barrier Reef Outlook Report 2014 was prepared by the Great Barrier Reef Marine Park Authority in accordance with the requirements of the *Great Barrier Reef Marine Park Act 1975*. It contains structured assessments of current condition, use, influencing factors, management effectiveness, resilience, risks and long-term outlook. It is based on the best available information to December 2013.

For the first time, the 2014 report contains assessments relating to the heritage values of the Great Barrier Reef, including World Heritage values. The report includes findings about the Reef's Outstanding Universal Value and its prospects.

This annex addresses two questions relating to Outstanding Universal Value and the findings of the Report:

- What is the basis for the finding that Outstanding Universal Value remains in good condition?
- Why is the future of the Reef's Outstanding Universal Value not threatened, given the Outlook Report predicts a 'poor' outlook for the Reef ecosystem?

# What is the basis for the finding that Outstanding Universal Value remains in good condition?

The Report contains an assessment of the **current condition** of the Reef's World Heritage values (see below). In summary:

The Outstanding Universal Value of the world heritage property remains in good condition, however the overall condition of some key attributes is poor...

This assessment is structured around the four natural criteria for which the property is listed, and integrity. The criteria of 'Natural beauty and natural phenomena', 'Ecological and biological processes', and 'Habitats for conservation of biodiversity' were assessed to be in **Good** condition at the scale of the Region and 'Major stages of the Earth's evolutionary history' was assessed as **Very good**. The property's integrity was assessed as **Good**. Because the assessment of World Heritage values was new to this report, there was no assessment of trend since 2009. However, declines in some species and habitats and some ecosystem processes, especially in inshore areas of the southern two-thirds of the property, were noted.

Central to the Outlook Report findings is the scale at which the assessment was undertaken. Outstanding Universal Value is distributed across the entire Great Barrier Reef and the assessment was conducted at that whole-of-Reef scale. The components which were assessed to be in 'poor' condition primarily relate to central and southern inshore areas of the 348,000 km<sup>2</sup> property. These areas have been most affected by legacy issues dating prior to its listing in 1981, for example catchment clearing (affecting water quality and connectivity), commercial harvesting of iconic species, crown-of-thorns starfish outbreaks and, more recently, a decade of extreme weather.

Summary of assessment of current condition of World Heritage values, Great Barrier Reef Outlook Report 2014

2009 Grade	Current summa	ary and assessment com	ponents			Assessm	ent grade		Confidence
Not assessed	World heritage values and national heritage values: The outstanding universal value of the world heritage property remains in good condition, however the overall condition of some key attributes is poor and many have deteriorated since the property's listing in 1981. Those related to coral reef and seagrass meadow habitats, marine turtles, seabirds and dugongs are assessed as being in poor condition overall. The Region remains a globally outstanding example of an ecosystem that has evolved over the millennia. 							Grade	
Not assessed	natural beauty;	and natural phenomen aesthetic values are dimi nena remain intact; decline	nished in some areas. N	Many				-	•
Not assessed		of the Earth's evolutiona ample of evolutionary hist							0
Not assessed	Ecological and remain in good recruitment hav Great Barrier R					O			
Not assessed	of habitats; som and southern in	onservation of biodivers ne are under pressure. Ha Ishore areas, are affecting ng those of conservation	abitat declines, especiall their ability to support of	y in central					O
Not assessed	world heritage	property is large enough to values. External factors and pome areas. The property is	re affecting the resilience	e of the					O
Grading	statements					Trend s	ince 2009		
	All elements Some loss or alteration of the elements necessary to elements necessary to of many elements of most eleme		ation nts	New ass provided	essment fo	r this report	; no trend		
essentially overall cor or improvi evidence i minor, if a	y intact, and their ndition is stable ing. Available indicates only ny, disturbance to ent of outstanding	universal value has occurred, but their overall condition is not causing persistent or substantial effects on this element of outstanding universal value.	necessary to maintain outstanding universal value has occurred, which is leading to a significant reduction in this element of the outstanding universal value.	necessary to maintain the outstanding universal value has occurred, causing a major loss of the outstanding universal value.		nsus ice or limite	d consensus		

The statements used to standardise the allocation of grades were based on IUCN's system for assessing natural World Heritage sites. The grade allocated was a 'grade of best fit' for the whole Great Barrier Reef Region.

The approach to assessing World Heritage values adopted in the Report built upon earlier work by the Authority to benchmark the Reef's Outstanding Universal Value as part of the *Great Barrier Reef Region Strategic Assessment*. In that assessment, the *Statement of Outstanding Universal Value of the Great Barrier Reef World Heritage Area* was used as the basis for identifying and assessing the condition of individual key components for each World Heritage criterion (a total of 38 components across the four criteria) and integrity (three components). Refer to Section 7.6.1 of the *Great Barrier Reef Region Strategic Assessment* Report, 2014.

The findings of the strategic environmental assessment for components relating to each criterion and integrity are presented in Annex A. The following is a summary of the findings:

• **natural beauty and natural phenomena** (13 key components)—five components assessed as being in very good condition, three in good condition and five in poor condition. The overall condition was assessed as **Good**. This assessment was confirmed in the Report

- major stages of the Earth's evolutionary history (six key components)—three components assessed as being in very good condition and three in good condition. The overall condition was assessed as Very good. This assessment was confirmed in the Report
- ecological and biological processes (eight key components)—one component was assessed as being in very good condition, six in good condition and one in poor condition. The overall condition was assessed as **Good**. This assessment was confirmed in the Report
- habitats for conservation of biodiversity (11 key components)—one component was assessed as being in very good condition, seven in good condition and three in poor condition. The overall condition was ranked as Poor. The Report assessed this criterion as **Good** based on additional data available after completion of the strategic environmental assessment which indicated habitat recovery following the cyclone and flood events of 2010–2011, and
- **integrity** (three components: inclusion of all elements necessary to express its Outstanding Universal Value; adequacy of size to ensure complete representation of the features and processes which convey the property's significance; and protection from the adverse effects of development and/or neglect)—two components were assessed as being very good, one as poor. The overall condition of integrity was assessed as **Good**. This assessment was confirmed in the Report.

## Why is the future of the Reef's Outstanding Universal Value not threatened, given the Outlook Report 2014 predicts a 'poor' outlook for the Reef ecosystem?

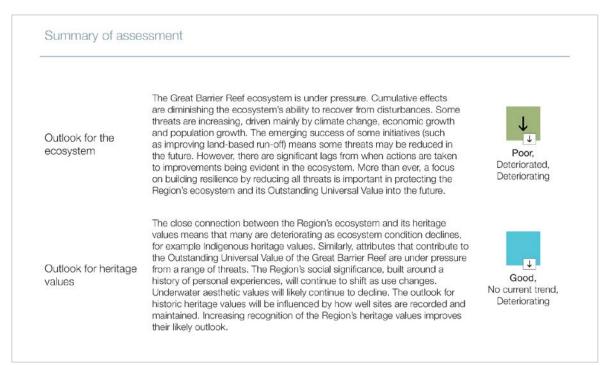
The Great Barrier Reef is expected to remain a place of Outstanding Universal Value, despite the Report prediction of a 'poor' outlook for the Reef ecosystem. This is because:

- additional management intervention has occurred since the Report was prepared
- the joint Australian and Queensland government Reef 2050 Long-Term Sustainability Plan has been prepared and will be implemented, and
- the Great Barrier Reef is of sufficient scale and complexity that declines in the condition of the ecosystem in central and southern inshore areas will not result in the overall loss of Outstanding Universal Value.

These factors are discussed in detail below.

The Report assessed the long-term outlook for both the Great Barrier Reef's ecosystem and its heritage values. These assessments are based on the preceding assessments of current condition, trends in influencing factors, existing protection and management measures, resilience and risk.

The Report's finding is that the future outlook for the Reef's ecosystem is 'poor and deteriorating' and the future outlook for the Reef's heritage values is 'good and deteriorating' (see summary of assessment below).



#### Summary of assessment of long-term outlook, Great Barrier Reef Outlook Report 2014

These findings were appropriately based on a conservative prediction of future management initiatives, with only current and already identified future management initiatives considered. Any further strengthening of management and reductions in threats can be expected to improve the predicted outlook.

With regard to Outstanding Universal Value, the report concludes that:

Prospects for the future of the Great Barrier Reef's outstanding universal value depend on global action to address the causes of climate change, and on coordinated, targeted and dedicated long-term commitments to continue to address the risks within and adjacent to the property. There is evidence that when there are concerted efforts to address damaging practices, impacts can be halted and reversed.

There is no short-term single action that will secure the outstanding universal value of the Great Barrier Reef. However working at global, regional and local levels will be the best solution to preserving the world heritage area.

Since preparation of the Report, and informed by its findings, there have already been additional management actions taken to reduce pressures further, such as limiting the disposal of capital dredge material in the Great Barrier Reef Marine Park and improvements in ports planning and management.

Importantly, the joint Australian and Queensland government Reef 2050 Long-Term Sustainability Plan has been developed. It directly responds to the identified need for *coordinated, targeted and dedicated long-term commitments to continue to address the risks within and adjacent to the property.* It builds on the substantial management arrangements of the Australian and Queensland governments already in place to protect and manage the Great Barrier Reef.

Protection of the Reef's Outstanding Universal Value is the focus of the Plan. It sets out the actions needed to maintain and enhance Outstanding Universal Value, recognising that the lag time between taking action and seeing results requires a long-term commitment by all parties. The Plan will be reviewed and updated every five years in response to future Outlook Reports, taking into account new information about the Reef environment, the results of implemented actions and the effectiveness of management interventions. Targets and actions will be adjusted based on progress made.

The success of the Plan will be central to improving the Great Barrier Reef's long-term outlook and the prospects for its Outstanding Universal Value.

The size and integrity of the Great Barrier Reef and its comprehensive management arrangements also improve the prospects for its Outstanding Universal Value. The Reef is an enormous area with a complex mosaic of habitats. The attributes that contribute to its Outstanding Universal Value are distributed across its entire extent, meaning that localised declines in condition in one area do not substantially affect its overall Outstanding Universal Value. Already the Reef is demonstrating recovery from the decade of extreme weather that contributed significantly to its current condition and the decline recorded since the Outlook Report 2009.

, eicheet

Russell Reichelt Chairman and Chief Executive Officer Great Barrier Reef Marine Park Authority

## Annex A: Findings of the strategic environmental assessment for components relating to each criteria and integrity. Taken from the Great Barrier Reef Region Strategic Assessment, Strategic Assessment Report, 2014.

Benchmarking the outstanding universal value of the Great Barrier Reef World Heritage Area

The assessments presented in this table are based on the same information used to assess current condition and trend in Sections 7.1 to 7.5. The references listed there also apply to this assessment.

Understanding the ta	ble						
/ery good: All elements necessary to maintain the outstanding universal value are essentially ntact, and their overall condition is stable or mproving. Available evidence indicates only minor, if any, disturbance to this element of outstanding universal value.Good: Some loss or alteration of the element necessary to maintain the outstanding universal value has occurred, but their overall condition is not causing persistent or substantial effects on this element of universal value.		lements tain niversal d, but ition is tent or s on this	<b>Poor:</b> Loss or alter many elements ne to maintain outsta universal value ha occurred, which is to a significant rec in this element of outstanding unive value.	ecessary anding s leading duction the	<b>Very poor:</b> Loss or alteration of most elements necessary to maintain the outstanding universal value has occurred, causing a major loss of the outstanding universal value.		
Area (See Chapter 1, Figure	1.1)	Trends			ence in condition		
GBR Great Barrier Reef Regi	on	$\uparrow$	Improving	and tre			
	$\leftrightarrow$		Stable		lequate high-quality idence and high level		
		$\downarrow$	Deteriorating	-	consensus		
		-	No clear trend		nited evidence or nited consensus		
				as	ry limited evidence, sessment based on ecdotal information		

a) Natural beauty and phenomena (previously criterion (iii) now criterion (vii)): contains unique, rare or superlative natural phenomena, formations or features or areas of exceptional natural beauty, such as superlative examples of the most important ecosystems to man

**Condition and trend** 

Excerpt from statement	Comment	Area	Very good	Good	Poor	Very poor	Confidence
Superlative natural beauty above and below the water	The natural beauty of most of the Region remains intact, especially for offshore coral reefs and aerial vistas, as well as for neighbouring islands. The significant loss of coral cover has reduced underwater aesthetic value.	GBR		$\downarrow$			•
Some of the most spectacular scenery on Earth	Both above and below the water, the Region's scenery remains spectacular. There have been some declines in the aesthetics of inshore reefs in the southern two-thirds.	GBR		$\downarrow$			•
One of a few living structures visible from space	The Reef remains visible from space and technological advances make these images more accessible.	GBR	$\leftrightarrow$				•
A complex string of reefal structures along Australia's north-east coast	Reefal structures remain intact. Recent estimates vastly increase the extent of coral with the identification of more deepwater reefs.	GBR	$\leftrightarrow$				•
Unparalleled aerial panorama of seascapes comprising diverse shapes and sizes	Aerial vistas remain spectacular, with scenic flights a popular tourism activity.	GBR	$\leftrightarrow$				•
Whitsunday Islands provide a magnificent vista of green vegetated islands and white sandy beaches spread over azure waters	The majority of the Whitsunday Islands are protected and managed as national parks. There have been some changes to island scenery, such as on resort islands.	GBR		$\Leftrightarrow$			•
Vast mangrove forests in Hinchinbrook Channel, or the rugged vegetated mountains and lush rainforest gullies	All of Hinchinbrook Island is protected and managed as a national park. Patches of mangrove forests and rainforest were affected by cyclone Yasi.	GBR	$\leftrightarrow$				•
On many of the cays there are spectacular and globally important breeding colonies of seabirds and marine turtles	There have been serious declines in some populations of seabirds and some marine turtle species.	GBR			$\downarrow$		•
Raine Island is the world's largest green turtle breeding area	Long-term data indicates that, since the mid-1970s, green turtle nesting on Raine Island has increased and then plateaued over the past two decades. It is thought to have declined recently.	GBR			$\downarrow$		•

		Condition and tre			end		
Excerpt from statement	Comment	Area	Very good	Good	Poor	Very poor	Confidence
Beneath the ocean surface, there is an abundance and diversity of shapes, sizes and colours Spectacular coral assemblages of hard and soft corals	Since 1986, average hard coral cover is estimated to have declined from 28 to 13.8 per cent, principally in the southern two-thirds of the Region. This is mainly due to storm damage (48 per cent), crown-of-thorns starfish (42 per cent), and bleaching (10 per cent).	GBR			$\downarrow$		•
Thousands of species of reef fish provide a myriad of brilliant colours, shapes and sizes	There are about 1500 species of bony fish. Long-term monitoring of about 200 species of coral reef fish has not detected declines in the species monitored. A small number of targeted species are under significant pressure.	GBR	$\leftrightarrow$				•
The internationally renowned Cod Hole is one of many significant tourist attractions	There is anecdotal evidence of severe declines in the number and condition of potato cod at Cod Hole.	GBR			$\downarrow$		●
Superlative natural phenomena include the annual coral spawning, migrating whales, nesting turtles, and significant spawning aggregations of many fish species	The number of migrating humpback whales is increasing. Nesting numbers have declined for at least two of the six species of marine turtle. Protection for fish spawning aggregations has improved, but most sites are unknown.	GBR		—			•

**b)** Major stages of the Earth's evolutionary history (previously criterion (i) now criterion (viii)): outstanding examples representing the major stages of the Earth's evolutionary history

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			Condition and trend				
Excerpt from statement	Comment	Area	Very good	Good	Poor	Very poor	Confidence
Globally outstanding example of an ecosystem that has evolved over millennia	The Reef remains an outstanding example of evolutionary history. Recent research has identified deepwater reefs that extend for hundreds of kilometres along the outer shelf at between 40 and 70 metres depth.	GBR	$\Leftrightarrow$				•
Area has been exposed and flooded by at least four glacial and interglacial cycles, and over the past 18,000 years reefs have grown on the continental shelf	The deepwater reefs are providing valuable records of past coral reef responses to climate and sea level change.	GBR	$\leftrightarrow$				•
Today, the Great Barrier Reef forms the world's largest coral reef ecosystem Including examples of all stages of reef development	The Great Barrier Reef remains the world's largest coral reef ecosystem and, while its condition has deteriorated, it remains one of the world's most healthy reef systems, including examples of all stages of reef development.	GBR		$\downarrow$			•
Processes of geological and geomorphological evolution are well represented, linking continental islands, coral cays and reefs	Geomorphological features and processes are well represented. Most remain in good condition but some processes are declining, especially in the inshore southern two-thirds.	GBR		$\downarrow$			O
The varied seascapes and landscapes that occur today have been moulded by changing climates and sea levels, and the erosive power of wind and water, over long time periods	The impacts of modern climate change are beginning to have effects on seascapes; for example, through reduced reef building.	GBR		$\checkmark$			•
One-third of the Great Barrier Reef lies beyond the seaward edge of the shallower reefs (and) comprises continental slope and deep oceanic waters and abyssal plains	Evidence of cold water coral communities has been found on deepwater knolls along the edge of the Great Barrier Reef at depths of more than 1000 metres, but these deep areas are hardly known.	GBR					O

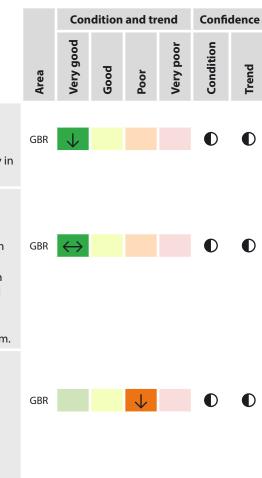
c) Ecological and biological processes (previously criterion (ii) now criterion (ix)): outstanding examples representing significant ongoing geological processes, biological evolution and man's interaction with his natural environment

Condition and trend

			Condition and trend				
Excerpt from statement	Comment	Area	Very good	Good	Poor	Very poor	Confidence
Significant diversity of reef and island morphologies reflects ongoing geomorphic, oceanographic and environmental processes	There remains a diverse range of reef and island morphologies. Most geomorphic, oceanographic and environmental processes remain in good condition, but some are declining, especially in the inshore southern two-thirds.	GBR		$\downarrow$			•
Complex cross-shelf, longshore and vertical connectivity is influenced by dynamic oceanic currents	Most marine species and habitats are thought to remain well connected. There is increasing evidence of intensified flow and accelerated warming in the East Australian Current.	GBR		—			O
Ongoing ecological processes such as upwellings, larval dispersal and migration	Ecological processes remain in good condition in northern areas. Some processes are in poor condition inshore in the southern two-thirds of the Region and are deteriorating.	GBR		$\checkmark$			O
Ongoing erosion and accretion of coral reefs, sand banks and coral cays combine with similar processes along the coast and around continental islands	Reef building is likely to be in good condition for much of the Region, especially in the north, but has been affected by cyclones and reduced coral cover, especially in the southern two-thirds of the Region.	GBR		$\checkmark$			D
Extensive beds of Halimeda algae represent active calcification and accretion over thousands of years	Halimeda beds are poorly studied, but are likely to be in very good condition given their isolation from land-based impacts and level of protection from trawling.	GBR	$\leftrightarrow$	1			O
Biologically, the unique diversity of the Great Barrier Reef reflects the maturity of an ecosystem that has evolved over millennia; evidence exists for the evolution of hard corals and other fauna	The diversity of species remains high, but some species are in poor condition, especially inshore in the southern two-thirds of the Region.	GBR		$\checkmark$			•
Vegetation on the cays and continental islands exemplifies the important role of birdsin seed dispersal and plant colonisation	Many islands are national parks or protected within the Marine Park. There are introduced plants on most islands.	GBR		$\checkmark$			D
Human interaction with the natural environment is illustrated by strong ongoing links between Aboriginal and Torres Strait Islanders and their sea country, and includes numerous shell deposits (middens) and fish traps, plus the application of story places and marine totems	Traditional Owners with connections to the Great Barrier Reef maintain their cultural practices and customs. Indigenous heritage is under pressure, especially in the southern two-thirds of the Region.	GBR			$\checkmark$		D

- **Condition and trend** Confidence /ery good /ery poor Good Area Poor Excerpt from statement Comment One of the richest and most The Great Barrier Reef remains a complex natural ecosystems GBR D complex ecosystem, rich in biodiversity. on Earth, and one of Some key habitats are under pressure, the most significant for especially in southern inshore areas. biodiversity conservation Some populations (dugong, sharks, Tens of thousands of marine seabirds and marine turtles) are known GBR and terrestrial species, to have declined. Others such as many of which are of global humpback whales, loggerhead turtles conservation significance and estuarine crocodiles are increasing. Although there is no published evidence The world's most complex of loss of species associated with coral GBR reefs, there has been a serious decline expanse of coral reefs... Contain some 400 species of in hard coral cover and deterioration corals in 60 genera of coral reef habitats in the southern two-thirds of the Region. Large ecologically important interreefal areas. The The Region's mangrove forests remain GBR shallower marine areas very diverse with at least 39 mangrove support half the world's species and hybrids recorded. diversity of mangroves Large ecologically important Seagrass diversity remains; however, interreefal areas. The there have been recent severe declines GBR shallower marine areas in abundance and community support...many seagrass composition in the inshore southern two-thirds of the Region. species The dugong population in northern areas remains robust. The population in Waters also provide major the southern two-thirds of the Region GBR feeding grounds for one of the was very low at the time of listing, and world's largest populations of remains so. Declines in the condition of the threatened dugong seagrass meadows have had profound effects on dugongs in recent years. Little is known about the populations of At least 30 species of whales most whale species. Two inshore dolphin GBR and dolphins occur here species are known to be at risk. The humpback whale population A significant area for is recovering strongly after being GBR humpback whale calving decimated by whaling. The calving habitats are well protected.
- d) Habitats for conservation of biodiversity (previously criterion (iv) now criterion (x)): habitats where populations of rare or endangered species of plants and animals still survive

			Cond	dition a	nd tre	nd	
Excerpt from statement	Comment	Area	Very good	Good	Poor	Very poor	Confidence
Six of the world's seven species of marine turtle occur in the Great Barrier Reef. As well as the world's largest green turtle breeding site at Raine Island, the Great Barrier Reef also includes many regionally important marine turtle rookeries	Of the habitats that support marine turtles, the condition of seagrass meadows and coral reefs have declined significantly. While nesting habitats are generally in good condition, sea-level rise, increasing air temperature and extreme weather events are affecting their condition.	GBR		$\downarrow$			•
Some 242 species of birds have been recorded in the Great Barrier Reef. Twenty-two seabird species breed on cays and some continental islands, and some of these breeding sites are globally significant	While the nesting habitats for seabirds remain in generally good condition, declines of up to 70 per cent in some nesting populations have been recorded. There is evidence this may relate to reduced availability of pelagic prey.	GBR			$\checkmark$		•
The continental islands support thousands of plant species, while the coral cays also have their own distinct flora and fauna	Plant diversity is generally well protected, with about one-third of the islands contained within national parks.	GBR		$\downarrow$			•



#### e) Integrity of the Great Barrier Reef World Heritage Area

**Includes all elements necessary to express its outstanding universal value:** The Great Barrier Reef meets all four natural criteria. While some ecosystems, habitats and populations are under pressure, the elements remain largely intact, particularly in the northern third of the Region.

Is of adequate size to ensure the complete representation of the features and processes which convey the property's significance: The Great Barrier Reef Region is vast, covering 14 degrees of latitude and extending 80 to 250 kilometres from the coast. Except for some small exclusions and about 600 of the 1050 islands, almost all of the World Heritage Area is within marine or national parks and is, therefore, afforded a high level of protection and management. While it is of adequate size to ensure complete representation of features and processes, increasing pressures from outside the Region are affecting them.

Is protected from the adverse effects of development and/or neglect: While activities within the property are comprehensively managed and use is generally sustainable, the remoteness of some of the property poses challenges for managing agencies. This, and previous assessments, have demonstrated that the most significant impacts on the property's values arise from external pressures such as climate change, catchment run-off and coastal development. In the southern two-thirds of the Region, where there are greater levels of development, the condition and trend of some values are in decline.

# Appendix 5: Status of capital dredging projects adjacent to the Great Barrier Reef coast at December 2014



**Australian Government** 

Great Barrier Reef Marine Park Authority

Project proposal	Referred for assessment	Proposed dredge volume (m <sup>3</sup> )	Comparative status—with particular Great Barrier Reef Marine Park	Dredge material in Marine Park—status now	
			September 2013	December 2014	
Fitzroy Terminal Project / Port Alma	2011	Not yet determined	Included trans-shipping—no details provided by proponent	Proposal lapsed under Queensland legislation	Nil
				Process to withdraw / lapse project under the EPBC Act is underway	
Fitzroy Delta— Balaclava Island	2011	Not determined but significant	First proposal withdrawn— potentially able to be resubmitted	Proposal withdrawn	Nil
Port of Townsville— Port Expansion Project	2011	10 000 000	Disposal in the Marine Park considered as an option 4 300 000 onshore to reclamation 5 700 000 to sea disposal	Port has indicated it will not consider option of disposal in Marine Park and will increase the amount to be disposed in land reclamation. Remaining amount to be disposed at sea within the port exclusion area	Nil
Cairns Shipping (Trinity Inlet) Project	2012	4 400 000	Disposal in the Marine Park indicated as preferred approach by port Likely to seek to dispose full amount in the Marine Park	Federal Minister and Queensland Government have indicated they will not approve disposal in the Marine Park	Nil

Project proposal	Referred for assessment	Proposed dredge volume (m <sup>3</sup> )	Comparative status—with particular Great Barrier Reef Marine Park	Dredge material in Marine Park—status now	
			September 2013	December 2014	
Wongai / Princess Charlotte Bay	2011	Not yet determined	Included trans-shipping—no details provided by proponent	No details provided by proponent	Nil
Abbot Point capital dredging	2012	3 000 000	Disposal in the Marine Park preferred	<ul> <li>(Marine Park disposal approval— on hold)</li> <li>Queensland has referred two projects under the EPBC Act that would allow for land-based disposal as an alternative to the approved capital dredging at Abbot Point:</li> <li>Abbot Point Port and Wetland Project, and</li> <li>Abbot Point Dredging and Onshore Placement of Dredged Material</li> </ul>	Nil
Dudgeon Point Coal Terminals Project— in port of Hay Point	2012	13 000 000	On hold Disposal site yet to be determined— options include Marine Park	Proposal withdrawn	Nil
Development of the Yarwun Coal Terminal Project	2012	4 560 000	Disposal proposed on shore	Proposal withdrawn	Nil
Port of Gladstone Channel Duplication	2012	12 000 000	Disposal site yet to be determined— options include Marine Park	Port has indicated it will not seek approval to dispose of dredge material in the Marine Park	Nil
Abbot Point Terminal 10 / Waratah Coal	2012	Not yet determined	No details provided by proponent	No details provided by proponent	Nil

