

## Chapter 9

### Conclusions and recommendations

9.1 The Great Barrier Reef is the largest coral reef ecosystem and one of the most beautiful and diverse natural ecosystems on Earth. It is clearly a world treasure that is fully deserving of its World Heritage Listing and warrants strong protection and effective management.

9.2 The committee is deeply concerned that the health of the Great Barrier Reef has declined and appears to be on a continual downward trajectory. The recent *Great Barrier Reef Outlook Report 2014* concluded that 'the overall outlook for the Great Barrier Reef is poor, has worsened since 2009 and is expected to further deteriorate in the future'.<sup>1</sup>

9.3 The *Outlook Report 2014* identified climate change, poor water quality from land-based run-off, impacts from coastal development and some remaining impacts from fishing as the main threats to the health of Great Barrier Reef ecology. The report noted that a series of major storms and floods in recent years also affected the ecosystem, which was already under pressure. These natural events highlighted the fact that the accumulation of all impacts has the potential to further weaken the resilience of the Great Barrier Reef, which will affect its capacity to recover from further serious disturbances.<sup>2</sup> These issues were also repeatedly identified in evidence to this committee.

9.4 The committee also heard evidence which referred continually to a 2012 study showing that in the past 27 years, the reef has lost around 50 per cent of its coral cover. The committee was told that same study attributed the decline in coral cover primarily to three factors: tropical cyclones; predation by crown-of-thorns starfish; and coral bleaching. However, the committee also heard that these factors are linked to the key underlying concerns of poor water quality and climate change, which are impacting upon the reef and its resilience.

9.5 The committee recognises that the Great Barrier Reef, and its catchments, support a range of activities and industries, including tourism, fishing, and shipping. However, the committee considers that greater effort is required to manage these activities and their impact on the reef; it is not only the health of the Great Barrier Reef which is at risk but also the long-term sustainability of economically important industries.

9.6 The committee acknowledges that progress has been made in recent years in some respects by both the Australian and Queensland Governments. However, it is clear that there is more that needs to be done. The Great Barrier Reef is facing pressures from multiple sources, all of which need to be managed effectively and their

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1 GBRMPA, *Outlook Report 2014*, p. vi, <http://www.gbrmpa.gov.au/media/external-links/external/outlook-report-flipbook> (accessed 13 August 2014).

2 GBRMPA, *Outlook Report 2014*, p. v.

impacts minimised, in order to reduce the stress on the reef and improve its resilience. The committee acknowledges evidence of the importance of addressing and minimising the cumulative impacts of *all* activities occurring in the Great Barrier Reef Region.

9.7 Most submitters and witnesses were in agreement that more needs to be done to prevent, and indeed, reverse the decline of the Great Barrier Reef. The committee is concerned that without urgent, concrete action and political will for change, the reef will be lost to future generations.

9.8 At the same time, the committee recognises the complex and difficult task of managing the pressures on the Great Barrier Reef. It will require all stakeholders to work together, to coordinate their efforts to ensure that the aspirations of those members of parliament who passed the Great Barrier Reef Marine Park Bill in 1975 are met:

The long term objective of this legislation is to permit this Parliament to take such steps as may be within its power to preserve for posterity the wonders of the Great Barrier Reef and...to preserve not only a major part of Australia's heritage but also to preserve an important and valuable part of the heritage of the world.<sup>3</sup>

### **Dredging and dredge disposal**

9.9 The committee recognises the importance of ports and shipping to the Queensland and Australian economy, and the need to maintain shipping routes through the Great Barrier Reef. The committee received evidence from ports and industry groups that the relative contribution of ports and shipping to the problems in the Great Barrier Reef are minor compared to other impacts. The committee acknowledges these views, but considers that any additional stress on the health of the Great Barrier Reef should be avoided wherever possible.

9.10 The committee is also persuaded by the evidence that we should not be undermining work being done by other sectors (and the government funding being spent) to improve reef water quality by reducing run-off in reef catchments. The committee further notes that the *Outlook Report 2014* rated dredging as a 'medium risk' and disposal of dredge material as 'high risk'. The committee was also persuaded by evidence that some of the long-term and indirect impacts of dredge spoil disposal are not well understood.

9.11 The committee welcomes, as did the World Heritage Committee, the commitment in the Queensland Ports Strategy to limit port development to existing, well-developed port areas. However, the committee notes evidence that there are still considerable concerns about the development proposals in those existing port areas.

9.12 The committee recognises the need for dredging, and particularly maintenance dredging. However, the committee was concerned to hear that there are numerous proposals for increased dredging, particularly capital dredging, which would also

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3 Senator the Hon Peter Durack, *Senate Debates*, 12 June 1975, p. 2657.

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potentially involve the disposal of large quantities of dredge spoil in the Great Barrier Reef World Heritage Area.

9.13 The committee is of the opinion that it is time to reconsider the idea that it is acceptable to dispose of dredge spoil in the Great Barrier Reef World Heritage Area. The committee acknowledges the evidence that toxic sediments are disposed of on land and that dredge spoil is never dumped on sensitive ecosystems such as corals or seagrass. Nevertheless, the committee is concerned by evidence that the large-scale and long-term cumulative impacts of dredging and dumping are not well understood.

9.14 To this end, the committee was pleased to hear that the Great Barrier Reef Marine Park Authority and the Australian Institute of Marine Science have co-convened an expert Dredging Panel to examine what is known about the impacts of dredging and dredge disposal and to address knowledge gaps. However, the committee queries why approvals are continuing to be made prior to this research being completed. The committee considers that, in light of the precautionary principle, no further approvals should be given under the *Environment Protection and Biodiversity Conservation Act 1999* or the *Environment Protection (Sea Dumping) Act 1981* for the disposal of dredge spoil in the Great Barrier Reef World Heritage Area until the expert Dredging Panel finalises its work.

9.15 The committee also suggests that the Minister for the Environment examine whether a cap or a ban should be introduced on dredge spoil disposal in the Great Barrier Reef World Heritage Area, and if a cap is introduced, the benefits or otherwise of reducing the amount of dredge spoil that is disposed in the area over time.

### **Recommendation 1**

**9.16 The committee recommends that, in light of the precautionary principle, no further approvals should be given under the *Environment Protection and Biodiversity Conservation Act 1999* or the *Environment Protection (Sea Dumping) Act 1981* for the disposal of dredge spoil in the Great Barrier Reef World Heritage Area until the Great Barrier Reef Marine Park Authority and Australian Institute of Marine Science Dredge Panel work is finalised.**

### **Recommendation 2**

**9.17 The committee recommends that the Minister for the Environment examine whether a cap or a ban should be introduced on the disposal of dredge spoil in the Great Barrier Reef World Heritage Area.**

### ***Gladstone Harbour***

9.18 The committee was deeply concerned by the evidence it received in relation to the significant problems that have occurred in Gladstone Harbour, which appears to have been an environmental disaster. The committee recognises that there have been numerous inquiries into this issue, including the Independent Review of the Port of Gladstone and the more recent Bund Wall Review. These reviews revealed flaws in the conditions placed on approvals as well as in compliance and monitoring processes. Indeed, the Bund Wall Review identified 'deficiencies' in the performance of

environmental regulators and Gladstone Ports Corporation (a state owned corporation).<sup>4</sup>

9.19 The committee notes the evidence that these inquiries could have been more comprehensive, and this prompted some submitters and witnesses to call for a Royal Commission into the issues that have occurred in Gladstone Harbour. The committee acknowledges these calls, but does not consider that a Royal Commission is warranted. However, the committee does consider that lessons need to be learned from the Gladstone Harbour experience, and that it is crucial to ensure that this type of problem never occurs again.

9.20 In particular, the committee considers that there is a need for the Department of the Environment to ensure that conditions of approval under the EPBC Act are stringently imposed, monitored and enforced. In addition, the Department of the Environment needs to maintain strong oversight over the monitoring of relevant developments. As is discussed further later in this chapter, the committee also considers that federal approval powers should not be delegated to the Queensland Government.

### **Recommendation 3**

**9.21 The committee recommends that the Department of the Environment ensure that conditions of approval under the *Environment Protection and Biodiversity Conservation Act 1999* are stringently worded, monitored and enforced.**

### **Recommendation 4**

**9.22 The committee recommends that the Minister for the Environment ensure that funding for, and resourcing and staffing levels within, the Department of the Environment are sufficient to ensure adequate capacity to monitor and enforce conditions of approval under the *Environment Protection and Biodiversity Conservation Act 1999*.**

### ***Abbot Point***

9.23 The committee received a large amount of evidence expressing concerns about the proposals to develop Abbot Point and, in particular, the recent approvals by the Environment Minister and the Great Barrier Reef Marine Park Authority to dispose of three million cubic metres of dredge spoil in the Great Barrier Reef Marine Park. The committee recognises that the decisions in relation to Abbot Point are currently the subject of legal challenges, and therefore it would not be appropriate for the committee to comment on the merits or legality of the decisions themselves.

9.24 Nevertheless, the committee is deeply concerned by evidence that the decision has damaged the reputation of, and community confidence in, the Great Barrier Reef Marine Park Authority. The committee also agrees with evidence that it is difficult to

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4 Department of the Environment, *Gladstone Bund Wall Review*, May 2014, p. viii, <http://www.environment.gov.au/topics/marine/gbr/gladstone-bund-wall-review> (accessed 6 August 2014).

be reassured by the so-called 'strict'<sup>5</sup> conditions on the Abbot Point development when 'strict'<sup>6</sup> conditions were also placed on projects in the Gladstone Harbour and Curtis Island region (as discussed further above).

### **Strategic Assessments and Long-Term Sustainability Plan**

9.25 It appears to the committee that there is now a plethora of plans, strategies and reports relating to the management of the Great Barrier Reef, but little in the way of concrete action. The most notable exception to this is the commendable work being done to improve catchment run-off. However, it seems to the committee that the only other concrete action occurring in the Great Barrier Reef Region is the approval of more port expansions, including the associated dredging and dredge spoil disposal.

9.26 The committee notes that the strategic assessments were due to be completed in 2013, yet the final versions have only just been released. The committee considers that these delays are regrettable, given the importance of putting in place the Reef 2050 Long-term Sustainability Plan as soon as possible. The committee notes the Department of the Environment's evidence that the plan will be provided to the World Heritage Committee by February next year.

9.27 The committee notes that the intention is that the Reef 2050 Plan will provide an overarching framework to guide the protection and management of the Great Barrier Reef World Heritage Area from 2015 to 2050. However, the committee is concerned that this could be yet another plan for more planning. Not only will this be unlikely to satisfy the concerns of the World Heritage Committee, but as some witnesses told the committee, governments have now prepared many reviews, inquiries and plans, which 'total thousands of pages'. The committee agrees that what is now needed 'is real solutions, not the endless reports that document the reef's decline'.<sup>7</sup>

9.28 The committee considers that it is vital that the Reef 2050 Plan contains concrete targets and actions to help stop the decline of the Great Barrier Reef, and addresses the issue of cumulative impacts of all activities impacting on the health of the Great Barrier Reef. The committee also considers that the Reef 2050 Long-Term Sustainability Plan draw on, and bring together, all existing strategies, plans and reports in relation to the Great Barrier Reef. The Reef 2050 Long-Term Sustainability Plan should also be subject to a full community consultation process. Finally, the committee notes that this chapter identifies a number of issues and contains recommendations which should also be considered in the development of the Reef 2050 Long-Term Sustainability Plan.

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5 Australian and Queensland Governments, *Submission 34*, p. 21.

6 Department of the Environment, *Gladstone coal seam and dredging projects*, <http://www.environment.gov.au/node/18620> (accessed 12 August 2014).

7 Mr Richard Leck, National Manager, Marine Conservation and Sustainable Development, WWF-Australia, *Committee Hansard*, 21 July 2014, p. 15.

**Recommendation 5**

**9.29** The committee recommends that the Reef 2050 Long-Term Sustainability Plan be drafted and finalised, subject to full community consultation, as a matter of high priority.

**Recommendation 6**

**9.30** The committee recommends that the Reef 2050 Long-Term Sustainability Plan bring together all existing strategies, plans and reports in relation to the Great Barrier Reef.

**Recommendation 7**

**9.31** The committee recommends that the Australian and Queensland Governments ensure that the Reef 2050 Long-Term Sustainability Plan contains concrete targets and actions to improve the health of the Great Barrier Reef.

**Recommendation 8**

**9.32** The committee recommends that the Australian and Queensland Governments ensure that the Reef 2050 Long-Term Sustainability Plan adequately addresses the cumulative impacts of all activities on the Great Barrier Reef Region and its world heritage values.

**Science underpinning the management of the Great Barrier Reef**

9.33 The committee acknowledges the importance of ensuring that management and decision-making in relation to the Great Barrier Reef is underpinned by robust and independent science. In this context, the committee recognises and commends the research work provided by government agencies such as the Australian Institute of Marine Sciences and CSIRO, and university researchers. The committee was also pleased to hear the evidence from the Australian and Queensland Governments that they have invested in new research to address 'key information gaps in relation to the future management of the Great Barrier Reef'.<sup>8</sup>

9.34 However, the committee was concerned by evidence that the science in relation to the Great Barrier Reef is becoming politicised. The committee also heard that there are numerous areas where further research is required to better understand the health of the Great Barrier Reef. A number of these areas have been identified in the strategic assessments and include, for example, the need to better understand the large-scale and long-term impacts of dredging and dumping associated with ports development (as discussed further later in this chapter).

9.35 The committee is especially concerned about evidence of recent funding cuts to the Australian Institute of Marine Science, which is one of Australia's leading authorities on marine science and ecology, including for the Great Barrier Reef. Given concerns about many matters affecting the Great Barrier Reef, the committee considers it is an inopportune time to underfund quality research that is crucial to the management of the Great Barrier Reef. The committee considers that adequate

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8 Australian and Queensland Governments, *Submission 34*, p. 27.

funding and support for institutions such as the Australian Institute of Marine Science is needed to ensure that they can continue to conduct and direct research in an independent and apolitical manner.

### **Recommendation 9**

**9.36 The committee recommends that funding for, and staffing for the Australian Institute of Marine Science be maintained, and wherever possible, increased, in order to ensure that they can continue to conduct the important research work needed to support management and decision-making in relation to the Great Barrier Reef.**

### **Great Barrier Reef Marine Park Authority**

9.37 The committee recognises the difficulties faced by the Great Barrier Reef Marine Park Authority (GBRMPA) and the complexities of managing a World Heritage Area of the size and scale of the Great Barrier Reef. In particular, the committee realises that many of the activities impacting upon the reef occur on land, in the catchments, over which GBRMPA has no jurisdiction.

9.38 The committee acknowledges that aspects of GBRMPA's management have been exemplary, including for example, its management of the rezoning within the marine park. However, the committee is concerned that community confidence in GBRMPA has been damaged, particularly by the recent Abbot Point decision. Most disturbingly, evidence to the committee revealed perceptions of bias and allegations of lack of independence in decision-making. The committee considers that these views are highly damaging for a government entity, particularly one that has been entrusted with the protection of one of the world's most significant and beautiful ecosystems.

9.39 The committee notes with approval that the Australian National Audit Office (ANAO) has recently commenced an audit to assess the effectiveness of the Great Barrier Reef Marine Park Authority's regulation of permits and approvals within the Great Barrier Reef Marine Park.<sup>9</sup> The committee also notes that the ANAO is considering an audit of the Australian Government Reef Programme (previously known as the Reef Rescue Initiative), which is jointly administered by the Departments of Environment and Agriculture.<sup>10</sup> However, the committee considers that there may be merit in the ANAO expanding these audits to include a broader audit of the performance of GBRMPA in executing its functions under the *Great Barrier Reef Marine Park Act 1975*, including whether it is acting in a manner that is consistent with the objects of that Act.

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9 Australian National Audit Office, *Regulation of Great Barrier Reef Marine Park Approvals*, <http://www.anao.gov.au/Publications/Audits-in-Progress/2015/Winter/Regulation-of-Great-Barrier-Reef-Marine-Park-Permits-and-Approvals> (accessed 27 August 2014).

10 Australian National Audit Office, *ANAO Work Program — July 2014*, pp 56–57 <http://www.anao.gov.au/About-Us/~media/Files/Audit%20Work%20Programs/AWP-July-2014-accessible.pdf> (accessed 2 September 2014).

**Recommendation 10**

**9.40** The committee recommends that the Australian National Audit Office expand its proposed and current audits relating to the Great Barrier Reef to include an audit of the performance of the Great Barrier Reef Marine Park Authority.

9.41 The committee was also concerned by evidence about recent cuts to funding and staffing in the Great Barrier Reef Marine Park Authority, and that experienced staff have left the Authority in recent months.

**Recommendation 11**

**9.42** The committee recommends that funding and staffing of the Great Barrier Reef Marine Park Authority be maintained in order to ensure that it can concentrate on providing independent, world-class management of the Great Barrier Reef Marine Park.

9.43 The committee also acknowledges suggestions that there needs to be improved access to information, including scientific information, relating to the Great Barrier Reef. The committee agrees with suggestions that the Great Barrier Reef Marine Park Authority develop a single searchable database of all reef reports and publications. The committee considers a searchable database will be of great value to all stakeholders and improve the accessibility of information.

**Recommendation 12**

**9.44** The committee recommends that the Great Barrier Reef Marine Park Authority create a single, searchable database of all relevant reports and publications relating to the Great Barrier Reef.

**Climate change**

9.45 The committee recognises that climate change is the major long-term threat to the Great Barrier Reef. In particular, the committee received evidence that the Great Barrier Reef is already feeling the effects of climate change in the form of coral bleaching events, which are likely to increase in the future, along with ocean acidification. As such, while Australia cannot ameliorate climate change on its own, the committee considers that Australia should take strong action and show international leadership on the issue of climate change.

**Recommendation 13**

**9.46** The committee recommends that the Australian Government take strong action, and an international leadership role, on the issue of climate change.

**Water quality and catchment management**

9.47 The committee notes that a great deal of effort has gone into managing the use of catchment areas to improve the water quality of the Great Barrier Reef. There has been an ongoing commitment made at all levels to engage in practices and develop plans to reduce land-based run-off into the Great Barrier Reef. The continued commitments of investment by the Australian and Queensland Governments have



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been supported by the work of regional natural resource management bodies, industry groups, other organisations and participating landholders.

9.48 These commitments have resulted in changes to land management practices which have, in turn, resulted in reduced total pollutant and sediment loads. However, although the trends towards reduced diffuse source pollution are encouraging and it is accepted that it will take time for these achievements to translate into improved conditions in the marine environment, the quality of water entering the Great Barrier Reef from catchment areas continues to pose a threat to the health of the reef. The committee considers that further measures are required to abate the threats to the health of the reef posed by poor water quality.

### ***Reef Water Quality Protection Plan***

9.49 The committee recognises that the efficiency and effectiveness of the Reef Water Quality Protection Plan is measured through comprehensive monitoring and evaluation, including progress reporting through Reef Plan Report Cards, which have been released since 2011.<sup>11</sup> However, the committee received evidence that the Reef Water Quality Protection Plan did not specifically quantify the sustainable load targets. These are required to achieve the overall goal of ensuring that, by 2020, the quality of water entering the Great Barrier Reef from catchment areas has no detrimental impact on the health and resilience of the reef. The committee considers that specific load targets should be included in the Plan.

9.50 The committee also considers that the management strategies incorporated in the Reef Water Quality Protection Plan need to support the achievement of the specific load targets.

### **Recommendation 14**

**9.51 The committee recommends that the Minister for the Environment examine the Reef Water Quality Protection Plan to identify explicit load reduction targets as well as management strategies to achieve these targets.**

### ***Funding***

9.52 The committee notes that, in real terms, funding to the Reef Water Quality Protection Plan has been cut. Not only has \$40 million been removed from the program and placed in the Reef Trust program but also inflation will affect the real value of the remaining funding over time. The committee notes the success of the plan in reducing run-off from broad-scale land use and the commitment by the agricultural sector in Queensland to reduce run-off and improve water quality entering reef waters. The committee is therefore concerned funding cuts will undermine these significant achievements.

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11 Australian and Queensland Governments, *Reef Water Quality Protection Plan Report cards*, <http://www.reefplan.qld.gov.au/measuring-success/report-cards.aspx> (accessed 2 September 2014).

### ***Reef Trust***

9.53 The committee recognises that Reef Trust has great potential to channel funds into site-specific projects to improve the quality of water entering the Great Barrier Reef and provide greater protection to threatened species.

9.54 However, there was evidence that Reef Trust may be a direct recipient of funds used for environmental offsets for developments impacting on the Great Barrier Reef. The committee was concerned that this may create a conflict of interest for GBRMPA, given that these funds could benefit GBRMPA and GBRMPA is the main authority charged with advising the Australian and Queensland Governments on the potential impacts of development on the Great Barrier Reef.

### ***Fertilisers and pesticides***

9.55 The committee considers that even if the best management practices were universally adopted by the agricultural sector, damage to the reef would still occur from fertiliser run-off. The committee notes that the inclusion of nitrification inhibitors and control release technologies into fertilisers has achieved good results in reducing fertiliser run-off in other parts of the world. The committee therefore believes that such technologies should be examined as an additional means of achieving the goal of improved water quality in the Great Barrier Reef Marine Park.

9.56 The committee notes that these products are currently significantly more expensive than the standard fertilisers used in Great Barrier Reef catchments. The committee therefore considers that further research is needed to assess the potential benefits of these products and whether there are ways to make these products more cost effective and accessible for the agricultural sector.

9.57 The committee acknowledges that some pesticide use is necessary to maintain and improve agricultural productivity. Pesticides are used in Great Barrier Reef catchments and some of these pesticides are washed into the waters of the Great Barrier Reef. The committee notes that higher concentrations of pesticides may have negative impacts on the health of the reef.

9.58 Despite this, the committee notes that the *Outlook Report 2014* states that the current levels of pesticide run-off pose a low to moderate threat to the health of the ecology of the Great Barrier Reef and, even then, generally only to the ecology of inshore reefs.

9.59 The committee acknowledges that a considerable amount of work has already been done to contribute to our understanding of agriculture and methods to lessen its footprint on water quality. This includes, for example, scientific work to improve the efficacy of nitrogen application in the Great Barrier Reef catchments. The committee also recognises the importance of the Reef Trust and the Reef Water Quality Protection Plan in this regard.

9.60 Nevertheless, the committee notes that measurement of pesticide concentrations is usually conducted by reference to modelling and the committee received evidence suggesting that the modelling could be improved. The committee considers that it would be beneficial for scientific studies into the effects of pesticide run-off on the health of the reef to be undertaken. This would allow a greater

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appreciation of the effects of pesticides on the health of the reef and ensure that the future funding of environmental protection programs is properly targeted.

### **Recommendation 15**

**9.61 The committee recommends that research funding be directed towards improving farming technologies, such as fertilisers, to make them more cost effective and less likely to negatively impact on the water quality of the Great Barrier Reef.**

### **Recommendation 16**

**9.62 The committee recommends that the Minister for the Environment commission a scientific review of the impacts on water quality of farm-related products. In undertaking such a review, the committee recommends that an assessment be undertaken of:**

- **the potential benefits of new farming technologies, including use of new types of fertiliser; and**
- **mechanisms to decrease the use of pesticides.**

### **Recommendation 17**

**9.63 The committee recommends that the Australian Government work closely with stakeholders to deliver enhanced environmental outcomes through the Reef Trust Programme and the Reef Water Quality Protection Plan.**

#### ***Crown-of-thorns starfish***

9.64 Outbreaks of crown-of-thorns starfish have had a devastating effect on the Great Barrier Reef. The committee notes that research into direct control mechanisms of starfish populations has resulted in improved control techniques and a better knowledge of the starfish lifecycle. However, the committee considers that continued research is required to fully identify the triggers, including water quality aspects, of an outbreak.

#### ***The large-scale development of Northern Australia***

9.65 The committee notes concerns about the large-scale development of Northern Australia and the evidence received that the health of Great Barrier Reef could suffer as a result. Of particular concern is large-scale land clearing, damming of rivers and an intensification of anthropogenic run-off, especially from previously undeveloped areas. It follows that any proposed development outside the currently developed areas of the Great Barrier Reef catchment should only be done with the utmost caution. The committee notes that the *Environment Protection and Biodiversity Conservation Act 1999* requires consideration of the precautionary principle, and therefore suggests strict adherence to this principle when assessing the potential impact of the development of Northern Australia, especially in previously undeveloped areas in catchments of the Great Barrier Reef.

**Recommendation 18**

**9.66 The committee recommends that there should be a strict adherence to the precautionary principle when assessing the potential impact of the development of Northern Australia, especially in previously undeveloped areas in catchments of the Great Barrier Reef.**

*Urban sewage*

9.67 The committee received evidence indicating that, over the next two decades, the population in catchment areas of the Great Barrier Reef is expected to grow dramatically. This population expansion will result in more urban sewage discharge into the waters of the Great Barrier Reef and thus result in detrimental effects on the water quality.

9.68 The committee supports the Queensland Government policy requiring all coastal sewage treatment plants to meet high ecological tertiary treatment standards before discharging sewage into the waters of the Great Barrier Reef. However, the committee notes that local government authorities lack adequate funding for upgrade works. As a consequence, that not all treatment plants in the catchment areas currently meet the requisite standards.

9.69 The committee therefore recommends that the tertiary treatment standards should be properly enforced. In addition, the committee considers that the Queensland Government should allocate funding to assist local government authorities to undertake the necessary upgrades.

**Recommendation 19**

**9.70 The committee recommends that the Queensland Government provide funding to local government authorities to assist with the upgrade of sewage treatment plants in the Great Barrier Reef catchment areas.**

*Sewage originating from vessels*

9.71 The committee understands from evidence that in the Great Barrier Reef and its catchment areas there is a dearth of land-based facilities for the disposal and treatment of sewage originating from vessels. Existing Queensland Government legislation is quite specific about where and what can be discharged into the waters of the Great Barrier Reef.

9.72 However, the lack of land-based disposal facilities could encourage the illegal dumping within the Great Barrier Reef Marine Park of sewage from vessels. The committee therefore recommends that the Queensland Government improve the enforcement of its Transport Operations (Marine Pollution) legislation and provide funding to expand facilities for the treatment and disposal of sewage originating from vessels in and around the Great Barrier Reef.

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## **Recommendation 20**

**9.73** The committee recommends that the Queensland Government improve the enforcement of the *Transport Operations (Marine Pollution) Act 1995* and associated regulations prohibiting the discharge of sewage from vessels into the waters of the Great Barrier Reef.

**9.74** Further, the committee recommends that the Queensland Government provide funding for improved facilities at ports for the effective treatment and disposal of sewage originating from vessels in and around the Great Barrier Reef.

### *National Parks and Protected Areas*

9.75 The committee acknowledges evidence that national parks, coastal wetlands and protected areas act as buffer zones, limiting the extent to which pollutants can enter riverine systems and the Great Barrier Reef. These areas provide significant benefits to the overall health of the Great Barrier Reef by supporting a high level of biodiversity, providing a refuge to different species, helping to control flood waters, allowing for the discharge of groundwater and acting as a filter for nutrient rich waters.

9.76 Given the acknowledged benefits derived from those areas already protected, the committee considers that it important to ensure that all ecologically significant areas are adequately protected for their own sake and for the demonstrated benefits on the health of the reef.

9.77 In this context, the committee particularly notes evidence received expressing concern about proposed developments in the Fitzroy River Delta near Rockhampton and in the Cape Melville/Bathurst Bay area. The committee notes that both these areas are of high conservation value. The committee considers that the Minister for the Environment should undertake an examination of the conservation values of these areas in order to ascertain whether the level of protection for these areas should be increased. The committee notes that this approach would be consistent with the spirit and intent of the Queensland Ports Strategy.

## **Recommendation 21**

**9.78** The committee recommends that the Minister for the Environment afford higher levels of environmental protection to areas on, or adjacent to, the Great Barrier Reef, including the Fitzroy River Delta and the Bathurst Bay Region.

### *Coal Particulates*

9.79 The committee was also concerned about evidence received and new research revealing the problem of pollution from coal particulates and its impact on the Great Barrier Reef. The committee notes evidence from GBRMPA that it is looking at measures to address this problem, and considers that this issue should be examined closely.

**Recommendation 22**

**9.80 The committee recommends that the Minister for the Environment examine measures to reduce coal particulate pollution in the Great Barrier Reef Region.**

**Shipping**

9.81 In terms of shipping, the committee acknowledges evidence to the committee that shipping is generally well managed and poses a relatively low risk to the reef compared to other activities and impacts. The committee also recognises the excellent work of the Australian Maritime Safety Authority and the REEFVTS system in minimising shipping incidents in the Great Barrier Reef Region.

9.82 The committee notes that the *North-East Shipping Management Plan* is currently being developed and aims to address impacts associated with the projected growth of shipping in the Great Barrier Reef over the coming years. The committee was advised that the plan will be finalised this year.

9.83 While the committee considers that shipping is generally well managed in the Great Barrier Reef, the committee also received evidence in relation to shipping where it appears that some management measures could be improved. For example, in relation to underwater noise pollution, the committee heard that consideration should be given to the adoption and implementation of the International Maritime Organization's *Guidelines for the Reduction of Underwater Noise from Commercial Shipping to Address Adverse Impacts on Marine Life*. In relation to ship strike, the committee welcomes the Department of the Environment's evidence that there is a proposal to develop a National Vessel Strike Strategy in consultation with relevant stakeholders.

9.84 The committee also notes that it received evidence indicating a number of deficiencies in the draft *North-East Shipping Management Plan*, which it hopes are addressed in the final plan. The committee therefore recommends that a further consultation process be undertaken in relation to the draft North-East Shipping Management Plan, in particular to give greater consideration to the issues such as extending compulsory pilotage, and underwater noise pollution.

**Recommendation 23**

**9.85 The committee recommends that the relevant Minister(s) examine whether the Australian Government should adopt the International Maritime Organization's *Guidelines for the Reduction of Underwater Noise from Commercial Shipping to Address Adverse Impacts on Marine Life*.**

**Recommendation 24**

**9.86 The committee recommends that the relevant Minister(s) ensure that further consultation be undertaken in relation to the draft North-East Shipping Management Plan.**

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## **Governance and decision-making processes**

9.87 The committee notes that the Australian and Queensland Governments made a comprehensive joint submission to the inquiry, which in itself is quite an unusual occurrence in terms of Senate inquiries. The committee further notes that a range of agencies from both governments were involved in the preparation of the joint submission.

9.88 The committee recognises the need for greater consistency and coordination in the governance arrangements relating to the management of the Great Barrier Reef. However, the committee has grave concerns about the Australian Government's 'one stop shop' proposal, particularly in the context of developments in Queensland where the State Government may be the proponent. It seems to the committee that it is completely inappropriate for a government to be regulating itself in this manner. The committee is also concerned that the one stop shop proposal may further undermine the role and independence of the Great Barrier Marine Park Authority.

9.89 Finally, the Great Barrier Reef is a World Heritage Area with international significance, and the committee considers that it is important for the Commonwealth to retain a significant role in the oversight of the area. The committee also recognises the World Heritage Committee's comments that the proposal to transfer decision-making power to Queensland is 'premature' and 'should be postponed to allow further consideration'.<sup>12</sup>

9.90 The committee therefore considers that it is inappropriate for the Commonwealth to be devolving its responsibilities for matters of national environmental significance to the states and territories. As such, the committee recommends that the Environmental Protection and Biodiversity Conservation Amendment (Bilateral Agreement Implementation) Bill 2014 currently before the Senate not be passed.

### **Recommendation 25**

**9.91 The committee recommends that the Australian Government not accredit Queensland development approval processes under the *Environment Protection and Biodiversity Conservation Act 1999*.**

### **Recommendation 26**

**9.92 The committee recommends that the Environment Protection and Biodiversity Conservation Amendment (Bilateral Agreement Implementation) Bill 2014 not be passed.**

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12 UNESCO World Heritage Committee, Decision 38 COM 7B.63, 2014, pp 116–117, <http://whc.unesco.org/archive/2014/whc14-38com-16en.pdf> (accessed 9 July 2014).

### *Independence of environmental assessments*

9.93 In addition, in terms of regulatory decision-making, the committee heard concerns about the lack of independence of environmental assessments, whereby the assessments are commissioned and provided by proponents. The committee notes that this has been a recurring concern in recent inquiries to the committee, such as the inquiry into threatened species last year and the inquiry into environmental offsets earlier this year. The committee suggests that the Minister for the Environment conduct a review, including a public consultation process, to examine ways to improve the independence and rigour of the environmental assessment process.

### **Recommendation 27**

**9.94 The committee recommends that the Minister for the Environment, conduct a review to examine ways to improve the rigour and independence of the environmental assessment process under the *Environment Protection and Biodiversity Conservation Act 1999*.**

### *Use of offsets in the Great Barrier Reef World Heritage Area*

9.95 The committee once again heard concerns about the use of offsets as conditions of approvals for developments significantly impacting on the Great Barrier Reef World Heritage Area. For example, the committee again heard concerns as to whether the offsets conditions proposed for the Abbot Point development (of a 150% reduction in fine sediments coming from the Burdekin and Don catchments) are even achievable. This is similar evidence to that which the committee heard during its recent inquiry into the issue of environmental offsets. The committee therefore reiterates the recommendations made in its report for that inquiry.<sup>13</sup>

9.96 In the offsets inquiry, the committee also recognised the specific concerns as to the application of offsets in the marine environment. The committee therefore suggested that the Department of the Environment consider developing a separate offsets policy in relation to the marine environment, and the committee wishes to reiterate that specific recommendation. The committee also recommends again that the existing Offsets Policy be revised to provide greater guidance on 'red flag' areas where offsets are unacceptable, including World Heritage areas including in the Great Barrier Reef World Heritage Area.

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13 See further Senate Environment and Communications References Committee, *Environmental Offsets*, June 2014, [http://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Environment\\_and\\_Communications/Environmental\\_Offsets/Report/index](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Environmental_Offsets/Report/index) (accessed 31 July 2014).



**Recommendation 28**

**9.97** The committee recommends that the Department of the Environment develop a separate offsets policy in relation to the marine environment.

**Recommendation 29**

**9.98** The committee recommends that the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy* be revised to provide greater guidance on developments in which offsets are unacceptable, such as a list of 'red flag' areas, including within the Great Barrier Reef World Heritage Area.

**Senator Anne Urquhart**  
**Chair**

