

Conservation and protection of the Antarctic environment

Australia's international obligations

5.1 Recognised as one of the last great wildernesses, Antarctica and its environs – including the Southern Ocean and the sub-Antarctic – are protected by a number of international agreements, most notably the Protocol on Environmental Protection to the Antarctic Treaty. Also known as the Madrid Protocol, this agreement was adopted in 1991 and entered into force in 1998.¹ The Protocol:

- designates Antarctica as a 'natural reserve, devoted to peace and science';
- establishes environmental principles for the conduct of all activities;
- prohibits mining;
- subjects all activities to prior assessment of their environmental impacts;
- provides for the establishment of a Committee for Environmental Protection, to advise the Antarctic Treaty Consultative Meeting (ATCM);

¹ The full text of the Protocol on Environmental Protection to the Antarctic Treaty is available from COMNAP's website, viewed 8 February 2005, <<http://www.comnap.aq/comnap/comnap.nsf/P/Pages/Environment/#5>>.

- requires the development of contingency plans to respond to environmental emergencies; and
 - provides for the elaboration of rules relating to liability for environmental damage.²
- 5.2 For Australia, environmental protection of the Antarctic region is guided by an intricate framework of legislative and administrative requirements. In general, these are incorporated in regional protected area management plans, station management plans and plans for World Heritage properties.³
- 5.3 This chapter examines Australia's role in the conservation and protection of the Antarctic environment in accordance with its international obligations. In particular, this chapter addresses the AAD's work towards preserving marine life in the Southern Ocean; minimising human impacts in Antarctica, including undertaking remediation of past work sites; and the cultural preservation of historical sites.

Preserving marine life in the Southern Ocean

- 5.4 The long term conservation of Antarctic marine living resources is guided by CCAMLR which entered into force in 1982 and is part of the Antarctic Treaty System.⁴ Twenty-four nations, including Australia, are members of the Convention, and a further seven nations have acceded but are not members. CCAMLR's secretariat is located in Hobart, Tasmania.
- 5.5 The Convention provides that a Commission and a Scientific Committee shall collaborate to research and monitor marine populations.⁵ The CCAMLR Commission determines catch levels for harvested species based on research undertaken by member nations (such as that undertaken by the Antarctic Marine Living Resources component of the AAD's Science Branch).⁶ The Commission also adopts measures aimed at minimising

2 Australian Antarctic Division 2002, *Introducing the Madrid Protocol*, Australian Antarctic Division, Kingston, Tasmania, viewed 7 July 2004, <<http://www.aad.gov.au/default.asp?casid=825>>.

3 Australian Antarctic Division, *The Law on Ice*, Australian Antarctic Division, Kingston, Tasmania, viewed 22 February 2005, <<http://www.aad.gov.au/default.asp?casid=3212>>.

4 For further information on the Antarctic Treaty System see Chapter Four.

5 See Articles XIV and XV, Convention for the Conservation of Antarctic Marine Living Resources, viewed 7 March 2005, <<http://www.ccamlr.org/>>.

6 Australian Antarctic Division 2002, *Fisheries for the Future*, Australian Antarctic Division, Kingston, Tasmania, viewed 3 August 2004, <<http://www.aad.gov.au/default.asp?casid=967>>.

harmful impacts that fishing may have on other species (for example, where endangered albatrosses are caught on long-lines used by fishermen). Enforcement of catch levels and other measures determined by the CCAMLR Commission are the responsibility of individual member nations.

- 5.6 The AAD is the lead agency representing Australia in the deliberations of the CCAMLR Commission. However, Australian positions are developed within a wider framework of agencies which include the Department of Agriculture, Fisheries and Forestry (AFFA), the Australian Fisheries Management Authority (AFMA), the Department of Foreign Affairs and Trade and the Attorney-General's Department. The AAD also contributes to the protection of marine life in the Southern Ocean through its participation in the International Whaling Commission and the Agreement on the Conservation of Albatrosses and Petrels.⁷ The issue of whaling has received significant attention in the media in recent weeks due to a Japanese proposal to increase its whaling in Antarctic waters.

The Heard Island and McDonald Islands Marine Reserve

- 5.7 The Heard Island and McDonald Islands (HIMI) Marine Reserve was established in October 2002 to protect the environmental values of the region and provide a conservation framework to manage the region in an integrated and ecologically sustainable manner. The Reserve is a Commonwealth reserve, declared under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act).
- 5.8 The Reserve, which covers an area of 6.5 million hectares, is the world's second largest fully protected marine reserve, surpassed only by the Great Barrier Reef Marine Park. The EPBC Act requires that a management plan be prepared for the Reserve.
- 5.9 The AAD is responsible for administering the Reserve under delegation from the Director of National Parks. The AAD is also responsible for preparing and implementing the management plan.
- 5.10 The AAD recently released a draft management plan for the Reserve for public comment which ended on 4 May 2005. The AAD will now prepare a final Plan, taking into consideration all comments received, for the consideration of the Minister for the Environment and Heritage.

7 Australian Marine Sciences Association, Submission no. 6, p 2.

Illegal, unregulated and unreported fishing

- 5.11 Illegal, unregulated and unreported (IUU) fishing is that which does not comply with national or international fishing conservation and management obligations.⁸ A global decline in fish stocks over recent years, resulting in tighter regulation of fishing at national and international levels, has seen an increase in IUU fishing. As well as depleting fish stocks, IUU fishing can inflict further damage on the environment through high levels of seabird and by-catch mortality and pollution through the disposal of rubbish and fishing gear at sea. In trying to conceal their illegal activities, IUU fishing vessels have been known to operate in a manner which compromises the safety of their crew.⁹
- 5.12 In recent times, the growing incidence of IUU fishing in the Southern Ocean has been the biggest issue on CCAMLR's agenda, despite a concerted effort by Australia to encourage an international approach to combating the problem. Australia's prominent role in the fight against IUU fishing was highlighted by the October 2003 apprehension of the Uruguyan vessel *Viarsa 1* after the much publicised pursuit by Australian authorities which lasted a record 21 days.¹⁰ The pursuit of the *Viarsa* not only highlighted the guile of illegal fishers operating in the Southern Ocean, but also demonstrated that combating IUU fishing is an expensive exercise and can be highly dangerous.
- 5.13 The Committee understands that at present, one of the greatest barriers to deterring IUU fishing is a consequence of international law which, at present, does not allow for sufficient action to be taken against fishing vessels flagged to non-CCAMLR nations.¹¹ While nations which are members of CCAMLR have acted responsibly and ceased fishing in areas where the total allowable catch has been reached, non-CCAMLR nations continue to fish with a complete disregard for rules set in place by the CCAMLR Commission.

8 Department of Agriculture, Fisheries and Forestry, *Overview of IUU Fishing*, Department of Agriculture Fisheries and Forestry, Canberra, viewed 4 August 2004, <<http://www.affa.gov.au>>.

9 Department of Agriculture, Fisheries and Forestry, *Overview of IUU Fishing*, Department of Agriculture Fisheries and Forestry, Canberra, viewed 4 August 2004, <<http://www.affa.gov.au>>.

10 After a chase which spanned 3,900 nautical miles, the vessel was eventually apprehended with assistance from the South African and United Kingdom authorities.

11 See Ellison, C & Macdonald, I (Ministers for Justice and Customs and Fisheries, Forestry and Conservation) 4 March 2005, *'Flag of convenience' vessels flaunt international rules*, joint statement, Parliament House, Canberra, <<http://www.mffc.gov.au/releases/2005/05028mj.html>>, viewed 14 March 2005.

The Heard Island and McDonald Islands Fishery

- 5.14 IUU fishing has become a serious problem in Australia's HIMI fishery, where Patagonian toothfish, in particular, are targeted. The HIMI fishery lies within the Australian Fishing Zone which Australia also declared as its Exclusive Economic Zone (EEZ) in 1994. The Australian Fishing Zone extends 200 nautical miles from the coastline of Australia and its offshore territories. The HIMI fishery also falls within the area covered by CCAMLR.
- 5.15 The magnitude of the illegal fishing problem in the HIMI region is illustrated by Table 5.1 which reveals that in some years, the estimated IUU catch at HIMI has exceeded the legal catch limits set by CCAMLR.

Table 5.1 IUU catch estimates and total allowable catch from HIMI, 1999 - 2003

Year	IUU catch estimate at HIMI, in whole weight tonnes	Legal total allowable catch at HIMI
1999/00	1154	3585
2000/01	2004	2995
2001/02	3489	2815
2002/03	1512	2879

Source: *Department of the Environment and Heritage, Submission no. 32, p 4.*

- 5.16 While the annual quota of allowable fishing in the HIMI zone is set each year by CCAMLR, it appears that there may be some confusion about the effect of IUU fishing on the setting of the quota. The GSDC stated that:

...It is estimated that some 3,000 tonnes of the [Patagonian toothfish] are stolen from Australian waters each year. The practice drives down the annual quota of fish that can be caught legally from the fishery.¹²

- 5.17 The AAD sought to correct this view by stating that when setting future allowable catch limits, CCAMLR does not include a reduction to account for IUU fishing:

...What happens is that the models that are used to set the total allowable catches do take into account all of the fishing that has been undertaken previous to the assessment being made, and that will include estimates of illegal fishing. But in setting the future catches it assumes that illegal fishing will be zero...¹³

12 City of Albany and the Great Southern Development Commission, Submission no. 3, p 4.

13 Australian Antarctic Division (Press A), *Transcript*, 23 June 2004, p 3.

- 5.18 During informal discussions with the Committee, the AAD pointed out that IUU fishing is a major problem for Australia, not only because it is a major impediment to the sustainable management of the Southern Ocean, but also because it impinges on Australia's sovereign rights, and severely affects the commercial interests of licensed Australian fishers.
- 5.19 The Government's commitment to protecting Australian fish stocks in its territorial waters in the HIMI region was confirmed by a recent announcement as part of the 2005-06 Budget. On 10 May 2005, the Ministers for Justice and Customs and Fisheries, Forestry and Conservation, announced that funding of \$217.2 million will be made available between 2005-06 and 2009-10 to support armed patrols of remote Australian waters in the Southern Ocean. The enhanced funding for the armed patrol program includes funding for Fisheries officers to participate in French patrols in the Southern Ocean.¹⁴

The AAD's role

- 5.20 The AAD seeks to partly meet the government's goal to protect the Antarctic environment by 'undertaking research to ensure that environmental and fisheries management is based on sound scientific principles'.¹⁵ This includes carrying out fieldwork such as tagging Patagonian toothfish to track their movements, and developing mathematical models to accurately assess fish stocks. As discussed previously, the AAD presents this information to the CCAMLR Commission for which it is the lead agency representing Australia.
- 5.21 As administrator of the HIMI Exclusive Economic Zone (EEZ), the AAD closely monitors IUU fishing in conjunction with other Australian authorities, namely:
- AFFA - which is responsible for fishery industry development schemes;
 - AFMA - which is a statutory authority responsible for the Commonwealth Government's management of Australian fisheries, including the development of management plans and management of fisheries licences;
 - Customs Australia - which is responsible for surveillance and enforcement in the Southern Ocean, particularly around Heard and

14 Ellison, C (Minister for Justice and Customs) and Macdonald, I (Minister for Fisheries, Forestry and Conservation) 10 May 2005, *Long-term commitment to Southern Ocean armed patrols*, <<http://www.mffc.gov.au/releases/2005/05078mj.html>>, viewed 16 May 2005.

15 Department of the Environment and Heritage, *Annual Report 2002-03*, p 125.

Macdonald Islands (HIMI). Customs is responsible for the operation of the *Oceanic Viking* armed patrol vessel; and

- the National Oceans Office – a branch of the Marine Division within the Department of the Environment and Heritage responsible for development of overall oceans policy, including development of a Regional Marine Plan for the Antarctic region.

5.22 The Royal Australian Navy also becomes involved in compliance from time to time, for example in August 2003 it assisted Customs in escorting the *Viarsa* back to Fremantle, Perth.¹⁶

5.23 For each voyage of the armed Southern Ocean patrol vessel *Oceanic Viking*, the AAD provides medical equipment and a doctor with Antarctic experience.¹⁷

Calls for more coordination amongst agencies

5.24 The Western Australian Government raised the question of coordination of fisheries management in Australia given that the Western Australian fishing industry is the major fisher of the Southern Ocean.¹⁸ The Western Australian Government has an International Fisheries Operations Unit, which provides fisheries compliance patrols for AFMA.¹⁹ The Western Australian Government questioned whether there was sufficient coordination between the above organisations:

From a WA perspective the Southern Ocean fisheries compliance program appears to operate on an ad hoc basis in response to reported illegal fishing activity. It would be timely to conduct a strategic assessment of Australia's future compliance needs to protect and manage our Antarctic marine resource.²⁰

Call for increased fisheries patrols

5.25 The GSDC called for the Australian Government to increase patrols around the HIMI fishery to deter illegal fishing, while the City of Albany

16 Hill, R, (Minister for Defence) 3 Oct 2003, *Mission Accomplished: Viarsa I back in Australia*, media release, Parliament House, Canberra.

17 Ellison, C, Macdonald, I, & Stone, S (Ministers for Justice and Customs; Fisheries, Forestry and Conservation; and Parliamentary Secretary for the Environment and Heritage) 29 June 2004, *Armed Southern Ocean patrol trials launched from Hobart*, joint statement, Parliament House, Canberra.

18 Department of Fisheries, State Government of Western Australia, Submission no. 18, pp 1-2.

19 Department of Fisheries, State Government of Western Australia, Submission no. 18, p 1.

20 Department of Fisheries, State Government of Western Australia, Submission no. 18, p 2.

argued that its relatively close proximity to the HIMI fishery made it a potential strategic base for surveillance operations.²¹

- 5.26 Austral Fisheries is the main Australian company fishing the HIMI zone, taking 70 per cent of Australia's annual quota of Patagonian toothfish.²² The City of Albany and the GSDC reported that Austral Fisheries is considering the use of a DC6 aircraft to undertake its own patrols of the HIMI fishing zone in the hope of identifying illegal fishing.²³ A joint submission from the two suggested that the Australian Government could undertake a joint venture with Austral Fisheries in supplementing funding for these flights, and associated infrastructure.²⁴
- 5.27 A submission from I3 Aerospace Technologies suggested the potential for utilising Unmanned Aerial Vehicles (UAVs) to undertake surveillance of the HIMI fishery.²⁵ Of the type of UAVs currently available, I3 Aerospace Technologies pointed out that these fall into two categories: military vehicles or small vehicles used for research applications. I3 Aerospace Technologies argued that the smaller UAVs are unsuited to the challenge of monitoring Antarctic fisheries, while the costs associated with the larger military UAVs make them an unattractive proposition. The company is proposing to develop and deploy long range, long endurance UAVs for monitoring and surveillance activities, initially to satisfy Coastwatch mission requirements, but indicated that such products 'may be technically feasible and cost-effective for Antarctic fisheries monitoring'.²⁶
- 5.28 During the inquiry, the Tasmanian Government also raised the possibility of utilising the proposed inter-continental air link to undertake long-range surveillance of any illegal fishing activities in the Southern Ocean.²⁷

What is Australia doing?

- 5.29 The Committee acknowledges that since it commenced its inquiry, the Australian Government has been increasingly active at both a national and international level in its efforts to combat IUU fishing. In December 2003 the Government announced a two-year \$89.2 million armed patrol

21 See Great Southern Development Commission and the City of Albany, Submission no. 3, p 5.

22 Wallace Engineering (Axe J), *Transcript*, 30 April 2004, p 28.

23 City of Albany and the Great Southern Development Commission, Submission no. 3, p 4.

24 City of Albany and the Great Southern Development Commission, Submission no. 3, p 5.

25 I3 Aerospace Technologies, Submission no. 13, p 1.

26 I3 Aerospace Technologies (Moreno F), *Transcript*, 30 April 2004, pp 31-32.

27 State Government of Tasmania, Submission no. 20, p 5.

program for the Southern Ocean.²⁸ In August 2004 it was announced that P&O Maritime Services had been selected as the preferred tenderer to provide the 105-metre *Oceanic Viking* for all future patrols, which commenced in November 2004.²⁹

- 5.30 The Government has also imposed stronger sanctions against illegal fishing including an increase in fines for perpetrators under Commonwealth legislation.³⁰
- 5.31 In August 2004 Australia signed the Food and Agriculture Organisation (FAO) Compliance Agreement, which requires flag states to have responsibility for authorisation of fishing vessels, and for ensuring vessels carry a recording system to track their movements.³¹
- 5.32 On 12 March 2005, at a Ministerial meeting of the FAO, Australia presented its National Plan of Action to Prevent, Deter and Eliminate IUU Fishing.³² The plan, described by AFFA as 'intentionally ambitious', outlines the domestic and international measures Australia has taken, or intends to take, to combat IUU fishing.³³ Australia's national plan aligns with the International Plan of Action to Prevent, Deter and Eliminate IUU Fishing which was adopted by FAO members in 2001.³⁴
- 5.33 As discussed previously, the Government has also announced a commitment of \$217.2 million in funding between 2005-06 and 2009-10 to support armed patrols of remote Australian waters in the Southern Ocean.

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- 28 Macdonald, I (Minister for Fisheries, Forestry and Conservation) 29 June 2004, *Armed Southern Ocean patrol trials launched from Hobart*, media release, Parliament House, Canberra, <<http://www.mffc.gov.au/releases/2004/04132mj.html>>, viewed 24 August 2004.
- 29 Macdonald, I (Minister for Fisheries, Forestry and Conservation) 29 June 2004, *Armed Southern Ocean patrol trials launched from Hobart*, media release, Parliament House, Canberra, <<http://www.mffc.gov.au/releases/2004/04132mj.html>>, viewed 24 August 2004.
- 30 Penalties for fishing offences by foreign vessels greater than 25 metres in length were increased from \$440,000 to \$825,000. See Macdonald, I (Minister for Fisheries, Forestry and Conservation) 26 Nov 2003, *Tough new penalties for illegal fishing*, media release, Parliament House, Canberra, <<http://www.mffc.gov.au/releases/2003/03258m.html>>, viewed 4 August 2004.
- 31 Macdonald, I (Minister for Fisheries, Forestry and Conservation) 24 Aug 2004, *Treaty tackles illegal fishing*, media release, Parliament House, Canberra, <<http://www.mffc.gov.au/releases/2004/04180m.html>>, viewed 24 August 2004.
- 32 Department of Agriculture, Fisheries and Forestry, *National Plan of Action for Illegal, Unreported and Unregulated Fishing*, <<http://www.affa.gov.au>>, viewed 17 March 2005.
- 33 Department of Agriculture, Fisheries and Forestry, *National Plan of Action for Illegal, Unreported and Unregulated Fishing*, <<http://www.affa.gov.au>>, viewed 17 March 2005.
- 34 The International Plan of Action for IUU Fishing is available online from the publications section of AFFA's website <<http://www.affa.gov.au>>, viewed 17 March 2005.

Committee comment

- 5.34 Despite legitimate concerns over the incidence of IUU fishing in the Southern Ocean, the Committee acknowledges the steps the Government has taken to increase the pressure against illegal fishing, including the significant extension of funding for the armed patrol program in the Southern Ocean.
- 5.35 The Committee also acknowledges the pivotal role the AAD plays in its representations to the CCAMLR Commission and applauds the resolute effort being made to encourage a uniform approach to enforcement and compliance measures across CCAMLR member nations.

Human impacts in Antarctica

- 5.36 Achieving its vision of 'Antarctica valued, protected and understood' requires that the AAD's work on the continent leave as little impact on the environment as possible. While many more tourists now visit Antarctica each year than those working on the continent, in terms of days spent on the ground, the people living and working at Antarctica in national programs have a far greater impact on the environment than tourists.
- 5.37 One of the four priority research programs comprising the *Science Strategy for Australia's Antarctic Program 2004/05 – 2008/09* (discussed in chapter six) is Impacts of Human Activities in Antarctica.
- 5.38 Human Impacts research addresses the Australian Government's goals for Antarctic research, in particular its goal 'to protect the Antarctic environment' and also 'to undertake scientific work of practical, economic and national significance'.³⁵
- 5.39 Under the priority program concerning Human Impacts, key questions to be addressed are:
- How do the characteristics of high latitude ecosystem processes influence how we best protect the Antarctic environment?
 - Are Antarctic ecosystems more vulnerable to human activities than those of other regions?

35 Australian Antarctic Division, *Australia's Antarctic Science Program: Science Strategy 2004/05 – 2008/09*, Kingston, Tasmania, p 2.

- How can science and technology mitigate the impacts of human activities in Antarctica?³⁶
- 5.40 At the logistical level, the AAD includes an Environmental Management and Audit Unit and an Operations Environment Officer to ensure that the AAD's activities in Antarctica meet both international and Australian standards for environmental management.
- 5.41 Some of the recent measures introduced by the AAD to minimise environmental impacts include:
- implementation of an environmental management system (EMS) which meets Australian/New Zealand Standard AS/NZS ISO 14001;
 - trials of alternative energy sources – a wind turbine farm at Mawson station has resulted in a 26 per cent fuel reduction; and
 - conduct of an environmental impact assessment on all activities in Antarctica (as required under the Antarctic Treaty System).
- 5.42 The AAD acknowledges that its presence in Antarctica will leave behind a human 'footprint'. The AAD has stated:
- Some environmental disturbance is an inevitable consequence of activities in Antarctica. These include emissions to the atmosphere such as exhaust; disturbance to the physical environment such as tracks from walking and vehicles; and disturbance to wildlife by visitors and vehicles.³⁷

Remediation of waste sites

- 5.43 Australia has taken a leading role in fulfilling its obligations as a signatory to the Madrid Protocol which requires the application of responsible waste management practices. In the past, management of waste on the Antarctic continent and in the sub-Antarctic has not been carried out to the high standards imposed today. While Australia closed its rubbish dumps in Antarctica in 1985, there remains a large amount of waste at existing stations and at the abandoned Wilkes Station, which requires remediation. AAD Director Dr Tony Press reflected upon the situation when appearing before the Committee:

36 Australian Antarctic Division, *Australia's Antarctic Science Program: Science Strategy 2004/05 – 2008/09*, Kingston, Tasmania, p 6.

37 Australian Antarctic Division, 'Human Impacts in Antarctica: What are we doing?', *Australian Antarctic Magazine*, no. 1, Autumn, 2001, p 46.

...what we are dealing with here is something like a very small country town rubbish tip situation that may have occurred, say, in the fifties and sixties where material was just put conveniently in a shallow gully or something near the station. That is the way things used to operate.³⁸

- 5.44 Over the 2003-04 summer season, the AAD trialled and subsequently implemented an operation which involved the removal of over 1000 tonnes of waste from the old Thala Valley tip site at Casey Station.³⁹ The AAD reported that the operation was highly successful from an environmental management perspective.⁴⁰ The Division utilised innovative remediation technologies to ensure the removal and transportation of the waste did not inflict further environmental damage.⁴¹
- 5.45 The Committee is aware however that the shipment of this waste was delayed in this instance due to setbacks in the processing of the required AQIS import permits.⁴² This was despite past shipments of waste and the issue of quarantine permits on previous occasions authorising entry to and treatment on arrival in Tasmania, of Antarctic wastes returned to Australia in accordance with the Treaty. The Committee expects that the relevant agencies will have taken the appropriate steps to avoid any repeat of delays to future shipments required to meet Australia's treaty obligations to remove waste from Australia's Territories in the Antarctic.
- 5.46 Previously, the AAD has reported that the tip in Thala Valley is intended to be used as a stepping stone in the lead up to tackling more severe waste problems at Wilkes and other sites.⁴³ The question of how best to manage waste sites occupies a major research focus within the AAD's environmental program, looking at aspects such as techniques for handling waste on a station and the environmental effects of contaminated site remediation.⁴⁴

38 Australian Antarctic Division (Press A), *Transcript*, 23 June 2004, pp 13-14.

39 Australian Government, *Budget 2004-05, Ministerial Statements, Environment and Heritage*, Department of the Treasury, Canberra, viewed 18 August 2004, <<http://www.budget.gov.au/2004-05/ministerial/html/environment-05f.htm>>.

40 Australian Antarctic Division (Press A), *Transcript*, 23 June 2004, p 14.

41 Australian Government, *Budget 2004-05, Ministerial Statements, Environment and Heritage*, Department of the Treasury, Canberra, viewed 18 August 2004, <<http://www.budget.gov.au/2004-05/ministerial/html/environment-05f.htm>>.

42 See Barbeliuk, A, 2004, [Permit call on ice ship waste](#), *The Mercury*, 2 February 2004, p 11.

43 Australian Antarctic Division, 'Research into the clean-up of tips at Casey and Wilkes', *Australian Antarctic Magazine*, no. 2, Spring 2001, p 3.

44 Department of the Environment and Heritage, *Annual Report 2003-04*, p 180.

5.47 The AAD estimates that the total cost to remediate Antarctic waste sites is approximately \$52 million, which at present is unfunded.⁴⁵ Despite the work undertaken by the AAD within its current resources, the Division has stated that it 'cannot continue this work while maintaining its ongoing program at the same level'.⁴⁶ The AAD acknowledged that it has an unfunded liability of \$40 million as a recognised requirement for remediation of waste in the AAT.⁴⁷

Committee comment

5.48 The Committee applauds the active role the AAD has played in remediating waste on the Antarctic continent. This extends to the important research work being carried out under the Antarctic science program to determine the most efficient and environmentally responsible methods of removing the waste. The Committee appreciates the scale of the problem confronting the Division, and notes that it is not an issue which can be resolved either quickly or without considerable difficulty. However, the Committee acknowledges that Australia has obligations under the Treaty and by taking such an active role, it is hoped that other Antarctic nations will be encouraged to step up their efforts in conserving the Antarctic environment.

5.49 The AAD has acknowledged that there is little more it can do with regard to remediation of waste without enforcing cutbacks to other areas of the program. To reinforce Australia's commitment to environmental management and to fulfil its obligations under the Madrid Protocol, the Committee believes that the Government must provide funding for the Division to proceed with its waste remediation project. The Committee acknowledges that a significant investment of approximately \$50 million is required, and believes that this should be invested over say a ten-year period.

Recommendation 3

5.50 **The Committee recommends that the Australian Government allocate an additional \$50 million to the budget of the Department of the Environment and Heritage over a ten-year period, to be administered under Australia's Antarctic Program, specifically for the remediation of past work sites in the Australian Antarctic Territory.**

45 Department of the Environment and Heritage, Submission no. 24, p 24.

46 Department of the Environment and Heritage, Submission no. 24, p 25.

47 Australian Antarctic Division (Allen R), *Transcript*, 23 June 2004, p 13.

Tourism in Antarctica

- 5.51 Tourism in Antarctica is a rapidly growing industry, with over 27,000 visitors to the continent in 2003-04.⁴⁸ The Antarctic Treaty includes a set of guidelines for tourism operators in Antarctica.⁴⁹
- 5.52 The AAD is not directly involved in tourist activities, although it has from time to time utilised tourist vessels to transport its personnel to and from Antarctic bases. However, the management of the potential impacts of tourism is certainly of concern to the AAD as the lead agency for Australia's Antarctic program.
- 5.53 The AAD has been leading the Australian Government's push for the establishment of an Antarctic tourism industry accreditation scheme.⁵⁰ ASAC has stated that its preference is for tourism to remain ship-based, with aircraft overflight activities from Australia.⁵¹ ASAC further stated that any future on-shore tourism would best be undertaken away from research sites and would require the availability of at least a summer base.⁵²
- 5.54 The Tasmanian Government is also an important stakeholder in Antarctic tourism as Hobart offers a logical launching site for such activities. Tasmania's then Parliamentary Secretary responsible for Antarctic matters, Ms Lara Giddings, commented:

In terms of tourism in Antarctica itself, the Australian Antarctic Division is a scientific and a logistics organisation; it is not a tourism organisation. Its members want to be able to get on with their job, so I can understand that they do not want to get too involved in that side of it and they are certainly very protective of

48 This figure is the total number of seaborne, airborne and land-based tourists making landings on Antarctica, 2003-04. See International Association of Antarctic Tourism Operators, *Tourism Statistics*, viewed 20 July 2004, <http://www.iaato.org/tourism_stats.html>.

49 Australian Antarctic Division, *Antarctic Treaty Guidelines for Visitors*, Australian Antarctic Division, Kingston, Tasmania, viewed 26 July 2004, <<http://www.aad.gov.au/default.asp?casid=1990>>.

50 Australian Antarctic Division, 2004, *Managing Antarctic Tourism*, Australian Antarctic Division, Kingston, Tasmania, viewed 28 February 2005: <<http://www.aad.gov.au/default.asp?casid=14626>>.

51 Antarctic Science Advisory Committee, 1997, *Australia's Antarctic Program Beyond 2000: A Framework for the Future: A Report to the Parliamentary Secretary for the Antarctic*, Department of the Environment, Canberra, p 42.

52 Antarctic Science Advisory Committee, 1997, *Australia's Antarctic Program Beyond 2000: A Framework for the Future: A Report to the Parliamentary Secretary for the Antarctic*, Department of the Environment, Canberra, p 42.

their air link. It is an air link to support scientific work; it is not an air link for tourism.

We do need to protect Antarctica's values. It is a unique, virtually untouched environment. We do not want to see what is happening around the Antarctic Peninsula, where ships are virtually hiding behind icebergs in order to give their own tourists a wilderness experience when in fact there are a couple of other ships with other tourists just a short distance away. We also have to accept that east Antarctica is not the Antarctic Peninsula either. Just the fact that it is so far away from New Zealand, from Tasmania and mainland Australia means that it will not have the appeal that the Antarctic Peninsula has for tourism. So its natural distance will keep tourism numbers down, to some degree anyway.⁵³

- 5.55 The Committee notes that the Tasmanian Government has flagged the proposed inter-continental air link as a potential means of expanding tourism to Antarctica. The Tasmanian Government's Antarctic policy document states:

Dependent on the progress and nature of the Antarctic air link, there may be the potential to develop an Antarctic air-tourism market departing from Tasmania. The Government acknowledges that the sole purpose for the construction of the Australia/ Antarctic air link is to enhance AAD scientific endeavours. This action will proceed only if considered appropriate by AAD.⁵⁴

- 5.56 In its 'Foresight Report', ASAC acknowledged that the air link may 'increase the pressure for inter-continental tourist transport to and from Antarctica'.⁵⁵ However, during informal discussions with the Committee, the AAD suggested that there would be unlikely to be any avenues for commercial use of what is likely to be a very limited operational airstrip on the Antarctic continent.

53 State Government of Tasmania (Giddings L), *Transcript*, 16 March 2004, p 7.

54 Tasmania. Department of Economic Development, 2004, *Tasmania's Antarctic, Sub-Antarctic and Southern Ocean Policy Framework*, Department of Economic Development, Hobart, viewed 25 January 2005, <<http://www.development.tas.gov.au/antarctic/policy.html>>.

55 Antarctic Science Advisory Committee, 1997, *Australia's Antarctic Program Beyond 2000: A Framework for the Future: A Report to the Parliamentary Secretary for the Antarctic*, Department of the Environment, Canberra, p 42.

Cultural heritage management: Mawson's Huts

- 5.57 Mawson's Huts represent the remnants of a collection of buildings which were established as Australia's main base during the Australasian Antarctic Expedition of 1911-1914, led by Sir Douglas Mawson.⁵⁶ The Huts were built in January 1912 at Cape Denison, Commonwealth Bay, in the AAT. Mawson and his party remained at the Huts for two years, returning to Australia in December 1913.⁵⁷
- 5.58 Mawson's Huts occupy a unique place in Antarctic history as one of only six surviving sites of the 'Heroic Era' of Antarctic exploration, and the only such surviving structure in the AAT.⁵⁸ As such, there are significant national and international heritage values attached to the site, which is entered in the Register of National Estate.
- 5.59 During the 1970s ANARE carried out reconnaissance missions to the Huts to observe their status and investigate restoration/preservation options.⁵⁹
- 5.60 In the mid 1980s a private organisation, Project Blizzard, was established to increase public awareness of the Mawson's Huts and to raise money to fund restoration projects. Project Blizzard undertook two expeditions to the site, focusing on carrying out surveying work and stabilising of some of the structure.⁶⁰
- 5.61 By the late 1980s, ANARE had become involved in the planning for conservation of Mawson's Huts, and in 1993 commissioned a Conservation Plan. In 1996 the Australian Associated Press (AAP) established the AAP Mawson's Huts Foundation to undertake conservation works and prepare

56 Australian Antarctic Division, 2004, *Mawson's Huts Commonwealth Bay*, Australian Antarctic Division, Kingston, Tasmania, viewed 14 March 2005, <<http://www.aad.gov.au/default.asp?casid=12151>>.

57 Godden Mackay Logan, 2001, *Conservation Management Plan: Mawson's Huts Historic Site, Cape Denison, Commonwealth Bay, Australian Antarctic Territory*, AAP Mawson's Huts Foundation; Godden Mackay Logan, Hobart, p x.

58 Godden Mackay Logan, Submission no. 8, p 1. Note: The period dating from Adrien de Gerlache's *Belgian Antarctic Expedition* aboard *Belgica* in 1897, extending to Richard Byrd's First Byrd Antarctic Expedition in 1928, is generally referred to as the 'Heroic Era' of Antarctic exploration.

59 Godden Mackay Logan, 2001, *Conservation Management Plan: Mawson's Huts Historic Site, Cape Denison, Commonwealth Bay, Australian Antarctic Territory*, AAP Mawson's Huts Foundation; Godden Mackay Logan, Hobart, p 1.

60 Godden Mackay Logan, 2001, *Conservation Management Plan: Mawson's Huts Historic Site, Cape Denison, Commonwealth Bay, Australian Antarctic Territory*, AAP Mawson's Huts Foundation; Godden Mackay Logan, Hobart, p 1.

a maintenance strategy.⁶¹ The Foundation raised public moneys to undertake these projects, and has worked with the Australian Heritage Commission and the AAD to fund two expeditions to Cape Denison.

5.62 In 2001 the AAP Mawson's Huts Foundation commissioned conservation consultants Godden Mackay Logan to prepare a Conservation Management Plan, which was published in 2001. In the summer of 2002-03 the AAD assigned an expedition team to undertake conservation work at Mawson's Huts in accordance with the Conservation Management Plan.⁶²

5.63 While investigations were carried out by ANARE to determine whether Mawson's Hut could be relocated to the mainland, this action is not supported by Godden Mackay Logan, who stated in its management plan:

The repatriation of the Main Hut to Australia is not supportable on either heritage or practical grounds (and would contravene the Antarctic Treaty)...⁶³

Concerns over AAD funding for cultural heritage management

5.64 Heritage consultants Godden Mackay Logan called for increased funding to the AAD to enable it to ensure that the Mawson's Huts conservation program can continue.⁶⁴ The 2001 Conservation Management Plan prepared by the firm stated:

The planning reports and physical conservation works on-site have gone a long way in assisting an understanding the significance and condition of Mawson's Huts. What remains to be established is a clear vision for how Mawson's Huts Historic Site, in particular the Main Hut, should be conserved, presented and interpreted in future.⁶⁵

61 Godden Mackay Logan, 2001, *Conservation Management Plan: Mawson's Huts Historic Site, Cape Denison, Commonwealth Bay, Australian Antarctic Territory*, AAP Mawson's Huts Foundation; Godden Mackay Logan, Hobart, pp 1-2.

62 Australian Antarctic Division 2002, *Restoration of Mawson's Huts*, Australian Antarctic Division, Kingston, Tasmania, viewed 14 March 2005, <<http://www.aad.gov.au/default.asp?casid=12153>>.

63 Godden Mackay Logan, 2001, *Conservation Management Plan: Mawson's Huts Historic Site, Cape Denison, Commonwealth Bay, Australian Antarctic Territory*, AAP Mawson's Huts Foundation; Godden Mackay Logan, Hobart, p xi.

64 Godden Mackay Logan, Submission no. 8, pp 1-2.

65 Godden Mackay Logan, 2001, *Conservation Management Plan: Mawson's Huts Historic Site, Cape Denison, Commonwealth Bay, Australian Antarctic Territory*, AAP Mawson's Huts Foundation; Godden Mackay Logan, Hobart, p 86.

- 5.65 Godden Mackay Logan stated that while the AAD has provided 'strong support and cooperation' in undertaking conservation of the Mawson's Huts site, it has been constrained by a lack of resources to undertake further work. The firm also argued that the Australian Government must allocate adequate funding for conservation works in order to meet its Antarctic Treaty obligations and Australia's own heritage requirements.⁶⁶
- 5.66 The Mawson's Huts site is listed as a heritage place in the Antarctic Treaty, and also under Australia's new heritage protection system. In July 2004 the Mawson's Huts Historic Site was listed as a Commonwealth Heritage Place under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In January 2005, the Minister for the Environment and Heritage announced that Mawson's Huts and Mawson's Huts Historic Site had been included on the National Heritage List.⁶⁷
- 5.67 Under the EPBC Act, as manager of the Mawson's Huts site the Commonwealth Government is required to prepare a management plan to protect and manage the heritage values of the site. Godden Mackay Logan argued that the AAD will need additional funding in order to write and implement the management plan. In its submission to the Committee, the firm stated:
- Allocation of resources to facilitate regular inspection, monitoring and maintenance will promote effective asset management and reduce total physical conservation costs. The allocation of resources to the Australian Antarctic Division for cultural heritage management purposes would result in the conservation of an extraordinary example of Australia's cultural heritage. Furthermore, it would help the AAD to meet the following specific goals...enhancing Australia's influence in the Antarctic Treaty system, and protecting the Antarctic environment.⁶⁸
- 5.68 A heritage consultant, Mr Duncan Marshall, made a similar argument for increased funding to the AAD for conservation work. Mr Marshall argued that the AAD must be the lead agency for conservation of the Mawson's

66 Godden Mackay Logan, Submission no. 8, p 1.

67 Campbell, I (Minister for the Environment and Heritage) 26 Jan 2005, *New listings recognise Australia's achievements*, media release, Parliament House, Canberra, <<http://www.deh.gov.au/minister/env/2005/mr26jan05.html>>, viewed 16 February 2005. Further information on the new Heritage laws is available from the Department of the Environment and Heritage website at <<http://www.deh.gov.au/heritage/publications/factsheets/fact1.html>>, viewed 2 August 2004.

68 Godden Mackay Logan, Submission no. 8, pp 1-2.

Huts site, rather than relying on 'charitable funds and voluntary enthusiasm':

The AAD sees itself supporting the efforts of others in conserving these cultural heritage places. This view must be reversed. The AAD must lead such efforts and be prepared to fully fund them from its own resources. If support is available from other sources then this may be welcomed but it should not become a pre-condition.⁶⁹

5.69 The AAD acknowledged the concerns of the heritage community about the lack of resources attributed to cultural heritage management, stating that:

...of course any government agency would like to have additional funds to carry out its responsibilities. Let me say that we have, over the last few years, invested a great deal of time, and also effort and money, into the conservation of Cape Denison and Mawson's Huts themselves.⁷⁰

5.70 The Division pointed out that expeditions to undertake restoration work can cost in the order of \$500,000. The AAD stated that it is continually looking at opportunities to build partnerships in order to finance such expeditions.⁷¹ The AAD also foreshadowed that the introduction of the air transport system will help to alleviate some of the costs associated with ship voyages to Cape Denison.⁷²

Committee comment

5.71 The Committee is satisfied from the response it received from the AAD that it takes its responsibilities with respect to the conservation of Mawson's Huts seriously. The Committee also notes the Division's views on the regularity with which the AAD believes conservation work on the Huts needs to be undertaken, suggesting that while the heritage concerns over the Huts are certainly not without foundation, the AAD appears confident that the necessary maintenance can be carried out within its current program.

5.72 The Committee also believes this is another aspect of the work of the Division which will be greatly enhanced by the operation of both the intra- and inter-continental air links. In the meantime, the Committee encourages

69 Marshall, Submission no. 5, pp 2-3.

70 Australian Antarctic Division (Press A), *Transcript*, 23 June 2004, p 4.

71 Australian Antarctic Division (Press A), *Transcript*, 23 June 2004, p 7.

72 Australian Antarctic Division (Press A), *Transcript*, 23 June 2004, p 7.

the AAD to continue to seek partnerships in order to finance future expeditions to undertake restoration work on the huts.

Recommendation 4

- 5.73 **The Committee recommends that additional funding be provided to enable the Australian Antarctic Division to comply with its responsibilities under the *Environment Protection and Biodiversity Conservation Act (1999)* for its work with the cultural heritage management of Mawson's Huts. The Committee also encourages the continuation of partnership links with community sponsors to continue the restoration work of Mawson's Huts.**