

The Auditor-General
Audit Report No.49 2001–2002
Performance Audit

The Management of Commonwealth National Parks and Reserves

‘Conserving our Country’

Department of the Environment and Heritage

Australian National Audit Office

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of Australia 2002

ISSN 1036–7632

ISBN 0 642 80635 7

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Canberra ACT
13 May 2002

Dear Madam President
Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of the Environment and Heritage in accordance with the authority contained in the *Auditor-General Act 1997*. I present this report of this audit, and the accompanying brochure, to the Parliament. The report is titled *The Management of Commonwealth National Parks and Reserves—Conserving our Country*.

Following its tabling in Parliament, the report will be placed on the Australian National Audit Office's Homepage—<http://www.anao.gov.au>.

Yours sincerely

A handwritten signature in black ink, appearing to read 'P. J. Barrett'.

P. J. Barrett
Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

AUDITING FOR AUSTRALIA

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For further information contact:
The Publications Manager
Australian National Audit Office
GPO Box 707
Canberra ACT 2601

Telephone: (02) 6203 7505
Fax: (02) 6203 7519
Email: webmaster@anao.gov.au

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Audit Team

Peter McVay
Catherine Hughes
Renee Gopal
Mike Lewis

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Abbreviations/Glossary

Anangu	Western Desert Aboriginal person or people (generally those Aboriginal people with traditional affiliations to Uluru-Kata Tjuta National Park)
ANAO	Australian National Audit Office
ANZECC	Australian and New Zealand Environment and Conservation Council. ANZECC has now been replaced by the Natural Resources Management Ministerial Council and the Environment Protection and Heritage Ministerial Council.
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
Boards of Management	A Board of Management is established under the EPBC Act for each of Kakadu, Uluru-Kata Tjuta and Booderee National Parks as they include land owned by indigenous people. The primary functions of a Board are to prepare management plans for the park and to make decisions about management of the park that are consistent with the plan. The majority of members of the Board are required to be Aboriginals nominated by the traditional owners of indigenous people's land in the Park.
CAC Act	<i>Commonwealth Authorities and Companies Act 1997</i>
Director of National Parks (Director)	The Director of National Parks was established as a 'corporation sole.' A 'corporation sole' is an individual who is invested with the qualities of a corporation. The position existed under the <i>National Parks and Wildlife Conservation Act 1975</i> and continued in existence under section 514A of the EPBC Act. He is also the person appointed as the Director under section 514F of the Act.
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPBC Regulations	<i>Environment Protection and Biodiversity Conservation Regulations 2000</i>
ERISS	Environmental Research Institute of the Supervising Scientist
ESD	Ecologically Sustainable Development
FMA Act	<i>Financial Management and Accountability Act 1997</i>
GAO	United States General Accounting Office
GIS	Geographic Information System
IUCN	International Union for the Conservation of Nature
Joint management	Kakadu, Uluru-Kata Tjuta and Booderee National Parks are managed jointly by the Director and the traditional Aboriginal owners. A central mechanism for giving effect to joint management is the Board of Management for each Park.

KRAs	Key Result Areas
Landscape scale	The landscape scale refers to the different landscapes that can form part of a national park, reserve or conservation zone. For example, Kakadu has a number of different landscapes varying from the coastal estuaries to the sandstone escarpments. A landscape scale may involve a sub-catchment, an entire river catchment or a bio-region.
<i>Malpa</i>	<i>Malpa</i> means ‘helper’ in the Pitjantjatjara language. In practical terms, <i>Malpas</i> are Traditional owners or mentors engaged by the Uluru-Kata Tjuta National Park, who advise park managers and operational staff on traditional ways of environmental management.
Management plan	The EPBC Act requires a seven year management plan to be made for each Commonwealth reserve. A management plan sets out how the reserve is to be managed, how its natural features are to be protected and conserved, and the activities that can be carried on in the reserve. The Director, the Commonwealth and other Commonwealth agencies are required to comply with management plans.
OSS	Office of the Supervising Scientist
PAN	Parks Australia North. Northern branch of Parks Australia that reports to the Director of National Parks through the Darwin office.
Parks Australia	The Director and that part of Environment Australia (the Commonwealth Department of Environment and Heritage) that assists the Director in performing the Director’s functions under the EPBC Act.
PAS	Parks Australia South. Southern branch of Parks Australia that reports to the Director of National Parks through Parks Australia South, located in Canberra.
Performance and Development Scheme (PDS)	The Performance Development Scheme links training programs to agency objectives as well as individual needs.
Reserve management principles	The EPBC Act requires Australian IUCN reserve management principles to be prescribed for the IUCN categories to which Commonwealth reserves must be assigned (on proclamation and by management plans). The principles are set out in Schedule 8 to the EPBC Regulations. Part 1 of the Schedule sets out general administrative principles that apply to all IUCN categories. Part 2 sets out principles for each category.

A threatening process The EPBC Act defines a threatening process as one that 'threatens, or may threaten, the survival, abundance or evolutionary development of a native species or ecological community' (section 188(3))

Tjukurpa Pitjantjatjara word for law: history, knowledge, religion and morality that forms the basis of the Anangu people's values and how the Anangu conduct their lives and look after their country.

World Heritage Convention (WHC) Convention for the Protection of the World Cultural and Natural Heritage.

Summary and Recommendations

Summary

Background

1. The Director of National Parks is appointed under section 514F of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).¹ The Director's functions are, amongst other things:

- to administer, manage and control Commonwealth reserves and conservation zones;
- to protect, conserve and manage biodiversity and heritage in Commonwealth reserves and conservation zones.

The Director is assisted by the Parks Australia division within the Department of Environment and Heritage. Functions are also delegated to the Marine and Water division of Environment Australia.

2. Currently, 19 Commonwealth reserves are declared under the EPBC Act comprising six terrestrial national parks, one botanic garden and 12 marine parks and reserves totalling some 23 million hectares across Australia, its external territories and Commonwealth marine areas. The EPBC Act provides for the protection and management of the natural and cultural features of declared parks and reserves. Parks Australia's stated goal is the 'conservation and appreciation of Commonwealth reserves'.²

3. In 2000–01 some 1.5 million people visited Commonwealth national parks and reserves. The Director of National Parks administers total assets of \$105 million³ with net operating costs of \$41.77 million⁴. Title to the land in the three major parks of Uluru-Kata Tjuta (Northern Territory), Kakadu (Northern Territory) and Booderee (NSW south coast) is held on behalf of the traditional owners of that land (by a Trust in the case of Kakadu and Uluru-Kata Tjuta and a Council in the case of Booderee).⁵ These are then leased back to the Commonwealth for the purposes of national parks under joint management arrangements and boards of management. Each park or reserve proclaimed under the EPBC Act is required to have a management plan. The plans must meet reserve management

¹ The Director of National Parks is a 'corporation sole' (an individual invested with the qualities of a corporation). The Director is appointed by the Governor-General under the Environment Protection and Biodiversity Conservation Act 1999 and is subject to the Commonwealth Authorities and Companies Act 1997 (CAC Act)

² Portfolio Budget Statements 2001–02, p. 215.

³ Director of National Parks Annual Report 2000–01, p. 66.

⁴ Director of National Parks Annual Report 2000–01, pp. 21–22.

⁵ Currently, some fifty per cent of Kakadu National Park is Aboriginal land.

principles set out in the EPBC Regulations. Plans are underpinned by operational plans covering matters such as fire management, weed or feral animal control.

Audit objectives, scope and methodology

4. The audit objective was to examine and report on the adequacy of the planning, management and reporting systems which support the Director of National Parks in the achievement of required functions under relevant legislation and agreed outputs and outcomes. The audit had a particular focus on the management of strategic risks to the conservation of natural and cultural heritage, and the management of business risks such as contract management.
5. The scope of the audit covered the core business operations of Parks Australia relevant to the audit objective. The methodology used for the audit was based on a review of the provisions of relevant legislation including the EPBC Act, records within Parks Australia as well as a survey of stakeholders involved in program delivery.⁶

Overall conclusions

Planning and corporate governance structures

6. Parks Australia has a complex planning and corporate governance structure influenced by international obligations, legislation, lease agreements, and statutory management plans. The planning and management of natural and cultural heritage conservation is challenging due to the remote location of many parks and the particular pressures and sensitivities arising from policies and practices that impact on local communities and a wide range of stakeholders.
7. Overall, Parks Australia's existing planning mechanisms provide a good foundation for an efficient and effective planning system. Parks Australia's planning framework has a number of strengths. The plans identify some of the strategic risks to natural and cultural heritage in the parks. The latest management plans have clear links to the EPBC Act and the reserve management principles in the regulations. Management plans have also shown improvement in quality over time.
8. However, one of the most significant shortcomings is the absence of key performance indicators and measurable targets related to agency or park objectives. This makes it very difficult to measure the effectiveness of actions

⁶ The ANAO conducted a survey of 97 Parks Australia stakeholders. The survey sought stakeholder views on the major risks to natural and cultural values in Commonwealth national parks. Stakeholders were also asked to discuss what they considered were the major business risks faced by Parks Australia. The ANAO received 44 survey responses.

against the natural and cultural heritage objectives. At the park level, clearer priority setting would assist the agency in dealing with the hundreds of actions included within the statutory management plans. Consideration could also be given to streamlining the number of actions in future management plans for Uluru-Kata Tjuta and Kakadu consistent with the needs of key stakeholders.

9. The ANAO found that generally, there is an alignment between the lease agreements and actions listed in the management plans. However, it would be desirable to have more specific timeframes or targets for actions in the plans stemming from the lease agreements. The joint management process with traditional owners is acknowledged as evolutionary and the Commonwealth has been a leader in this area. However, the practice of joint management could be clearer and better focussed on matters relevant to the higher order risks. Expanding governance training opportunities for Board members and staff in line with Corporate Governance better practice could assist in improving the capacity of the Boards to meet their obligations under the EPBC Act, as well as strengthening business management across the parks.

Management of natural and cultural heritage

10. The management of natural and cultural heritage in the parks examined has produced good results in important areas such as fire management and in working with traditional owners on aspects of cultural heritage management. These results demonstrate compliance with the reserve management principle aimed at 'minimising as far as practicable, potential adverse impacts on the natural, cultural and social environment'. However, there needs to be a more systematic approach to the management of wildlife monitoring and feral animal control. In particular, measuring the impacts of introduced species programs on wildlife would allow Parks Australia to better demonstrate value for money results. While Parks Australia has some good baseline data, monitoring of wildlife and threats to biodiversity currently tends to be opportunistic and focussed on specific operational issues, rather than occurring systematically at the landscape scale⁷ or linked to long-term trends. Consequently, it is very difficult to make any broad assessment of changes (if any) in the condition of the parks over time.

11. Visitor management is a particular challenge as, under reserve management principles, parks should be managed 'at a level that will maintain the reserve or zone in a natural or near natural state'. There is an inherent tension between the competing interests of natural and cultural heritage conservation on the one hand and tourism development on the other. Tourism levels for the

⁷ The landscape scale reflects the fact that within a national park there may be several different landforms with different habitats and ecological communities. For example, within Kakadu National Park there are tidal flats, floodplains and lowlands as well as a plateau complex and escarpment.

three jointly managed parks are generally limited by tourism demand and the capacity of local facilities. However, it is unclear to what extent the growth in visitor numbers is sustainable—particularly in the longer term.

Business support services

12. Business support services examined in the audit were contract management and human resource management. Systems for the control and accountability of contracts are sound in principle. In addition, savings have been achieved as a consequence of out-sourcing functions, as well as from implementing effective fraud control. However, tighter and more frequent financial monitoring and internal reporting of expenditure on contracts would minimise the risks of breaches of delegations and overspends in the future as well as assisting in end of year reconciliations. Human resource management in Parks Australia has been strengthened through the introduction of mechanisms such as cross-cultural training and the Performance and Development Scheme (PDS). The PDS links training programs to agency objectives as well as individual needs. However, a stronger focus on workforce planning for remote locations could assist in addressing high staff turnover at Uluru-Kata Tjuta and enhancing business continuity.

Performance reporting

13. Performance reporting provides the basis for demonstrating accountability under *Commonwealth Authorities and Companies Act 1997* (CAC Act). This requires the Director, amongst other things, to review performance on matters such as 'key financial and non-financial performance indicators' and 'factors, events, or trends influencing its performance'. Currently, Parks Australia's reporting is focussed on inputs and outputs across the parks. As such, it covers progress on important activities and provides a means of assessing emerging risks. However, no key performance indicators are used consistently across the parks to provide the basis for internal benchmarking or for assessing whether overall objectives are being achieved. Nor is there sufficient quality information to support an agency-wide national report on outcomes.

14. A greater focus on those matters required under the CAC Act, could assist stakeholders to make informed judgements on Parks Australia's performance over time. The ANAO recognises that while issues and priorities differ across individual parks or reserves, the annual report should aim for greater consistency in reporting across the individual parks and major reserves.

15. In 1998, the Government agreed with the recommendations of the 1996 House of Representatives Environment Committee Report, *Managing Australia's*

World Heritage that a small number of key indicators should be identified for world heritage values, constantly monitored and reported on annually. The ANAO notes that Parks Australia is working with traditional owners as well as organisations such as the Office of the Supervising Scientist on the development of a landscape-wide monitoring program for Kakadu. The ANAO considers that this should be a high priority for Parks Australia to enable a quality performance report to be prepared by 2003—the date when an international report is expected. Consideration should then be given to including other national parks and reserves as soon as practicable after this date.

Director's Response

16. The Director of National Parks welcomes the conclusion that overall, Parks Australia's existing planning systems provide a good foundation for an efficient and effective planning system and that its planning framework is generally sound. The Director agrees broadly with the recommendations in this report and, in many instances, is already implementing processes and procedures to address them. Nevertheless, it should be emphasised that the capacity to address fully the recommendations made by the Australian National Audit Office will be conditional upon available resources.

17. As the report acknowledges, the Director of National Parks operates within a complex administrative environment, particularly in relation to joint management arrangements, and each park within the estate is different to the others. The expectation of traditional owners—the legal owners of the estates in the jointly managed parks—is that their values and priorities are properly recognised and incorporated into day-to-day park management practice. A key challenge in joint management is developing and maintaining a balance between indigenous and non-indigenous aspirations and business practices.

18. The Director welcomes suggestions on moving towards a more performance-based approach to management of Commonwealth reserves. The ANAO Report is a helpful contribution to this end. National and international experience confirms that application of performance assessment systems to management of protected areas is inherently difficult because of the many factors that operate on and within natural and cultural heritage systems. The Director will continue to work, in cooperation with other protected area management agencies within Australia and overseas, on ways in which this issue can be addressed.

Key Findings

Planning and Corporate Governance Structures— Chapter 2

Planning process

19. Parks Australia has a complex planning and corporate governance structure influenced by international obligations, five different Acts of Parliament, lease agreements, and statutory management plans. Management plans are explicitly required under the EPBC Act. At present, there are fourteen management plans in effect, and five in draft form, for the 19 areas declared.

20. Overall, management plans have shown progressive improvement in quality, with the Booderee plan being the best in terms of measurable aims (supported by baseline data) at the present time. The Ashmore Reef and Cartier Island plans also represent good practice in terms of risk management. The strengths of the current planning framework include:

- identification of strategic risks and actions to deal with them;
- recognition of cultural heritage and the importance of cultural issues for local communities;
- clear documentation of the reasons why the area has been set aside as a park or reserve;
- the allocation of parks and reserves to management categories required under the EPBC Act;
- links between management plans and inventories of flora and fauna relevant to each park; and
- a broad consultation process involving stakeholders.

21. The current shortcomings of the planning framework are the:

- absence of key performance indicators and targets within an agency-wide strategic plan;
- absence of performance indicators and measurable targets at the park, reserve or conservation zone level;
- need for better priority-setting particularly in management plans with hundreds of specified actions, and coordination in relation to species management; and
- absence of mechanisms to deal with new or redundant issues.

22. Parks Australia could consider the above matters within the context of the current development of a park management effectiveness program.

Leases

23. The jointly managed parks contain Aboriginal lands leased to the Director of National Parks for 99 years. As well as setting down the amount of rent to be paid for the use of the land, the leases include specific provisions on a number of issues, including the employment and training of traditional owners in park management. While the review of leases is not automatic, they have been reviewed every five years or so as opposed to the seven year time frame for the management plans. Generally, there is a reasonable alignment between the lease agreements and the actions in the management plans. Nevertheless, it would be desirable to have more specific timeframes or targets for actions in the plans stemming from the lease agreements.

Boards of management

24. The boards of management of Kakadu, Uluru-Kata Tjuta and Booderee national parks comprise a majority Aboriginal membership nominated by the traditional Aboriginal owners, together with the Director of National Parks and representatives of the tourism industry, a conservation expert and the relevant government administration. While the EPBC Act outlines a clear definition of the roles and responsibilities of the boards, in practice, a high degree of ambiguity exists in the application of the joint management arrangements.

25. In part this reflects the different values and perceptions of participants. However it also reflects the limited information available to Board members. Board members are not advised of their duties, responsibilities and obligations in their letter of appointment, however, Parks Australia has advised that oral briefings are provided to some members in accordance with their preferences. Minutes of board meetings are recorded but Parks Australia staff are not routinely advised of outcomes—even where they have a professional interest in the actions arising. While Boards of Management, such as the Uluru-Kata Tjuta Board, have requested minutes be maintained with a high level of confidentiality, there is scope for more clearly disseminating the substance of the actions arising.

26. Parks Australia has indicated that the effectiveness of joint management arrangements is challenging due to cross-cultural sensitivities, issues associated with English language proficiency and varying levels of literacy. Cross-cultural issues are also about non-indigenous staff/stakeholders and their appreciation of indigenous value systems and making provision for a non-English business place.

27. While recognising the efforts that have been made by Parks Australia, the ANAO considers that across all jointly managed parks there is a need to enhance the effectiveness of information and administrative support provided to Board members and to the Parks Australia staff with whom they interact. For example, there could be value in making roles, responsibilities and desired performance outcomes for joint management explicit in schedules to revised lease agreements along with legal requirements under the EPBC Act.

Management of Natural and Cultural Heritage— Chapter 3

The management of threatening processes

Fire

28. The risk to natural heritage from fire is a major consideration for terrestrial park managers. However, fire is also a natural feature of the environment and is one of the most complex management issues in the jointly managed parks. Traditional owners have strong views about fire and its role in landscape and cultural continuity. Fire management is a good illustration of the need for adaptive approaches to natural and cultural heritage management. Needs and priorities will vary year by year according to seasonal and other external factors. Fire management practices reviewed during the course of the audit were sound, for example Parks Australia demonstrated that it was effective in managing the threats and risks posed by the bushfires impacting on Booderee National Park during the summer of 2001–02. However, natural resource managers should ensure that future fire management plans include clearer targets and indicators linked to overall conservation objectives, to allow assessment of achievements over time.

Feral animals

29. Feral animals are a significant threat to both natural and cultural heritage due to their potential impact on local habitats and species. Feral animal control actions are an important element in all the management plans. There are significant numbers of introduced animals in all the parks (such as foxes, cats and dogs) as well as cane toads in Kakadu and crazy ants on Christmas Island. In some cases feral animals have economic value for traditional owners. For example, rabbits and cattle are a food source. This introduces tensions in the eradication process and requires balance in any control program.

30. Overall, Parks Australia's control of feral species has been effective in some areas. The control of crazy ants on Christmas Island is proving effective although eradication has yet to be achieved. In a number of cases, success has been limited

because the control measures do not yet exist. This point is a particular constraint on dealing with the cane toad which is currently the major feral animal challenge facing Kakadu National Park. While cane toads are not yet in Kakadu in any significant numbers, it is likely to be the case in the near future. This is likely to reduce populations of natural predators such as quolls and goannas. These populations are being monitored by Parks Australia and some \$1 million has been allocated from the Natural Heritage Trust for research into the viability of achieving biological control. The results of the research are expected towards the end of 2002. However, for the foreseeable future there is no effective method of preventing a negative impact on park wildlife.

31. At Booderee, Parks Australia was successful in reducing fox numbers during 2000-01. While fox numbers were reduced, the impact of the baiting program could not be clearly established as monitoring of wildlife numbers was not undertaken prior to the baiting program being implemented.

32. A further issue is that the persistent nature of feral species both within and outside of the parks (such as camels in southern areas of the Northern Territory) means that it is impractical to totally eradicate feral species populations in mainland parks. This highlights the importance of finalising feral species strategies in parks such as Kakadu and Uluru-Kata Tjuta so that priorities can be more clearly set, resources earmarked over successive years, cost effective monitoring introduced systematically to minimise the impacts on the environment of the parks, and assist in participation in regional control strategies. Demonstrating value for money outcomes as part of regular monitoring of measures to control feral species should also be a priority.

Weeds

33. Weeds are one of the most significant threats to parks' ecosystems Australia-wide. A weed management strategy exists in each of the jointly managed parks although few have any targets or timeframes or specific financial allocations. Weed control is a particularly difficult challenge for all park managers. Parks Australia is achieving good results in some areas, particularly the management of *Mimosa pigra* in Kakadu. Significant steps have been taken to control Bitou Bush in Booderee, using best available practice but measures to date have not proven effective in the control of the weed which continues to spread through vegetation communities in the park. In Uluru-Kata Tjuta, there is concern, particularly amongst stakeholders, that the control of Buffel Grass has not been given sufficient priority. This is important in that Buffel Grass threatens biodiversity in the park.

34. There needs to be a more systematic approach to the management of weeds through the implementation of weed management strategies that link targets

and indicators at the local level to agency-wide objectives. Implementation strategies should include clearer priorities, and specify timelines and resources for achieving these, to allow parks to report systematically on the value for money achieved as well as better practice.

The rehabilitation of former mine-sites in Kakadu

35. A particular issue for Kakadu is the potential impact of former uranium mine sites on the natural heritage of the park. There are approximately 20 former mine sites located within the national park, with varying degrees of contamination. These sites were mined in the 1950s and 1960s when there were minimal requirements for rehabilitation or environmental protection. The long-term aim of rehabilitating these sites was included as a key feature of the Gunlom Aboriginal Land Trust lease, which forms part of the Kakadu National Park area. Parks Australia considers that the risk to people is negligible. At the present time, it is considered impractical to restore all of the former mine sites to pristine condition for a variety of technical, financial and cultural reasons. The likely cost of the rehabilitation is unknown at the present time although the cost of developing rehabilitation plans alone has increased due to the expanding scope and significance of the project. This highlights the importance of planning and scoping efforts in the early stages of significant or complex projects.

Monitoring natural heritage

36. Monitoring natural heritage is an important compliance issue in relation to the EPBC Act as well as, in relation to Kakadu and Uluru-Kata Tjuta National Parks, meeting international environmental obligations under the World Heritage Convention. It is also essential for the assessment of change (if any) over time. Across the major parks, monitoring of natural heritage tends to be opportunistic and focussed on specific issues, rather than occurring systematically at the landscape scale. While the management plans may specify particular monitoring actions to be carried out, in general these actions are not prioritised or linked to long-term trends. This means that it is difficult for implementation plans, where these exist, to demonstrate that resources are targeted to areas of greatest need. It is consequently difficult to make an assessment of the extent to which conservation of natural and/or cultural heritage has been achieved over the life of a particular plan.

37. It is anticipated that work commenced by the Parks Performance and Planning Task Force may provide the basis for addressing the gaps in monitoring identified in this audit report. This should be a priority for Parks Australia.

Wildlife

38. The EPBC Act contains important provisions for identifying and monitoring biodiversity and introducing recovery plans for listed threatened species. Generally, parks have inventories of wildlife species linked to the plans (or draft plans) of management. Kakadu's current major species management efforts are related to the impact of cane toads, so northern quolls and goannas are a particular focus for wildlife management. Eleven fauna species are currently listed as threatened compared with the eight species listed when the current management plan was introduced in 1999. A park specific monitoring plan is in place for only one of eleven relevant species listed as endangered or vulnerable. In 2001, Kakadu commenced a park-wide fauna survey to provide additional data on the distribution and relative abundance of mammals, birds, reptiles and amphibians. The results are anticipated towards the end of 2002.

39. Uluru-Kata Tjuta conducted a similar vertebrate re-survey in 1999 and reported in July 2001. The report indicated no concern over the general health of the park's ecosystem and vertebrate communities but it commented on the importance of monitoring Buffel grass and ensuring that data collected by rangers is analysed to improve the management of feral pests and the protection of wildlife.

40. Of the three currently listed threatened species at Uluru-Kata Tjuta, there is a recovery plan for the Mulgara and draft recovery plans are being progressed for the Marsupial Mole and the Great Desert Skink. In Booderee, there is detailed survey information and inventories on fauna from which species are listed as either vulnerable or endangered under the EPBC Act. However, there are no final recovery plans in place for listed threatened species although draft recovery plans have been prepared for the Eastern Bristlebird and Gould's Petrel.

Managing cultural heritage

41. Cultural heritage encompasses both tangible and intangible sites and heritage. For example the 15 000 rock art sites at Kakadu illustrate tangible heritage while the history, language, skills and knowledge of local indigenous communities exemplify intangible heritage. Management is an area of great sensitivity in terms of balancing the views of traditional owners who live in the park with the expectations and requirements of Commonwealth legislation and contemporary management practice. Both are important in terms of providing assurance as to the performance of Parks Australia over time. The balance is also important because both Uluru-Kata Tjuta and Kakadu are listed under the World Heritage Convention as sites of cultural as well as natural significance.

Cultural heritage protection strategies

42. The management plans for Uluru-Kata Tjuṯa and Kakadu provide an important framework for the protection of cultural heritage. Uluru-Kata Tjuṯa is the only park to have a formal operational plan for cultural sites. The plan contains specific action plans that relate to the aims outlined in the management plan, assign specific time lines to projects and specifies monitoring and reporting arrangements. Uluru-Kata Tjuṯa has also been innovative in its approaches to joint management relationships between park staff and traditional owners. For example, park managers have introduced the concept of *malpas* to enhance the way that park staff and traditional owners work together.⁸ Uluru-Kata Tjuṯa and Kakadu have cultural centres that assist in informing visitors about the cultural heritage of the parks. Booderee is yet to establish a cultural centre and this has been a priority for the Board of Management.

43. Kakadu has been proactive in terms of its liaison with tour operators to attempt to reduce the risk of damage to cultural heritage through insensitive tourism. Both Kakadu and Uluru-Kata Tjuṯa have recently focused on the maintenance of oral histories and have developed separate strategies for achieving this. The priority for Parks Australia is the development of better mechanisms for sharing information on innovative or good practice in cultural heritage protection.

Monitoring cultural heritage protection

44. Documentation of cultural heritage sites is very sensitive because of the cultural significance of many sites. With the consent of traditional owners, park staff have documented some cultural sites in all three jointly managed parks. For example, in Kakadu 5 000 of the estimated 15 000 rock art sites have been documented by parks staff. At Uluru (within Uluru-Kata Tjuṯa) a Geographic Information System (GIS) electronic map of cultural sites has been established. Cultural heritage at Booderee was documented in an academic paper that examined changes in archaeological sites from 1976 to 1996. The study indicated that the number of disturbed or destroyed sites more than doubled within this period. While recognising the challenges and complexities of cultural heritage monitoring, there remain major gaps in terms of monitoring changes or otherwise in cultural heritage. A more focussed and consistent approach to the application of core indicators would assist in better monitoring the effectiveness of park management practices. The ANAO considers that there is considerable scope for measuring aspects of cultural heritage and that the traditional owners, boards of management and local indigenous communities have the major role to play in this area.

⁸ 'Malpas' may include traditional owners advising park managers and staff as well as park staff transferring skills to Aboriginal people.

Compliance and enforcement

45. Compliance with, and enforcement of, the EPBC Act has been a major issue for both the terrestrial and marine parks. During the course of the audit the compliance and enforcement plan has been in the process of substantial revision. A new draft plan is currently being considered for implementation that meets the requirements of the EPBC Act. Environment Australia has also developed a compliance and enforcement strategy for the Department as a whole, and both Parks Australia and the Marine and Water Division are currently reviewing and revising program-specific compliance and enforcement plans that are built on risk assessments for each park or marine protected area. This review is anticipated to be completed by June 2002.

46. Some of the highest risks for Commonwealth national parks and reserves include: illegal fishing (Booderee, Kakadu and marine parks); illegal immigration (northern marine parks); breach of permit conditions by tour operators (all major parks); enforcing climb closures at Uluru; fee evasion and theft (all major parks). In the last 12 months, there have been no convictions for offences in either Booderee or Uluru-Kata Tjuta, and four convictions in Kakadu.

47. The introduction of the EPBC Act in 2000 has generated significant challenges in terms of compliance and enforcement, with new requirements for enforcement activity particularly as a consequence of the requirements to consider the precautionary principle in relation to actions and permits. As a result, Parks Australia has undertaken a broad scale restructuring within existing resource levels. Parks Australia is aiming to have dedicated compliance and enforcement officers in each of the major terrestrial parks. However, at present, only Kakadu and Booderee have been able to meet this target. A position for a compliance and enforcement officer with national responsibilities has been established and staffed in the Darwin Office.

48. Compliance and enforcement matters have largely been managed on an individual park basis in the past. Compliance and enforcement databases are under development in both Kakadu and Booderee. Access to these databases is limited to staff in each individual park rather than on an agency-wide basis. There would be value in extending access to information on compliance and enforcement issues in each park to appropriate officers on an agency-wide scale, particularly to the officer with national responsibilities. The ANAO considers that, in general, Parks Australia should strengthen the consistency and priority given to planning, management and reporting of compliance and enforcement across parks.

Visitor management

49. Visitors provide a significant revenue stream for Parks Australia, and also for traditional owners. In 2000–2001, \$9.76 million was raised from some 1.5 million

visitors to Commonwealth national parks and reserves under the Director's control. Visitor numbers have increased significantly over time. Tourism is important because of the revenue and job opportunities it brings to people in rural and remote regions of Australia. However, there are potential risks to visitors as well as natural and/or cultural heritage. The risk to visitors of injury or death in Commonwealth parks and reserves is low when assessed against total visitor numbers. However, a relatively small number of deaths and serious injuries do occur. In 2000–01, there were 24 accidents or incidents involving visitors to Commonwealth national parks, compared with 14 in 1999–2000.

50. Parks Australia recognises visitor management as a high priority. Visitor management is included in the management plans for all of the major Commonwealth national parks. Incidents and accidents involving visitors are recorded on file by individual parks however there is no central data base for monitoring trends and disseminating better practice. There are substantial tensions between traditional owners and tourism interests over access to sensitive sites and total numbers of visitors. While area plans exist for Kakadu National Park to manage visitor numbers within limits, these are difficult to enforce and a wider range of mechanisms to manage visitors within optimum levels needs to be considered. While tourism numbers are not large by international standards, and within acceptable limits most of the time, there have been instances at peak times of camp site limits being exceeded at Kakadu, problems of degradation from poor siting of facilities at Uluru-Kata Tjuta and sewerage capacity problems at Booderee (which have recently been addressed). This was a concern noted in the comments from some stakeholders surveyed during the audit and highlights an important priority for strategic park management.

51. The completion of the accreditation of tour operators in Parks Australia North has not been progressed due to difficulties in reaching a consensus with the Northern Territory Parks and Wildlife Commission on a Territory-wide system. In this case, a modified approach to the accreditation issue may provide an interim step in implementing the relevant actions from the management plan. As the implementation of an accreditation scheme is prescribed in both the Uluru-Kata Tjuta and Kakadu management plans endorsed by Parliament, Parks Australia will need to consider a mechanism for managing and reporting if the decision is made not to proceed with the accreditation scheme. As discussed earlier, this is a current shortcoming in the Parks Australia planning framework.

52. The management of visitor numbers is particularly important as one of the Australian IUCN reserve management principles applicable to national parks indicates that visitor use 'should be managed at a level that will maintain the reserve or zone in a natural or near natural state'. Mechanisms to achieve this include: pricing policies; licensing; ballot systems; and setting maximum visitor

caps. The ANAO recognises that capacity is a dynamic concept that could vary according to impacts, investment in infrastructure, the site characterisation and other relevant issues.

Business Support Systems—Chapter 4

Parks Australia internal administrative structure

53. The Director of National Parks performs his functions with the assistance of two branches with responsibilities for the terrestrial parks: Parks Australia North (PAN), managed from Darwin, and Parks Australia South (PAS), managed from Canberra (marine park responsibilities are managed by the Marine and Water Division of the Department on behalf of the Director.) The individual parks report to the Director of National Parks through PAN and PAS depending on their geographic location. In the past, the individual parks have operated with a large degree of autonomy. This reflects the remote locations of many of the parks and the need for local park managers to respond quickly to emerging issues.

54. However, this has resulted in different parks developing different practices for common business processes. While this approach allows for innovation, it requires adequate support systems and the consistent sharing of knowledge of business risks and performance. The ANAO found that delays in finalising the CEO Instructions following the introduction of the EPBC Act in 2000 have also not assisted in strengthening common approaches to business management across parks. This is a key plank in good corporate governance and is important in establishing a consistent alignment in administrative procedures and practices across different parks.

Contract management

55. Some \$4 million was managed through contracts in the jointly managed parks in 2000–01. The ANAO reviewed the most financially significant contracts in each of the jointly managed parks. Overall, the process for establishing contracts in Parks Australia is consistent with good practice. There are formal delegations and approval for contracts of different value, and dedicated contract management staff. Expert consultants generally scrutinise tender documents, reasons for decisions are documented, and contracts generally include standard clauses protecting Commonwealth legal liabilities. In addition, savings have been recorded as a consequence of out-sourcing previous park functions such as entry stations, information services, cleaning and maintenance. For example, the out-sourcing of entry stations at Kakadu saved \$216 000 per annum (approximately). At Booderee, some 25 indigenous Wreck Bay Community

members are now employed to undertake a range of park service contracts at a lower overall cost to Parks Australia.

56. However shortcomings in particular aspects of the design and implementation of contract monitoring and control were noted in the course of the audit. These included the absence of standard form contracts for two major service provision agreements in Kakadu; some instances of delegations being exceeded for contracts requiring Ministerial approval (which constitutes a breach of section 514D(5) of the EPBC Act); inconsistent, and in some cases inadequate, monitoring of expenditure on contracts; delays in payments to contractors, and the absence of a financial system capable of monitoring and reporting on these; and, the need to strengthen the consistency of quality control across parks. The ANAO considers that these matters should be high priorities for Parks Australia.

Human resource management

Workforce planning

57. To be successful in achieving their objectives agencies should be forward looking and position themselves to ensure they have the staff with the necessary skills and knowledge. However, the recruitment and retention of staff has been an ongoing challenge for Parks Australia. To some extent, this is due to the remote location of Commonwealth national parks and reserves as well as the shortage of housing and the limited range of services available. Uluru-Kata Tjuta has had particular problems with the turnover of Park Managers. Turnover of senior managers also affects joint management arrangements as traditional owners find it difficult to build relationships with Park Managers and staff who are often not there for long. In addition, there is significant potential for the loss of corporate knowledge and a serious inability to complete projects due to understaffing. Workforce planning also has an important role to play in employment and training obligations under the leases for the jointly parks. Parks Australia is currently considering options for increasing staff retention.

58. To address the workforce issues, the ANAO notes that a workforce planning strategy could be developed as part of Environment Australia's Strategic People Management Plan. While there may be similarity between the wider Environment Australia approach and office-based Parks Australia staff, field staff are a different matter and would require separate plans for each park.

Aboriginal staffing

59. Under the lease agreements, the Director of National Parks is required 'to take all practicable steps to promote Aboriginal administration, management and control of the Park'. Increased traditional owner participation in the delivery

of park management is also a key indicator identified in the Portfolio Budget Statement 2001–02. Aboriginal staffing levels are estimated to range from 38 per cent at Kakadu, to 45 per cent at Uluru-Kata Tjuta, to 51 per cent at Booderee. Figures to indicate change over time are generally problematic because they are self selected and may understate true numbers. From the best available figures, the total number of Aboriginal staff has increased from 61 in 1995–96 to 80 in 2001–02. However, they are generally clustered at the more junior levels of park administration. This limits the capacity of the Director to meet his longer-term obligation to achieve Aboriginal administration, management and control of the parks under the lease agreements.

60. An additional challenge in this area is balancing indigenous and non-indigenous competencies. Both Kakadu and Uluru-Kata Tjuta, have implemented specific initiatives to support indigenous staff. Parks Australia has also developed the Indigenous Career Development and Recruitment Strategy. This Strategy is designed to assist indigenous staff and enable the Director of National Parks to fulfil his role under the lease agreements. The ANAO considers that, while these are positive initiatives, there would be benefit in strengthening efforts to train Aboriginal staff for middle management positions which could improve the alignment between Parks Australia’s strategic goals, including those derived from lease agreements, and the human resource capacity required to achieve them.

Training and development

61. Training in Parks Australia is evolving towards a more strategic approach to people management development—particularly since the introduction of the Performance and Development Scheme (PDS). However, during the course of the audit the ANAO noted that there were still some gaps in implementation. Staff do not always receive mandatory training, including computer literacy and OH&S-related training such as handling chemicals and operating machinery. There are some instances of staff declining to undertake mandatory training, for example, there are a number of long-term abstainers in Kakadu who have not attended cross-cultural training. While training needs are identified in performance agreements and individual development plans, training officers do not consistently have access to these plans or to summaries of training needs identified in these plans. In general, Parks Australia should give a higher profile to key people management mechanisms including the PDS.

Performance Reporting—Chapter 5

62. Performance reporting provides the basis for demonstrating accountability under Commonwealth legislation. The Orders made by the Minister for Finance under the CAC Act and the provisions of the EPBC Act largely constitute the legal reporting requirements. For example, the CAC Orders require the Director of National Parks, amongst other things, to review how the authority has performed in the financial year in relation to matters such as ‘key financial and non-financial performance indicators’ and ‘factors, events, or trends influencing its performance over the financial year and in the future’, including the risks and opportunities that it faces and the strategies adopted or proposed to be adopted to manage those risks and opportunities’.

63. Currently, Parks Australia’s reporting is focussed on inputs and outputs across the parks. As such, it covers progress on important activities and provides a means of assessing emerging risks. However, there are no generally reliable performance indicators used consistently across the parks that could provide the basis for internal benchmarking or for assessing whether overall objectives are being achieved. Nor is there sufficient quality information to support an agency-wide national report on outcomes. Quantitative data is reported, such as visitor numbers and the percentage of Aboriginal staff employed in individual parks. However, there are no performance indicators or analysis and reporting of progress against any milestones achieved or targets set. This also limits the Director’s capacity to report effectively on Ecologically Sustainable Development (ESD) as required under section 516A of the EPBC Act.

64. A greater focus on those matters required under the CAC Orders, could assist Parliament and other stakeholders including Boards of Management to make informed judgements on Parks Australia’s performance over time. The ANAO recognises that while issues and priorities differ across individual parks or reserves, the annual report should aim for greater consistency in reporting across the individual parks and major reserves to assist Parliament in judging overall performance from the annual report. Where lead times are long, intermediate outcomes can be used to provide some assurance that performance is on track.

65. A 1996 House of Representatives Committee report, *Managing Australia’s World Heritage*, found that the Australian Government’s reports to the World Heritage Committee were not based on systematic monitoring. It recommended suitable monitoring systems, and scrutiny of the results. In 1998, the Government agreed with these recommendations, and also considered that a small number of key indicators should be identified for world heritage values, constantly monitored, and reported upon annually.

66. The ANAO notes that Parks Australia is yet to establish systematic monitoring of world heritage listed parks, although steps have been taken to develop a landscape scale monitoring system in consultation with Traditional Owners. In addition, Australia is to report internationally on all properties listed before 1994 (which includes Uluru-Kata Tjuta and Kakadu National Parks) in 2003. The ANAO considers that the implementation of a monitoring and reporting program for all national parks should be a priority for Parks Australia.

Recommendations

The ANAO's recommendations, along with Parks Australia's responses, are set out below. More detailed responses are shown in the body of the report. The recommendations form part of a package for improved performance management of national parks and reserves. Consequently, there has been no attempt to assign priority to individual recommendations.

**Recommendation
No 1
Para. 2.16**

In order to strengthen strategic planning, the ANAO recommends that Parks Australia, as part of the current review of park planning and performance, establishes an integrated planning system with core performance measures across national parks and reserves that includes:

- (a) key performance indicators and targets as part of strategic planning for Parks Australia that documents significant outcomes and outputs relevant to natural or cultural heritage values, along with significant threatening processes and actions to address them;
- (b) core performance indicators, targets and priority actions to be addressed in the management plans at the park level, or in a subsidiary document to the management plans; and
- (c) a mechanism to ensure that, where an action in a management plan cannot be progressed, the Boards of Management (if applicable), and the Minister are advised of the reasons for the decision and the matter is reported in the Annual Report to the Parliament.

Director's Response: Agree.

**Recommendation
No 2
Para. 2.22**

In order to make more explicit the link between the lease agreements and the management plans, the ANAO *recommends* that Parks Australia ensures that:

- (a) all future management plans for jointly managed national parks specify targets and timeframes for achieving the commitments set down in the park leases; and
- (b) targets and timeframes developed for future management plans, together with the allocated financial resources, be included in operational plans at the national park or reserve level.

Director's Response: Agree.

**Recommendation
No 3
Para. 2.33**

In order to further develop joint management arrangements, the ANAO *recommends* that Parks Australia:

- (a) ensures that roles and responsibilities for each of the joint management partners are explicitly considered in future reviews of the lease agreements and are reflected in the terms and conditions of appointment for the members of the Park Boards of Management; and
- (b) expands the training program for members of Boards of Management by including a specific focus on their roles and responsibilities under the EPBC Act and other relevant legislation.

Director's Response: Agree.

**Recommendation
No 4
Para. 3.27**

In order to improve the management of natural heritage of Commonwealth national parks and reserves, the ANAO *recommends* that Parks Australia should give priority to finalising feral animal and weed control strategies where appropriate and explicitly linking financial and staffing resources to feral animal and weed control priorities identified at the agency and park levels. These should have time lines and provide the basis for determining value for money from feral animal and weed control.

Director's Response: Agree.

**Recommendation
No 5
Para. 3.41**

In order to strengthen the monitoring of natural heritage in Commonwealth national parks and reserves over time, the ANAO *recommends* that Parks Australia should give priority to the development and implementation of a comprehensive monitoring system at the agency and park level.

Director's Response: Agree.

**Recommendation
No 6
Para. 3.53**

In order to enhance wildlife conservation, the ANAO *recommends* that Parks Australia:

- (a) ensures that information collected for management purposes is analysed and acted upon as appropriate at the park level;
- (b) undertakes an analysis of the cost effectiveness of wildlife conservation measures in different parks so as to identify lessons learned and better practice; and
- (c) coordinates with Wildlife Australia so as to progress the development of recovery plans for threatened species in national parks.

Director's Response: Agree.

**Recommendation
No 7
Para. 3.76**

In order to enhance cultural heritage management, the ANAO *recommends* that Parks Australia:

- (a) documents and disseminates better practice in cultural heritage management across all national parks and reserves such as through the Parks Australia Forum; and
- (b) ensures, in consultation with traditional owners, that there is sufficient and consistent monitoring of cultural heritage sites and features to enable an assessment of the status of cultural heritage across all jointly managed national parks.

Director's Response: Agree.

**Recommendation
No 8
Para. 3.93**

In order to enhance the management of compliance with, and enforcement of, the *Environment Protection and Biodiversity Conservation Act 1999* the ANAO recommends that Parks Australia should:

- (a) extend access to information on compliance and enforcement issues (including permits, incidents and accidents) to appropriate officers in Parks Australia; and
- (b) ensure that major compliance or enforcement matters across all parks are included in the Director of National Parks annual report to Parliament, consistent with the requirements of the Orders made by the Minister for Finance under the *Commonwealth Authorities and Companies Act 1997*.

Director's Response: Agree.

**Recommendation
No 9
Para. 3.111**

In order to better balance visitor pressures with the conservation of natural and cultural heritage, the ANAO recommends that Parks Australia:

- (a) explicitly recognises in all future management plans and operational plans, mechanisms to manage visitors within optimum levels, particularly for sensitive sites within the parks; and
- (b) considers, as a priority, implementing an accreditation scheme or a modified permit scheme that includes incentives for voluntary completion of tour operator training endorsed by Parks Australia.

Director's Response: Agree with qualification to 9(a). The qualification relates to the difficulties in defining an optimum level of visitor use for different parks or sites within parks and the role that traditional owners play in joint management for the major parks. However, consideration will be given to implementing the intent of this recommendation within future management and operational plans.

Agree with 9(b).

**Recommendation
No 10
Para. 4.13**

In order to improve contract management practices, the ANAO *recommends* that Parks Australia:

- (a) ensures that there are standard form contracts or service level agreements in place for all contractual undertakings;
- (b) implements monthly financial monitoring and reporting on period and operational contracts;
- (c) standardises and strengthens financial monitoring and reporting controls at agency, branch and park level to improve the timeliness of payments to contractors and to enhance reconciliation at the end of financial year; and
- (d) enhances the consistency of quality control as a standard operational requirement for contract management.

Director's Response: Agree.

**Recommendation
No 11
Para. 4.26**

In order to strengthen human resource management practices, the ANAO *recommends* that Parks Australia:

- (a) considers, in conjunction with Environment Australia's people management branch, the development of a Workforce Planning Strategy for Parks Australia staff aimed at strengthening the alignment between Parks Australia's strategic goals and the human resource capacity required to achieve those goals;

and ensures that:

- (b) field staff undertake mandatory training as standard procedure; and
- (c) training officers are provided with information on training needs identified as part of performance agreement and development plans and regular reports are provided to the Director of National Parks on the cost-effectiveness of training field staff.

Director's Response: Agree.

**Recommendation
No 12
Para. 5.19**

In order to enhance compliance with the reporting provisions of the *Environment Protection and Biodiversity Conservation Act 1999* and the *Commonwealth Authorities and Companies Act 1997* in relation to natural and cultural heritage, the ANAO *recommends* that Parks Australia should:

- (a) incorporate in the Director of National Parks Annual Report an account of progress being made through the landscape-wide monitoring program; and
- (b) consider releasing periodically, a 'State of the Parks report' that provides an overview of Commonwealth park management, the treatment of major threatening processes and changes (if any) in the condition of important natural and cultural heritage matters.

Director's Response: Agree.

Audit Findings and Conclusions

1. Background

Legislation and policy framework

1.1 The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) came into operation in July 2000, and is the principal Commonwealth legislation for establishing and managing protected areas. The EPBC Act provides for the protection and management of the natural and cultural features of declared parks and reserves. It replaced five Acts: the *National Parks and Wildlife Conservation Act 1975*; the *Whale Protection Act 1980*; the *Endangered Species Protection Act 1992*; the *World Heritage Properties Conservation Act 1983*; and the *Environment Protection (Impact of Proposals) Act 1974*. Under amendments effective from January 2002, the EPBC Act now also includes the wildlife trade provisions previously covered by the *Wildlife Protection (Regulation of Exports and Imports) Act 1982*.

1.2 The Director of National Parks is appointed under section 514F of the EPBC Act.⁹ The Director's functions are, amongst other things 'to administer, manage and control Commonwealth reserves and conservation zones' and 'to protect, conserve and manage biodiversity and heritage in Commonwealth reserves and conservation zones'. The Director is assisted by the Parks Australia division within the Department of Environment and Heritage. Functions are also delegated to the Marine and Water division of Environment Australia. The Director is also subject to the provisions of the *Commonwealth Authorities and Companies Act 1997* (CAC Act).

1.3 Currently, 19 areas are proclaimed under the EPBC Act comprising six terrestrial parks, one botanic garden, and 12 marine parks and reserves totalling some 23 million hectares across Australia and its territorial waters. The Director of National Parks is also responsible for the management of Calperum and Taylorville Stations in South Australia and RAN Weapons Range Beecroft in New South Wales, although these areas are not proclaimed under the EPBC Act.

1.4 The Director of National Parks is assisted by Parks Australia. Wildlife Australia, within the Natural Heritage Division of the Department of the Environment and Heritage (the Department), also assists the Director where relevant. The Marine and Water Division of the Department manages marine

⁹ The Director of National Parks is a 'corporation sole' (an individual invested with the qualities of a corporation). The Director is appointed by the Governor-General under the *Environment Protection and Biodiversity Conservation Act 1999* and is subject to the *Commonwealth Authorities and Companies Act 1997* (CAC Act).

parks on behalf of the Director. Three parks (Kakadu, Uluru-Kata Tjuta and Booderee) are managed jointly with their Aboriginal owners under formal lease agreements. The lease agreements are between the Director and traditional owners and require the Director to take all practical steps to promote indigenous management and control of national parks. This is achieved through a range of administrative and operational functions, including a Board of Management with majority Aboriginal membership¹⁰. In addition, the Director of National Parks promotes, where possible, Aboriginal employment and training, and contracting to Aboriginal enterprises.

1.5 The goal of Parks Australia is the ‘conservation and appreciation of Commonwealth reserves’. The Portfolio Budget Statements note that the agency’s effectiveness is assessed against the extent to which:

- the Director’s statutory responsibilities under the *Environment Protection and Biodiversity Conservation Act 1999* are met;
- Commonwealth reserves are managed according to national and international best practice;
- the conservation of the natural and associated cultural heritage of Australia’s indigenous people is actively promoted through joint management arrangements;
- effective working arrangements are fostered through consultative and advisory fora to implement conventions and national strategies concerned with the management of national parks and other reserves;
- Commonwealth participation in key protected area fora, both national and international, is effective;
- there is better understanding and appreciation of Australia’s protected areas and their natural and cultural heritage; and
- there is a cooperative community participation in the management of national parks and other reserves.¹¹

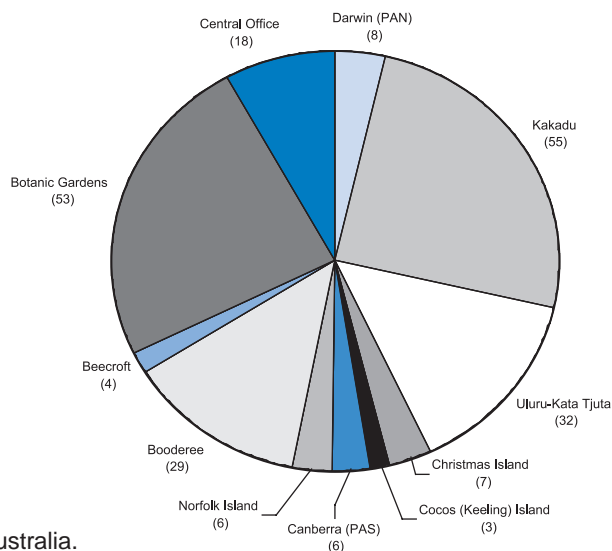
1.6 There are 221 equivalent full-time staff engaged in reserve management at sites in Canberra, the Northern Territory, Jervis Bay and external territories. Central office provides coordination across the agency while Parks Australia North (PAN) and Parks Australia South (PAS) provide branch level coordination for northern and southern parks respectively as set out below in Chart 1:

¹⁰ The structure and composition of the Boards of Management varies from park to park, although membership for all three Boards includes the Director, and a majority of Aboriginal people nominated by traditional owners.

¹¹ Portfolio Budget Statements 2001–02, Environment and Heritage Portfolio, p. 220.

Chart 1

Staff distribution (actual)—Parks Australia—2001–02



Source: Parks Australia.

1.7 An estimated 1.5 million visitors enter the parks each year. The Director of National Parks administers total assets of \$105 million¹² with net operating costs of \$41.77 million¹³. Table 1 outlines Budget actuals and estimates.

Table 1

Total Budget estimates (Parks Australia)

Program description	2000–01	2001–02	2002–03	2003–04	2004–05
	actual	estimate	estimate	estimate	estimate
	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)
Commonwealth Parks and Reserves	60.6	54.9	55.7	56.8	58.0
National Reserve System Program ¹	32.0	15.3	1.6	0	0
Australian Biological Resources Study ¹	5.0	4.6	4.6	4.6	4.7
Indigenous land management facilitators ¹	1.3	0.6	0.2	0.2	0.2
International policy	0.4	0.4	0.4	0.4	0.4
Total	\$99.3	\$75.8	\$62.5	\$62.0	\$63.3

¹ Delegated functions from the Minister and/or Secretary for NHT and departmental funds

Source: Investing in Our Natural & Cultural Heritage, Commonwealth Environment Expenditure 2001–02, pp. 66 & 72.

¹² Director of National Parks Annual Report 2000–01, p. 66.

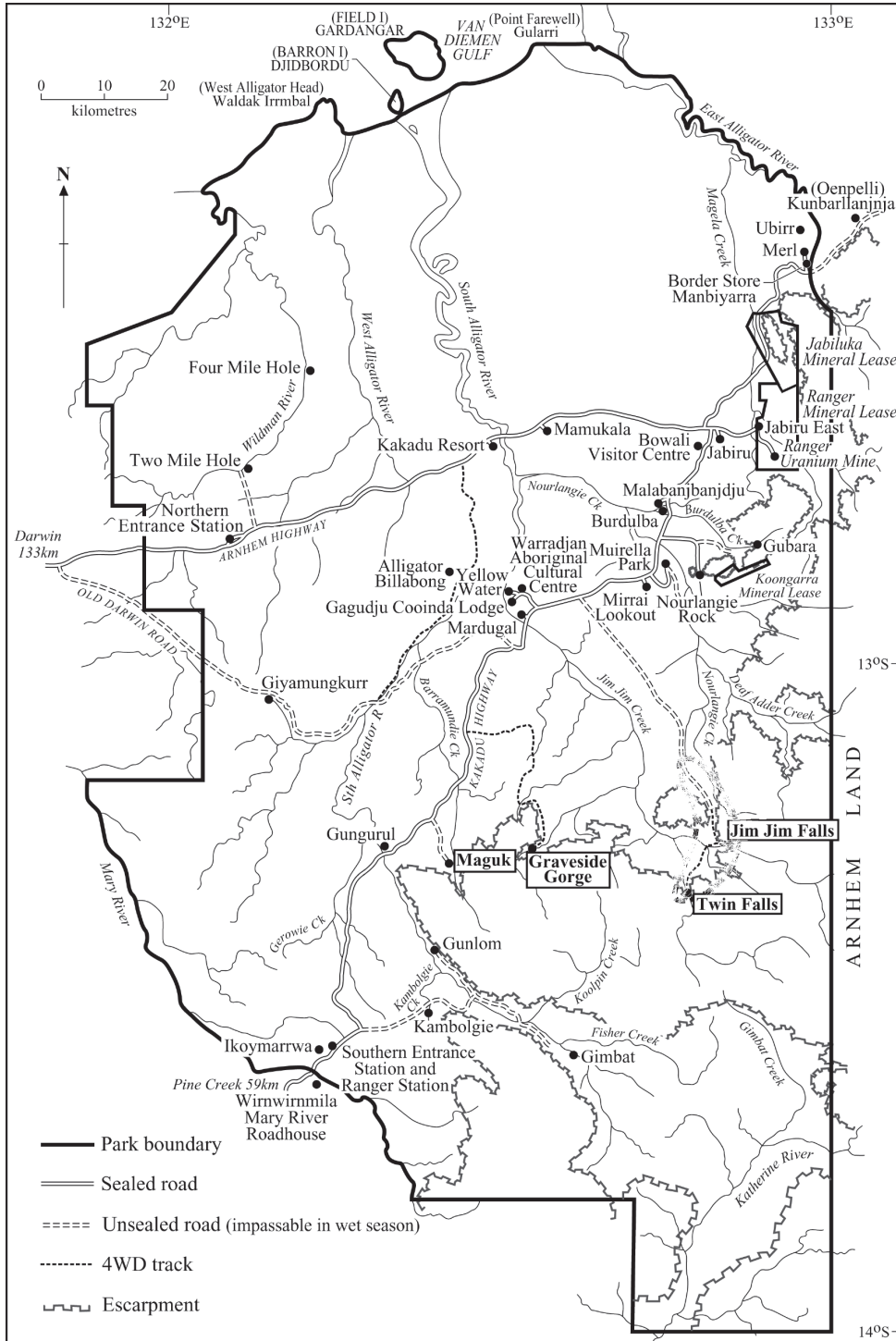
¹³ Director of National Parks Annual Report 2000–01, pp. 21–22.

Major parks

Kakadu

1.8 Kakadu National Park, in the Northern Territory, is Australia's largest national park at nearly 2 million hectares and is inscribed on the list of World Heritage properties under the World Heritage Convention for both its natural and cultural values. The first stage of the Park was declared in 1979 and inscribed on the World Heritage list in 1981. The second stage of the Park was declared in 1984 and inscribed on the World Heritage list in 1987. The third stage of the Park was declared progressively between 1987 and 1991. The whole of the Park was inscribed on the World Heritage list in 1992. Figure 1 illustrates the extent, and some of the key sites of Kakadu National Park. Approximately 50 per cent of Kakadu is Aboriginal land under the *Aboriginal Land Rights (Northern Territory) Act 1976* and leased to the Director. The whole park is managed jointly by the Director and the traditional Aboriginal owners. The Board of Management established for the park under the EPBC Act has ten Aboriginal members nominated by the traditional owners and four other members including the Director. The EPBC Act provides for a further member to be nominated by the Northern Territory government.

Figure 1
General Map of Kakadu National Park



Source: Parks Australia

1.9 Four management plans have been developed since the park was declared. In 2000–2001, approximately 183 000 fee-paying adults visited the park. The net operating cost was \$14.51 million, revenue from fees and charges was \$2.69 million and payment to the traditional owners was \$1.35 million.

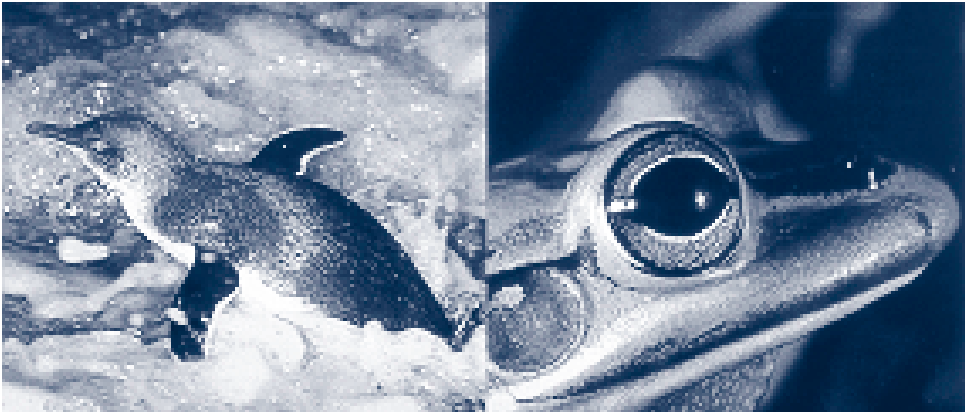
Uluru-Kata Tjuta

1.10 Uluru-Kata Tjuta National Park, also in the Northern Territory, is approximately 132 000 hectares and is inscribed on the list of World Heritage properties under the World Heritage Convention for both its natural and cultural values. The Park was declared in 1977 and inscribed on the World Heritage list for its natural values in 1987. In 1994 it became the second World Heritage property to be inscribed as a cultural landscape. In 1995 Uluru-Kata Tjuta National Park won the Picasso Gold Medal, UNESCO's highest award for outstanding efforts to preserve the landscape and Anangu culture and for setting new international standards for World Heritage management. The park is Aboriginal land under the *Aboriginal Land Rights (Northern Territory) Act 1976* and leased to the Director, and jointly managed by the Director and the traditional Aboriginal owners. The Board of Management established for the park under the EPBC Act has six Aboriginal members nominated by the traditional owners and four other members including the Director. The EPBC Act provides for a further member to be nominated by the Northern Territory government.

1.11 The fourth Uluru-Kata Tjuta National Park Plan of Management came into effect in 2000. In 2000–01, approximately 396 000 fee-paying adults visited the park. The net operating cost was \$11.32 million, revenue from fees and charges was \$5.9 million and payment to traditional owners was \$1.51 million.

Booderee National Park and Botanic Gardens

1.12 Booderee National Park covers 6 400 hectares of coastal landscape in the Jervis Bay Territory on the south coast of New South Wales. It was declared in 1992. The declaration was amended in 2000 to include the botanic gardens located within the park (formerly part of the Australian National Botanic Gardens). The park is Aboriginal land under the *Aboriginal Land Grant (Jervis Bay Territory) Act 1986*, leased to the Director and jointly managed by the Director and the traditional Aboriginal owners, the Wreck Bay Community. The Board of Management established for the park under the EPBC Act has six Aboriginal members nominated by the traditional owners and four other members including the Director.



Little Penguin and Green and Golden Bell Frog two of the species of Booderee National Park

Source: Booderee Visitors Guide

1.13 The first management plan came into effect on 3 April 2002. The latest annual report indicates that some 500 000 people visited the park in 2000–2001¹⁴. The net operating cost was \$5.07 million, revenue from fees and charges was \$0.62 million and payment to traditional owners was \$0.33 million.

Best practice park management standards and international and Australian lessons learned

Best practice park management standards

1.14 International and national experiences can be usefully compared to management practice in Commonwealth national parks and reserves. Australia is a signatory to international conventions such as the Convention Concerning the Protection of the World Cultural and Natural Heritage (or World Heritage Convention—WHC) and the Ramsar Convention on Wetlands of International Importance.¹⁵ Kakadu National Park is relevant to both conventions while Uluru-Kata Tjuta is relevant to the WHC. This latter convention notes that:

It is the prime responsibility of the [signatories] to take appropriate provisions and actions for the application of the Convention and to put in place on-site monitoring arrangements as an integral component of day-to-day conservation and management of the sites....It is necessary that every year the conditions of the property be recorded by the site manager or the agency with management authority.¹⁶

¹⁴ Fee structures are different in each park and fees are set separately on the recommendation of the Board and with the approval of the Minister. At Booderee, the 500 000 figure represents numbers based on an estimate from ticket sales calibrated on a sample of vehicles entering the park.

¹⁵ A full list of international conventions relevant to Commonwealth national parks, reserves and conservation zones is at Appendix 1.

¹⁶ <http://www.unesco.org/whc/world_he.htm>

1.15 Under the WHC, parties are also requested to submit periodic reports every six years. The main objective of these periodic reports is to assess the overall application of the WHC by signatories, as well as to assess whether the World Heritage values for which a property was inscribed on the World Heritage list are being maintained over time.

1.16 In addition to particular standards for world heritage areas, there are required management standards for all Commonwealth national parks and reserves. The EPBC Act requires that all reserves and conservation zones are allocated to an International Union for the Conservation of Nature (IUCN) category and managed according to the principles prescribed for that category.¹⁷ These management principles are set out in the EPBC Regulations, and are attached at Appendix 2 of this report.

1.17 The Australian and New Zealand Environment and Conservation Council (ANZECC) also had a working group on national parks and protected area management¹⁸. The working group comprised representatives from Parks Australia, the States/Territories and New Zealand. It was established to 'identify issues and report on matters relating to the selection, planning and management of national parks and protected areas and the development of staff involved in management.' Benchmarking and best practice projects were undertaken by the working group in areas such as:

- visitor risk management;
- performance reporting in natural resource management;
- national data standards on protected areas; and
- commercial management.

1.18 Based on a review of Australian and international approaches, a best practice model for performance assessment in natural resource management in parks and reserves was developed for ANZECC in 1997 based on the following criteria:

- a clear nexus between an agency's legislative requirements and its strategic objectives for natural resource management;
- clearly stated management goals (desired outcomes) that are derived directly from the strategic objectives;

¹⁷ While some parks or reserves such as Kakadu National Park are formally national parks, they were declared under the former *National Parks and Wildlife Act 1975* and are not formally assigned to a IUCN category.

¹⁸ ANZECC has now been replaced by the Natural Resources Management Ministerial Council and the Environment Protection and Heritage Ministerial Council.

- a plan of natural resource management programs and activities at both the agency and the park level for meeting the strategic objectives within a specified timeframe (both medium term and annual);
- performance indicators and targets against which the degree to which goals were achieved can be assessed, at both the agency and the park level; and
- natural resource monitoring programs that provide data for the assessment of performance.

1.19 When assessed against this approach, the ANZECC report noted that none of the agencies assessed, either in Australia or overseas, met all the criteria for best practice in natural resource management in parks. ANZECC noted that Environment Australia did not undertake agency-wide performance assessment at that time. This contrasted with other state agencies such as Parks Victoria, which indicated a strong commitment to developing performance assessment at a range of levels but was at an early stage in the process. The ANAO notes that Parks Australia commenced planning in 2001 to develop capability in this area. This is further discussed in Chapter 2.

International and Australian lessons learned

1.20 This audit has identified a number of experiences that have highlighted lessons learned in relation to park management. Examples from the United States General Accounting Office (GAO), the Victorian Auditor-General, Parks Canada, and the New Zealand Department of Conservation are discussed below.

1.21 In 1996, the GAO identified the need for system-wide data on threats to park resources. The GAO found that the natural and cultural resources of US national parks were being threatened not only by sources external to the parks, but also by activities originating within the parks' borders. Without system-wide data on these threats to the parks' resources, the US National Park Service was not fully equipped to meet its mission of conserving and protecting those resources. The GAO noted that it was critical for the agency to have this information in order to identify and list the threats and set priorities for mitigating them so that the greatest threats could be addressed first. The GAO had earlier (1987 and 1994) released two reports on the National Park Service with similar recommendations¹⁹.

1.22 In 1995, the Victorian Auditor General undertook a performance audit of the Victorian National Parks Service. The report has particular relevance to Parks

¹⁹ United States General Accounting Office (1996) *National Park Service: Activities Within Park Borders Have Caused Damage to Resources*, GAO/RCED-96-202.

Australia and was noted by ANZECC. The report recognised the limited material available on world's best practice in natural resource management in parks and that there were no documented minimum standards for management of protected areas. The report also noted that any assessment of administrative effectiveness required consideration of the extent to which the agency has met its legislative obligations.

1.23 The Victorian Auditor-General noted the importance of having systems for periodic environmental monitoring of parks and for performance assessment based on that monitoring. The dispersed nature of park systems means that effective dissemination of strategic objectives and priorities, appropriate systems of delegation, and a consistent approach to performance monitoring and reporting are vital. The reported recommended:

- clear articulation of corporate and business objectives with a visible nexus between those objectives and the agency's legislative responsibilities;
- specific information on priority tasks linked to the objectives;
- strategies to be implemented to achieve the objectives;
- time-frames and performance indicators for monitoring progressive action against planned tasks; and
- sound management systems so that decision making can be made across the agency based on reliable data.

1.24 Parks Victoria responded to the audit through the publication of *State of the Parks 2000*. 'State of the Parks' reports focus on the natural and/ or cultural heritage values within a particular park system. They allow individual reserves and conservation zones, and their outputs and outcomes, to be seen in an agency-wide context. The Parks Victoria report also clarified the challenges facing Victorian parks and the approaches that were being taken to meet them. While the report did not contain quantitative targets, it established a benchmark against which future management of parks might be assessed. For example, the report noted that approximately 80 per cent of the area of the parks system was 'intrinsically viable'. It also established a framework for the monitoring of changes in selected ecosystems and indicator species. In terms of the future, Parks Victoria aimed to be able to report on changes to biodiversity values and the overall level of risk across the parks and reserves system by 2012. By 2020, it was envisaged that it would be feasible to re-assess the 'intrinsic viability' of Victorian parks and reserves.²⁰

²⁰ Parks Victoria (2000) *State of the Parks 2000*.

1.25 International agencies have also focussed on improving performance measurement. For example, the Parks Canada Performance Report was structured using key result areas (KRAs), supported by a number of strategies designed to achieve each KRA. Parks Canada report the planned and actual expenditure for each KRA, along with the number of staff allocated to each KRA in terms of full-time equivalent units. The report examined Parks Canada's implementation of the strategies supporting the KRAs, including achievement against targets, further work to be completed, and timeframes for completion and targets. The report also analysed trends over time, such as changes in visitor attitudes based on quantitative data, and the strength of threats to ecosystems over recent years.

1.26 The New Zealand Department of Conservation Annual Report 1999–2000 focused on measurable conservation outcomes, and outputs were arranged under the headings of quality, quantity and timeliness. The report included quantitative achievements against targets for activities such as planning, species conservation and usage permits (e.g. tourism and mining).

1.27 International and Australian experience suggests that an integrated approach to Commonwealth national park and reserve management, which incorporates system-wide data collection and risk assessment, strategic priority-setting, and performance monitoring is in line with best practice.

Audit objective and scope

1.28 The audit objective was to examine and report on the adequacy of the planning, management and reporting systems which support the Director of National Parks in the achievement of required functions under relevant legislation and agreed outputs and outcomes.

1.29 The audit had a particular focus on:

- the management of strategic risks to the conservation of natural and cultural heritage; and
- the management of business risks such as contract management.

1.30 The scope of the audit was on the planning, management and reporting systems used in Parks Australia. In terms of park coverage, attention was directed to the major terrestrial parks with the highest levels of public expenditure and greatest natural and cultural significance.

Audit methodology

1.31 The methodology used for the audit was based on:

- a review of the provisions of relevant legislation including the EPBC Act—especially the Australian IUCN reserve management principles set out in the EPBC Regulations;
- a review of file records and reports within Parks Australia;
- discussions with relevant officers within the parks involved in the delivery of the program;
- a review of the management information system and its outputs, including the Annual Report;
- a survey of stakeholders such as State/Territory agencies, park Boards of Management and non-government bodies involved in program delivery²¹; and
- expert advice provided by Mr Graeme Worboys, consultant to the audit team. Mr Worboys has a Master of Applied Science Degree in Parks, Recreation and Heritage and is Chief Executive of Green Globe Asia Pacific Pty Ltd. He has worked as a ranger, park superintendent, policy specialist, regional manager and executive director with the NSW National Parks and Wildlife Service. He recently co-authored a book on Protected Area Management.

Audit conduct

1.32 The audit was conducted in accordance with the ANAO Auditing Standards. The audit commenced in August 2001 and the bulk of the fieldwork was conducted between August and November 2001. The total audit cost was \$298 000.

Previous reviews

1.33 The ANAO has not previously undertaken an audit in Parks Australia. However, the 1996 House of Representatives Environment Committee report,

²¹ The ANAO conducted a survey of 97 Parks Australia stakeholders. 35 of these were nominated by Parks Australia. The remainder were identified in the course of ANAO preliminary study fieldwork and included individual Board members, government agencies, industry groups, community and non-government organisations. The ANAO also included in the survey a sample of period contract holders and permit holders for the jointly managed parks. The survey sought stakeholder views on the major risks to natural and cultural values in Commonwealth national parks. Stakeholders were also asked to discuss what they considered were the major business risks faced by Parks Australia. The ANAO received 44 survey responses.

Managing Australia's World Heritage, found that the Australian Government's reports to the World Heritage Committee were not based on systematic monitoring. The report made a number of recommendations relating to improvements in monitoring and reporting which the Government agreed. This is further discussed in Chapter 5.

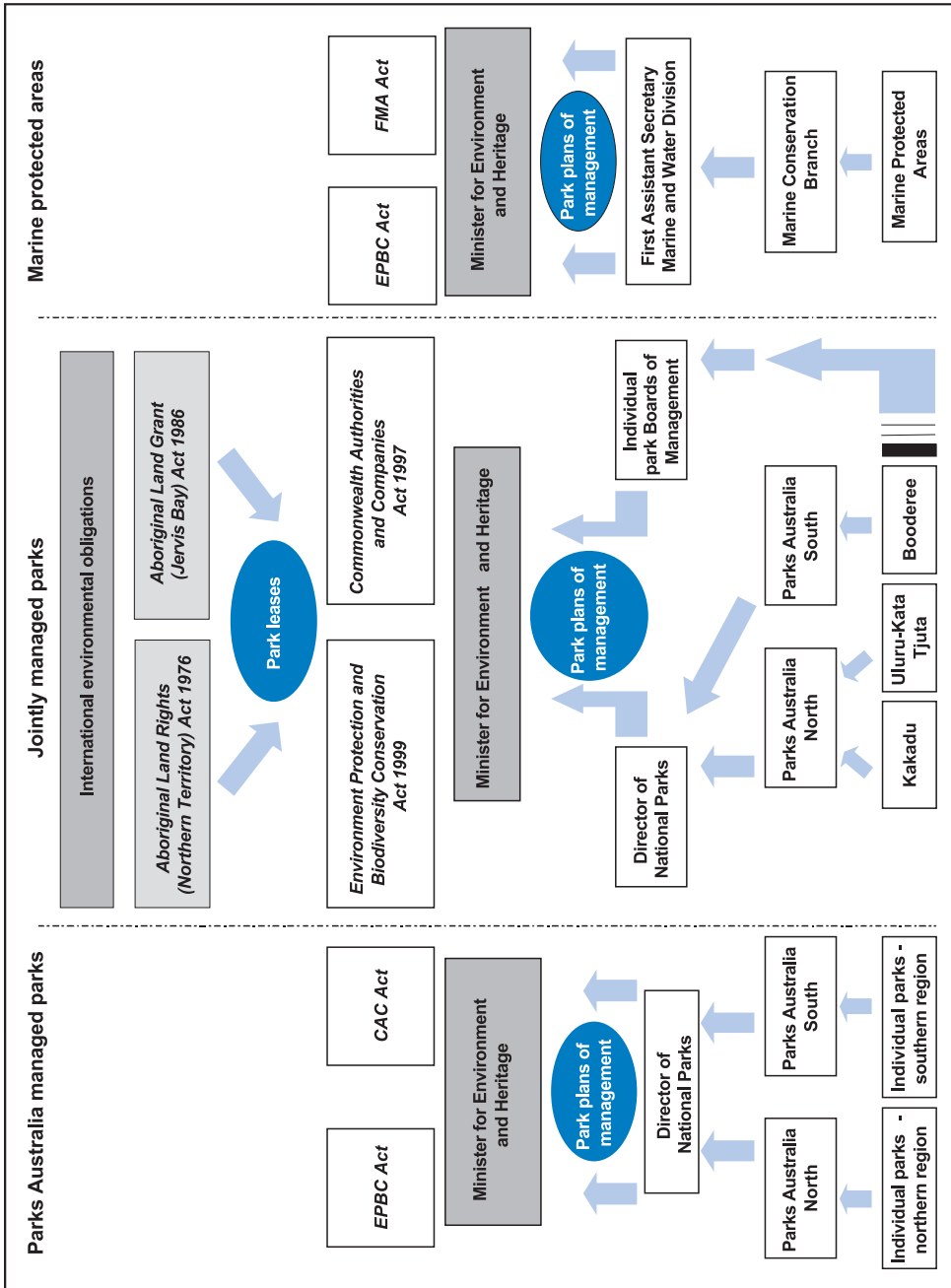
2. Planning and Corporate Governance

Introduction

2.1 Corporate governance is about the way an organisation is managed. This includes how plans are formulated, how the organisation is directed, how risks are controlled, how decisions are informed, and the accountability of the organisation for its operations. A well-governed organisation will provide its CEO, responsible Minister, the Parliament and other stakeholders with reliable and well-founded assurances that it is meeting its performance targets.

2.2 Parks Australia has a complex planning and corporate governance structure influenced by international obligations under conventions Australia has ratified, five different Acts of Parliament (two of which are critical to the Director of National Parks—the EPBC Act and the CAC Act), lease agreements, and management plans. In addition, Parks Australia consults and liaises with a very wide range of stakeholders including traditional owners, scientific researchers, the tourism and mining industries, State/Territory and local governments.

Figure 2
Planning and corporate governance structures for Parks Australia²²



Source: ANAO analysis of Parks Australia corporate documents.

²² Responsibility for Marine Protected Areas is delegated to the Marine and Water Division of Environment Australia. The Director of National Parks has no direct management role.

2.3 Figure 2 outlines Parks Australia’s planning and corporate governance structures, which were examined through the audit. It also highlights the three separate management streams for different parks—those managed directly by Parks Australia, those with joint management arrangements with traditional owners, and those managed through the Marine and Water Division on behalf of the Director of National Parks. Some marine protected areas that are adjacent to State waters are managed cooperatively by the Marine and Water Division of Environment Australia and the relevant State management agency.

2.4 A variety of management mechanisms such as Memoranda of Understanding, joint management committees and annual business agreements between the agencies are used to manage these areas.

Management plans

2.5 The management plans provide a statutory framework for management operations within parks and reserves. They provide an important mechanism for the protection of natural and/or cultural heritage and for defining acceptable uses within defined areas. For the three parks involved in joint management arrangements, plans also need to be consistent with the lease agreements involving traditional owners and take into account the views of Boards of Management, traditional owners and other indigenous persons interested in the reserve.

2.6 The IUCN has produced International ‘Best Practice Guidelines for National System Planning for Protected Areas’. These guidelines incorporate IUCN reserve management principles which have been adapted for Australia and are included under the EPBC Regulations. As noted in the previous chapter, ANZECC has also produced guidelines on planning that outline best practice. The Portfolio Budget Statements also state that management according to national and international best practice is an effectiveness criterion for the Director of National Parks.²³

2.7 Management plans are legal documents explicitly required under the EPBC Act. Section 366 requires the Director to prepare management plans for each Commonwealth reserve for which there is no Board of Management. Section 366 requires that, where there is a Board of Management, a management plan should be prepared by the Board in conjunction with the Director of National Parks.

2.8 On average, it takes up to three years from the inception to completion of a management plan. Plans last for seven years. For the 19 areas declared, there are fourteen management plans in operation and five in draft form, as illustrated

²³ Portfolio Budget Statements 2001–02 Environment and Heritage, p. 220.

in Table 2. Statutory management plans are not required for Calperum and Taylorville Stations or for the RAN Weapons Range Beecroft although annual business plans are prepared.

Table 2

Management plans for Commonwealth protected area

Parks and Reserves	Year park proclaimed	Plan in effect	Plan in draft	Australian IUCN category ²⁴
Uluru-Kata Tjuta	1977	✓		3
Kakadu	1979	✓		3
Booderee	1992	✓		3
Christmas Island	1980	✓		3
Norfolk Island National Park and Botanic Garden	1986	✓		3
National Botanic Gardens	1991	✓		5
Pulu Keeling	1995	✓		3
Coringa-Herald	1982	✓		1
Lihou Reef	1982	✓		1
Ashmore Reef	1983		✓	1
Ningaloo	1987		✓	5
Elizabeth and Middleton Reefs	1987	✓		1
Mermaid Reef	1991	✓		1
Solitary Islands	1993	✓		7
Great Australian Bight	1998	✓		3
Tasmanian Seamounts	1999		✓	1
Macquarie Island	1999	✓		5
Cartier Island	2000		✓	1
Lord Howe	2000		✓	5

Source: A.M. Hardy (ed) 2001, *Terrestrial Protected Areas in Australia: 2000 Summary*. (updated)

2.9 Uluru-Kata Tjuta (declared 1977) and Kakadu (declared in 1979) are currently under their fourth management plans. These were finalised before the passage of the EPBC Act. The management plan for Booderee came into effect on 3 April 2002—some 10 years after proclamation. The Booderee plan explicitly addresses EPBC Act requirements.

²⁴ IUCN categories are assigned at proclamation under the EPBC Act. Reserves proclaimed prior to the commencement of the EPBC Act are assigned an IUCN category when their management plans come into effect. See Appendix 2 for descriptions of the IUCN categories.

2.10 Overall, management plans have shown progressive improvement in quality, with the Booderee plan being the best in terms of measurable aims (supported by baseline data) at the present time. The Ashmore Reef and Cartier Island plans also represent better practice in terms of risk management. The strengths of the current planning framework are as follows:

- (a) **all plans identify strategic risks to natural heritage and prescriptions or actions to deal with them.** For example, the Booderee plan documents risks from 13 known introduced terrestrial vertebrate species (i.e. rabbits, foxes, cats, dogs, mice, black rats and seven bird species). The plan also documents 129 species of introduced flora. Bitou Bush has been identified as the most significant pest and the fox is an agent in its spread within the park. Mechanisms to control both Bitou Bush and foxes are outlined in the management plan, which references the Vertebrate Pest Management Plan, and the fox control program introduced in 1999. This is a major step forward from the essentially descriptive nature of the earlier plans in other parks.
- (b) **the plans, as appropriate, recognise cultural heritage and the importance of cultural issues for indigenous as well as island communities.** For example, the Uluru-Kata Tjuta Plan of Management outlines the Board of Management's vision statement in the local Pitjantjatjara language. It also outlines the importance of *Tjukurpa* to the cultural landscape and provides for specific actions to conserve cultural heritage sites and practices.²⁵ Some marine parks such as Ashmore Reef National Reserve, recognise the rights of Indonesian fishers using traditional methods.
- (c) **it is clear from all management plans why the area has been set aside as a park or reserve.** In all recent plans over the past eight years, a technical audit process has been built into the plans to enable a report against the actions. Overall, there are numerous attributes of the plans that are consistent with best practice.²⁶ For example, there is a clear nexus established between the agency's legislative requirements and its strategic objectives and there are clearly stated management goals (desired outcomes) that are derived directly from the strategic objectives.
- (d) **generally, parks or reserves are allocated to IUCN categories.** This is important as the category determines the subsequent nature of protection and the type of land use activity that will be permitted in the park. The

²⁵ *Tjukurpa* is the Pitjantjatjara word for law: history, knowledge, religion and morality that forms the basis of the Anangu people's values and how the Anangu conduct their lives and look after their country. Uluru-Kata Tjuta Plan of Management, p. 191.

²⁶ ANZECC (1997) *Best Practice in Performance Reporting in Natural Resource Management*.

EPBC Act states that the proclamation declaring the area to be a Commonwealth reserve must assign the reserve to one of seven Australian IUCN categories—strict nature reserve, wilderness area, national park, natural monument, habitat/species management area, protected landscape/seascape, or managed resource area.²⁷

- (e) **generally the plans have, or are cross-referenced to, comprehensive inventories of fauna and flora including threatened species.** These inventories are significant in that they comprise the natural heritage of the parks or reserves.²⁸ More broadly, these lists of fauna and flora take into consideration the national list of threatened species, ecological communities and key threatening processes under the EPBC Act. National lists of threatened species, threatened ecological communities and key threatening processes required under the EPBC Act are managed by Wildlife Australia, within the Department of Environment and Heritage, rather than Parks Australia. Inventories and relative abundance of listed threatened species, communities, migratory species and marine species for each park, as required under section 172 of the EPBC Act, is yet to be developed.²⁹
- (f) **the consultation process with stakeholders** prior to finalisation of the plans. The process is consistent with section 368 of the EPBC Act and focuses on key stakeholders, but at the same time is broad enough to enable other interested parties to contribute to the plan formulation process. Community participation is the first of the IUCN reserve management principles. The IUCN principles indicate that management arrangements should, to the extent practicable, provide for broad and meaningful participation by the community, public organisations and private interests in designing and carrying out the functions of the reserve or zone. This was very limited in the first management plan for Kakadu in 1980, and the current plan is a significant improvement. The ANAO acknowledges the challenges involved in resolving the sometimes incompatible objectives of competing interest groups.³⁰

²⁷ See EPBC Act s346.

²⁸ Some reserves or conservation zones have yet to develop comprehensive inventories of fauna and flora. For example, the Ashmore Reef National Nature Reserve draft plan of management notes that 'baseline surveys are a necessary first step in performance assessment providing a benchmark for monitoring, and building upon existing data'. (*Ashmore Reef National Nature Reserve draft plan of management* p. 51)

²⁹ The EPBC Act requires the Minister to prepare inventories within five years from the commencement of the Act or after land becomes Commonwealth land. It applies to all Commonwealth land.

³⁰ The ANAO survey of clients and stakeholders involved in park management or activities has shown that while different groups accept the consultation process, these groups are sometimes unhappy with some of the compromises agreed - i.e. the outcomes rather than the process. For example, tourist interests would like improved access to sites in Kakadu and Uluru-Kata Tjuta while traditional owners are concerned about protecting their cultural values.

2.11 The current shortcomings of the planning framework are as follows:

- (a) **the absence of key performance indicators and targets within an agency-wide strategic plan.** While the divisional plan for Parks Australia provides a good agency-wide plan with high level priorities actions and cost estimates over a 12 month period, it needs to be supported by a 3–4 year vision statement and key performance indicators and targets. These should provide a means of measuring and reporting on progress (or otherwise) against key agency objectives. Performance indicators and targets could also provide a focus for benchmarking internal performance (including cost effectiveness) as well as the dissemination of better practice across parks. It could also assist in giving effect to the broad objectives and indicators in the Portfolio Budget Statements and other related documents. Ideally, it should be possible to track the objectives and indicators from the corporate level (including both Environment Australia and Parks Australia) through to the park or reserve level.
- (b) **the absence of performance indicators and measurable targets at the park, reserve or conservation zone level.** Currently, it is difficult to measure progress towards overall aims and objectives at the park or landscape scale.³¹ As discussed in Chapter 1, this is an ANZECC Best Practice criterion against which Parks Australia does not currently rate well. The ANAO recognises that Parks Australia may need more flexibility in performance measurement than would be allowed for in a statutory management plan set over a seven year time frame. However, while desirable to include performance indicators in a management plan to measure results, an operational plan or compendium to the management plans would at least give Parks Australia the capacity to measure performance while improving the quality and relevance of the indicators over time. The ANAO notes that the Coringa-Herald and Lihou Reef National Nature Reserves consultancy report is a good example of a step forward in performance measurement. The consultancy report includes risks to the reserves and treatment mechanisms, information gaps, strategic objectives/ goals, desired trends, and performance indicators.³²
- (c) **the need for better priority setting for the jointly managed parks.** This is particularly important as, for example, the Uluru-Kata Tjuta plan has 364 actions while the Kakadu management plan outlines 459 actions. The

³¹ The distinction between parks and landscapes reflects the varying size of parks. For example, Kakadu has a number of different landscapes, varying from the coastal estuaries to the sandstone escarpments. In contrast, a more compact park such as Booderee would have significantly less variation in its landscape.

³² Ilse Kiessling, (October 2001) *Performance Assessment program for Coringa-Herald National Nature Reserve and Lihou Reef National Nature Reserve*. Parks Australia also intends to complete a framework for performance assessment, and outcome measurement which will be undertaken every seven years. There will be annual measurement of outputs and selected indicators of efficiency/effectiveness applied to all parks for the purposes of annual reporting in 2001–02.

challenge in balancing the broad range of issues being dealt with by Parks Australia was noted in the stakeholder survey. Many stakeholders were confused or uncertain as to the reasons for particular decisions being given preference over other competing pressures. For example, one stakeholder surveyed by the ANAO commented:

To the outsider, the basis for priority setting is not immediately obvious. Apart from decisions made by the Board of Management, the specific interests of some influential managers/ researchers appear to get the green light, while other priority issues appear to receive considerably less funds and/or attention³³

As noted in the US GAO report referred to in Chapter 1, setting priorities for mitigating threats is essential if an agency is to demonstrate that it is able to meet its prime natural and cultural heritage objectives. It is also important to demonstrate that scarce resources are being allocated to areas of greatest need. One option for Parks Australia would be to streamline the number of actions in future management plans so that implementation efforts can be focused on a more select group of key actions targeted at those areas of greatest priority.

(d) absence of mechanisms for dealing with emergent or redundant issues.

The seven-year cycle for statutory management plans is required under the EPBC Act and, in accordance with s362(1) of the Act, the Director is required to exercise his powers and perform his functions to give effect to a management plan. Consequently, a prescribed action documented in a park management plan is legally required to be addressed. However, such a long-term planning cycle is a challenge for Parks Australia when dealing with emerging risks or where proposed actions are unable to be progressed for valid reasons. This highlights the importance of drafting objectives and actions that are strategic and that can meet the test of time. A report to the Director of National Parks highlighted the need for a more ‘comprehensive’ approach to overall management of Uluru-Kata Tjuta.³⁴ This was particularly important as the management plan did not adequately address important risks such as:

- the level of community services provided to the residents of the Mutitjulu community by Parks Australia;³⁵
- who should pay for these services;

³³ ANAO survey response no.19.

³⁴ Draft internal report for discussion, 27/06/01.

³⁵ At the inception of the Mutitjulu community as a settlement within the Park in 1985–86 a total of 22 households comprising 33 family groups were identified. By 2000, a total of 42 households comprising 70 family groups was identified. The total population is anticipated to grow from the current 385 people to over 800 by 2021.

- the standards and location (within the park or externally) for a rubbish dump, effluent management, and water extraction from the aquifers which are the main supply for the park and the resort; and
- the overseas marketing of park attractions by the tourism industry to take greater account of the cultural sensitivities of traditional owners. (This is an issue for the three jointly managed parks).

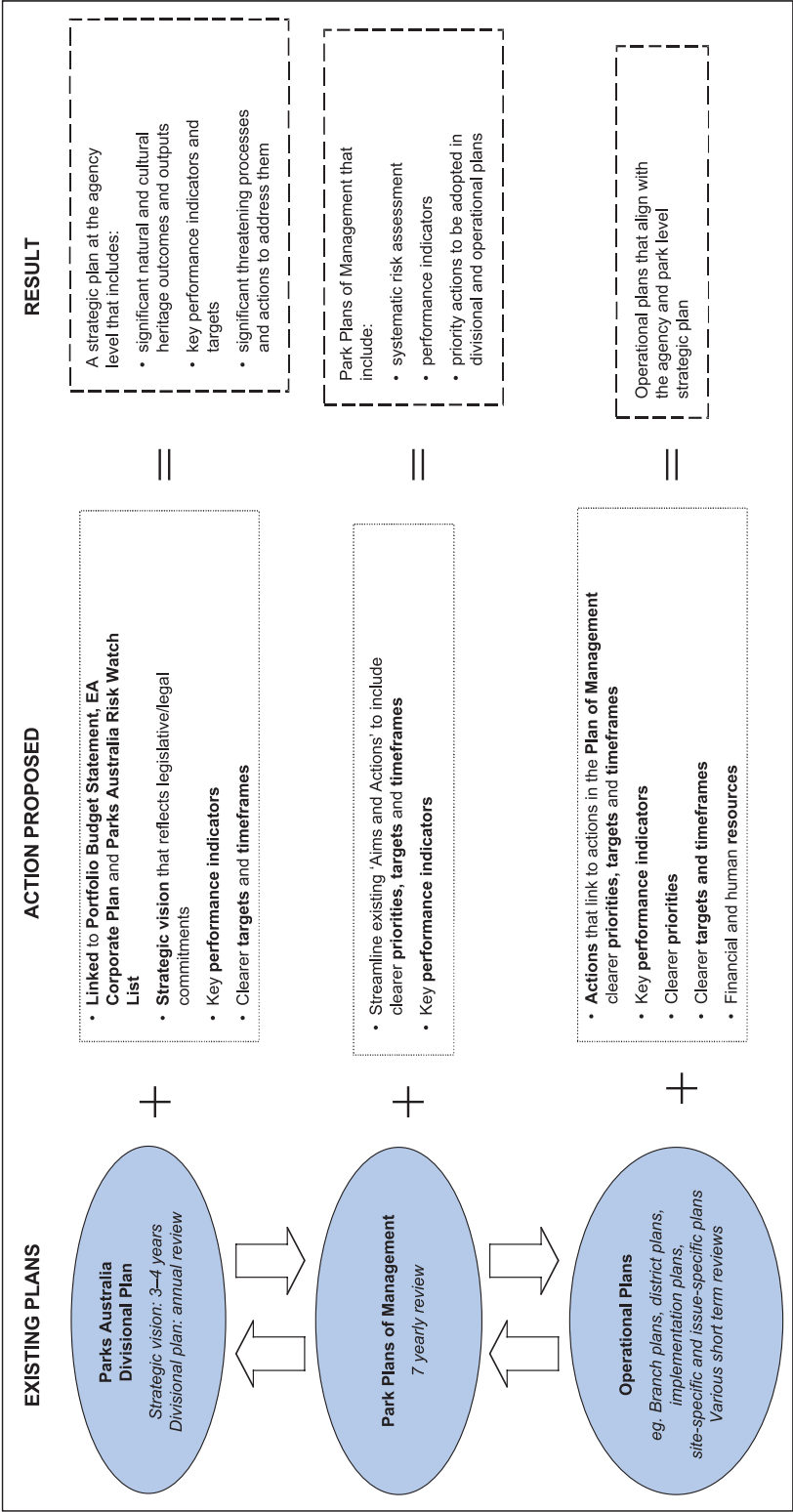
An operational plan considered by the Board of Management and the Minister for each park with an annual review process could provide the mechanism for better managing such matters.

However, circumstances may arise that make the action/s redundant or impractical to progress or finalise. For example, Parks Australia North has particular difficulties over progressing the accreditation scheme for tour operators required in the management plans for Kakadu and Uluru-Kata Tjuta. This is largely because of constraints in reaching agreement with the Territory agencies and other stakeholders over a consistent Territory-wide approach. In these cases, the Director should consider improving the transparency of the process by documenting the reasons why the action is not progressed, advise the Minister and report these matters in the annual report. In addition, such issues should be considered within the context of the technical audit for each management plan at the end of the seven-year cycle. Where an action relates to a jointly managed park, and is not to be progressed or finalised, it would be prudent for the Director to consult with the relevant Board of Management prior to advising the Minister and reporting, through the annual report, to Parliament.

2.12 The ANAO notes that management plans require some flexibility to enable park staff and the Boards of Management to address emergent or unforeseen issues. Parks Australia has indicated that their business environment is both complex and dynamic with many local pressures and responses. However, the three Boards of the jointly managed parks have indicated support for strengthened performance measures in the plans. Booderee has moved towards this direction in its new plan. The IUCN Guidelines for National System Planning for Protected areas clearly encourage this type of approach as does the ANZECC report on best practice in performance reporting. As noted earlier, Parks Victoria has recently produced a ‘State of the Parks’ report that also illustrates good practice.

2.13 The Director of National Parks has recently implemented a Park Planning and Performance Task Force which aims to address weaknesses with performance information. The Parks Australia Risk Watch List also strengthens the performance planning framework. The Marine and Water Division, which manages marine parks under delegation from the Director of National Parks, is also moving to include better practice performance information. Figure 3 outlines the ANAO’s analysis of Parks Australia’s existing planning structures and planning gaps.

Figure 3
Planning gap analysis



Source: ANAO analysis of Parks Australia corporate documents.

Conclusion

2.14 Parks Australia has a complex planning and corporate governance structure influenced by international obligations, five different Acts of Parliament, lease agreements, and statutory management plans. Nevertheless, Parks Australia has a good foundation for building an efficient and effective planning system. Overall, management plans for Commonwealth national parks and reserves have shown improvement in quality over time.

2.15 Parks Australia's planning framework has a number of strengths including clear links between management plans and international reserve management standards, and identification of some of the strategic risks to natural and cultural heritage in the parks. However, the ANAO considers that Parks Australia's planning framework also has some shortcomings. The most significant of these is the absence of key performance indicators and targets within an agency-wide strategic plan or operational plans at the park, reserve or conservation zone level. In addition, there is a need for better priority setting in park management plans and a mechanism to deal with emergent or redundant issues within the seven year planning time frame. Addressing these matters could strengthen Parks Australia's ability to plan, measure and report on natural and cultural heritage across all parks. This is also important so that Parks Australia can demonstrate that expenditure of funds has been targeted to areas of greatest need.

Recommendation 1

2.16 In order to strengthen strategic planning, the ANAO *recommends* that Parks Australia, as part of the current review of park planning and performance, establishes an integrated planning system with core performance measures across national parks and reserves that includes:

- (a) key performance indicators and targets as part of strategic planning for Parks Australia that documents significant outcomes and outputs relevant to natural or cultural heritage values, along with significant threatening processes and actions to address them;
- (b) core performance indicators, targets and priority actions to be addressed in the management plans at the park level, or in a subsidiary document to the management plans; and
- (c) a mechanism to ensure that, where an action in a management plan cannot be progressed, the Boards of Management (if applicable), and the Minister are advised of the reasons for the decision and the matter is reported in the Annual Report to the Parliament.

Director's response

2.17 Agree. There is an on-going effort to establish better indicators to provide clearer measures of progress towards the objectives of park management and the outcomes set out in the Portfolio Budget Statement. It is recognised that, during the seven-year timeframes for management plans, circumstances will arise that will require decisions, made on the grounds of good management, not to implement actions prescribed in a management plan. Such decisions would need to be taken having regard to the Director's obligations under s362 of the EPBC Act 'to give effect to a management plan that is in operation for a Commonwealth reserve'.

Leases and management plans

2.18 The jointly managed parks are Aboriginal lands leased to the Director of National Parks for 99 years for use as Commonwealth national parks. As well as outlining the amount of rent to be paid for the use of the land, the leases include specific provisions for employing traditional owners and promoting Aboriginal administration, management and control of the park. The provisions of the leases are renegotiated every five years. In 2000–01, the Commonwealth paid \$3.19 million to traditional owners under the lease agreements (almost 14 per cent more than in 1999–2000, which indicates a higher level of revenue from increased visitor numbers over this period). In some cases, the leases specify actions that must be undertaken within a particular timeframe. For example, the Gunlom Aboriginal Land Trust lease for an area within Kakadu National Park specifies that an environmental rehabilitation plan must be in place for former mine sites within the Gunlom Aboriginal Land Trust area by 31 December 2000 and that this plan should be fully implemented by 31 December 2015. The Uluru-Kata Tjuta and Booderee leases specify that within six months of the commencement of the original leases, an Aboriginal training program to facilitate participation in the administration, management and control of the park must be implemented.

2.19 Generally, there is a reasonable alignment between the lease agreements and the actions in the management plans. However, it would be desirable to have more specific timeframes or targets for actions in the plans stemming from the lease agreements. For example, while the Kakadu lease states that the Director of National Parks will take all practicable steps to promote relevant Aboriginal administration, management and control of the park, there are no targets or timeframes linked to this undertaking in the management plan. This is also challenging for the community development objectives listed in leases. In this case, the lack of precision in both the lease agreements and the management plans has contributed to an expansion of Parks Australia activity into areas of

human and municipal services that are beyond what could be reasonably expected from an environmental agency. For example, the broad range of human services required to support the Mutitjulu community at Uluru-Kata Tjuta (including housing and essential services), stretch the resources of the park management agency. One stakeholder surveyed by the ANAO noted that:

The current processes of joint management are fraught with complexity and difficulties that paralyse the management of the park. This, combined with a high turnover of park managers and other subordinates, creates an atmosphere where only the basics of running a park are completed. [This is a] drain and distraction on the park from focusing on its core responsibilities ...³⁶

2.20 A recent draft report commissioned by Parks Australia on joint management reinforced this view:

Parks Australia (PA) must remain within the boundaries of its core competencies of Park management and conservation. Its interventions in specialist areas such as housing, power and essential services have highlighted its limitations and left it exposed to criticism. It has also increased expectations, both from within its own organisation and the parties with which it interfaces at Uluru-Kata Tjuta National Park, straining PA's resources and relationships. ... PA, because of its presence and substance in the Park, is used and regarded as a 'solution to all things'. This is a myth that must be dispelled.³⁷

2.21 An estimate by Parks Australia for Uluru-Kata Tjuta, is that some \$14.8 million has been spent in net present values (\$10.9 million in actual dollars) on services to the Mutitjulu community since 1980. This has covered aspects such as power generation, radio and TV upgrades, water and sewerage supply, housing upgrades, community offices and fit-outs, a community health clinic and fencing.³⁸ Parks Australia is currently finalising a review of joint management at Uluru-Kata Tjuta. The current management plan recognises that Parks Australia should withdraw from its position as provider of essential services. Within the context of the park's history this represents an important step forward. One solution would be to consider constituting the Mutitjulu community as a local government body for the purposes of Commonwealth local government grants. However the ANAO notes that this is a matter that would need to be progressed in conjunction with other Commonwealth and Northern Territory agencies. Nevertheless, it would enable Parks Australia to concentrate more effectively on core business operations.

³⁶ ANAO survey response no. 25.

³⁷ Sovereign Health Care Australia, (December 2001) *Report of the Exaluation of the Community Liaison Function at Uluru Kata-Tjuta National Park*, p. 58.

³⁸ Internal report on infrastructure development in Uluru Kata-Tjuta, July 2001 (11:14)

Recommendation 2

2.22 In order to make more explicit the link between the lease agreements and the management plans, the ANAO *recommends* that Parks Australia ensures that:

- (a) all future management plans for jointly managed parks specify targets and timeframes for achieving the commitments set down in the park leases; and
- (b) targets and timeframes developed for future management plans, together with the allocated financial resources, be included in operational plans at the national park or reserve level.

Director's response

2.23 Agree. In agreeing with this recommendation, the Director notes that it should be recognised that development of management plans and review of lease agreements operate in different timeframes. Therefore, it will not always be possible to ensure that management plans fully and accurately reflect lease commitments.

Boards of management

2.24 Under section 377 of the EPBC Act, the Minister must establish a Board for a Commonwealth reserve that is wholly or partly on indigenous people's land. A majority of Board members must be indigenous people nominated by traditional owners. The boards of management of Kakadu, Uluru-Kata Tjuta and Booderee National Parks comprise a majority Aboriginal membership nominated by the traditional Aboriginal owners, together with the Director of National Parks and representatives of the tourism industry, a conservation expert and the relevant government administration. The Board's role is to:

- make decisions relating to the management of reserves that are consistent with the management plan in operation for the reserve; and

in conjunction with the Director:

- prepare a management plan for the reserve;
- monitor the management of the reserve; and
- advise the Minister on all aspects of the future development of the reserve³⁹.

2.25 While the EPBC Act outlines a clear definition of the roles and responsibilities of the Boards, in practice, a high degree of ambiguity exists in the application of joint management. In part this reflects the different values and perceptions of participants. However, it also reflects the limited information available to Board members.

³⁹ s376 EPBC Act.

2.26 Board members are not advised of their duties, responsibilities and obligations (or that of the Director) in their letter of appointment. Parks Australia has advised that such briefings are provided verbally. At Kakadu and Uluru-Kata Tjuta some Board Members appointed to represent traditional owners may have English as a second language and may, therefore, require the assistance of translators. Nevertheless, the ANAO considers that it is consistent with good corporate governance for Board Members to be fully informed of their responsibilities.

2.27 Minutes of board meetings are recorded, but Parks Australia staff are not routinely advised of outcomes—even where they have a professional interest in the actions arising. The Uluru-Kata Tjuta Board, in particular, has for many years, requested that Minutes be maintained with a high level of confidentiality. Nevertheless, there is scope for the actions arising from the Board meetings to be documented and circulated. Kakadu has recently developed a quarterly newsletter, 'Board Business', that is being distributed to parks staff and local Aboriginal Associations after each board meeting. In addition, the Secretary to the Board of Management is, in future, to attend weekly park management meetings to facilitate communication and understanding between park staff and the Board. These are positive initiatives.

2.28 Parks Australia has indicated that the effectiveness of joint management arrangements is challenging due to cross-cultural sensitivities, issues associated with English language proficiency and varying levels of literacy. Parks Australia has provided resources for Board training over time and has established and supported Board secretary / liaison positions in all three jointly managed parks. These officers facilitate and provide ongoing training for Board members.

2.29 Nevertheless, joint management is, and continues to be, an evolving process. In recent years, there has been a general improvement in the relationship between Parks Australia and the Boards of Management. The substantial delays in the Booderee Management Plan (some 10 years since the gazettal of the park) have been in part, linked to tensions over joint management relations. While tensions remain, the current Board and park administration have finalised a management plan. At Kakadu National Park, there has been cross-cultural training offered to Board members to assist them to understand how non-Aboriginal people organise themselves. The training covers matters such as legal issues, corporate governance, financial management and conflict resolution. Uluru-Kata Tjuta also has cross-cultural training for park staff and traditional owners to strengthen the understanding of the priorities of all participants in joint management.

2.30 Park Boards of Management are appointed under the EPBC Act. Aboriginal Board members are nominated by Land Trust members under the auspices of

the relevant Land Councils and appointed by the Minister. An ANAO Principles and Better Practice Guide on Corporate Governance in Commonwealth Authorities and Companies includes useful better practice principles for boards. For example, there is value in ensuring that a board collectively has the necessary blend of qualities, skills, knowledge and experience relevant to the operations of its legislative framework. This suggests that on appointment, board members should be given a sound understanding of the role of the board as envisaged under the EPBC Act. The ANAO Better Practice Guide also notes that Board members should undertake appropriate induction training on appointment, as well as continuing education and professional development as necessary.⁴⁰

2.31 Across all jointly managed parks there is value in enhancing the effectiveness of administrative support provided to Board members and to the Parks Australia staff with whom they interact. Parks Australia agrees that it would be appropriate to allocate greater resources to Board training, and to better articulate the role and function of Boards. For example, this could be achieved by making roles, responsibilities and desired performance outcomes for joint management explicit in schedules to revised lease agreements.⁴¹

Conclusion

2.32 The joint management process is acknowledged as evolutionary and Parks Australia has been a leader in this area. However, in practice there is a high degree of ambiguity in the application of joint management. In part, this reflects the different values and perceptions of participants as well as the limitations on the information available to Board members. Expanding information on appointment as well as governance training opportunities for Board members and staff in line with Corporate Governance better practice could also assist in improving the capacity of the Boards to meet their obligations under the EPBC Act, as well as strengthening common approaches to business management across the parks.

⁴⁰ Australian National Audit Office (1999) *Principles and Better Practices: Corporate Governance in Commonwealth Authorities and Companies (Discussion Paper)*.

⁴¹ Sovereign Health Care Australia, (December 2001) *Report of the Evaluation of the Community Liaison Function at Uluru-Kata Tjuta National Park*, p. 69.

Recommendation 3

2.33 In order to further develop joint management arrangements, the ANAO *recommends* that Parks Australia:

- (a) ensures that roles and responsibilities for each of the joint management partners are explicitly considered in the next five year reviews of the lease agreements and are reflected in the terms and conditions of appointment for the members of the Park Boards of Management; and
- (b) expands the training program for members of Boards of Management by including a specific focus on their roles and responsibilities under the EPBC Act and other relevant legislation.

Director's response

2.34 Agree.

3. Management of Natural and Cultural Heritage

Introduction

3.1 Protecting and conserving the natural and cultural heritage identified in the management plans is core business for Parks Australia. It is an important prerequisite to demonstrating compliance with the provisions of the EPBC Act. Actions should be cost effective and timely with all financial and human resources allocated to recognised priorities and /or risks in plans (e.g. threatening processes, wildlife conservation, tourism and visitor management and compliance and enforcement).

Defining natural heritage

3.2 Defining the natural heritage of each particular Commonwealth national park and reserve is important to facilitate monitoring of change over time. Natural heritage covers all flora and fauna, and other natural features including water bodies and rock formations, of intrinsic value to a particular national park or marine protected area. The EPBC Act references the World Heritage Convention (WHC) in seeking to define natural heritage of world heritage areas including Kakadu and Uluru-Kata Tjuta. Article 2 of the WHC defines natural heritage as:

natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;

geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species and animals and plants of outstanding universal value from the point of view of science or conservation;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.⁴²

3.3 The natural heritage values for which both Kakadu and Uluru-Kata Tjuta were inscribed on the World Heritage list are detailed in the management plans for each park⁴³. Other parks and marine protected areas list sites and species of natural value in various ways in their management plans. For example, Booderee lists significant flora, and endangered and vulnerable fauna as an appendix to

⁴² Convention Concerning the Protection of the World Cultural and Natural Heritage, Article 2.

⁴³ Uluru-Kata Tjuta National Park Plan of Management, pp. 179–182. Kakadu National Park Plan of Management, pp. 215–217.

its management plan. In addition, the visual attributes of the park, geology, landform and soils, marine and freshwater conditions, native plants and animals, and introduced flora and fauna pests are discussed in the body of the plan. In attempting to define their natural and ecological heritage, the Ashmore Reef and Cartier Island draft management plans list aspects of biological diversity, marine habitats, marine vertebrates, marine invertebrates, terrestrial habitats and flora, and terrestrial fauna. Although the definition of natural heritage across parks, reserves and conservation zones is not identical (reflecting the diversity of each environment), definitions are sufficiently consistent to allow for the management of natural heritage.

The management of threatening processes

Fire

3.4 The risk to natural heritage from fire is a major consideration for terrestrial park managers. However, fire is also a natural feature of the environment and is one of the most complex management issues in the jointly managed parks. Traditional owners have strong views about fire and its role in landscape and cultural continuity. Fire management is a good illustration of the need for adaptive approaches to natural and cultural heritage management. Needs and priorities will vary year by year according to seasonal and other external factors.

3.5 All jointly managed parks have fire management strategies along with significant resources and equipment to respond to local outbreaks. Kakadu managers estimate that some 40 per cent of the park is controlled burned each year through a range of methods including aerial ignition from helicopters. Uluru-Kata Tjuta has a fire management plan and baseline data dating back to 1976 on the effects of controlled burns on the park, and uses the GIS to plot fire sites. Fire management in Uluru-Kata Tjuta is a current concern, mainly due to above normal rainfall in 2001 and the presence of an invasive weed species, Buffel Grass, which results in a hotter than normal fuel burn with more serious implications for the natural heritage of the park.

3.6 Booderee has a five-year management plan for fire control, and the local indigenous community has developed a complementary fire management plan for neighbouring land. Fire management is critical to Booderee as some 80 per cent of the park was burnt in a wildfire in 1972. However in the Christmas 2001 bushfires only 15 per cent of the park was damaged. Good planing and coordination played an important part in this result (see Case Study 1).

3.7 Methods for managing fire can be contentious and many stakeholders surveyed by the ANAO raised the issue of fire management as an ongoing concern. Some of these concerns are cultural, in that some Kakadu and Uluru-Kata Tjuta stakeholders consider that more could be done to achieve alignment between traditional fire management practices and the practices favoured by Parks Australia. Parks Australia considers that it aims to replicate Aboriginal burning patterns whilst recognising property protection issues. Others raised the extent and scale of controlled burns as an issue worthy of attention. Some Kakadu stakeholders noted that there was insufficient consultation regarding the timing of burns with both indigenous and non-indigenous neighbours. Some Uluru-Kata Tjuta stakeholders felt that burning was not comprehensive enough, and that there is consequently a major threat of wildfire both within and outside park boundaries.



Fire management has been a long standing management technique at Kakadu National Park

Source: Kakadu Visitors Guide

3.8 While management practices reviewed through the course of the audit were sufficient to address the threat from fire at this time, natural resource managers should ensure that future fire management plans include targets and indicators linked to overall conservation objectives, to allow assessment of achievements over time.

Case Study 1

Booderee National Park Fire Management

In the summer of 2001-02, severe bushfires affected major areas of NSW including the south coast region where Booderee National Park is located. On 24 December 2001, Booderee was threatened by fire approaching from the north west. The fire caused extensive property damage to areas near Huskisson, Woolamia, Falls Creek and Vincentia. Fire crews from Booderee assisted in combating the fires in these adjacent areas. Due to wind shifts and fire fighting efforts, the fire was contained 4 km from the park boundary.

As a result of the fire, the park lost power and telephone communications for five days. Park visitors were evacuated and the park was closed as, without power, the water supply and sewerage systems were inoperative. Water and sewerage systems were reactivated on 30 December.

On 2 January 2002, a fire entered the park from Sussex Inlet. The fire threats led to the closure of the park and the evacuation of villages and campgrounds in Jervis Bay Territory. The fire presented a particular problem in that it spread throughout areas without fire trails and could only be fought from public access points. During the peak of the fire, resources were deployed from the Wreck Bay Aboriginal Community, Department of Defence, NSW Rural Fire Service, State Emergency Services, Queensland and Sutherland Shire as well as Parks Australia staff from Canberra and RAN Weapons Range Beecroft. Mechanical support for plant and vehicle breakdowns was also provided by the Shoalhaven City Council.

Fire damage was restricted to the western portion of the park and overall some fifteen per cent of the park was damaged. A number of Parks Australia staff worked twelve hour shifts or were rostered on standby for 12 to 14 days without a break. At critical times, staff agreed to work longer periods to ensure the firefighting capabilities were not diminished. The fire placed an unanticipated burden on the park finances through an increase in expenditure (to cover the direct costs of overtime, materials, fuel and plant hire) and a loss of revenue (estimated at \$15 000 per day while the park was closed). However, the ANAO notes that the potential cost of injuries and /or property damage, or damage to natural and cultural heritage could have been far greater if park staff had not undertaken pre-emptive action.

Some of the key lessons learnt related to fire-fighting and property protection within the park. Parks Australia considers that the operations room worked extremely well as did procedures for inter-agency coordination. Up to 100 firefighters and support staff were deployed throughout the park. Throughout the course of the fire, there were equipment breakdowns principally due to

age and extended hours of operation of the plant. A review will be undertaken to identify old and unreliable equipment and funds will be sought for this purpose in 2002–03 financial year. More formalised working arrangements with other agencies would also assist in future coordination of fire management. The ANAO notes that the Government has recently announced the development of a coordinated national bushfire strategy that will link fire agencies, scientists, researchers and industry groups. Overall, the ANAO considers that Parks Australia was effective in managing the threats and risks posed by the fires and this illustrates the importance of good planning, good coordination and adaptive management.

Feral animals

3.9 Feral animals are also a very significant threat to both natural and cultural heritage due to their potential impact on local habitats and species. As noted in the Uluru-Kata Tjuta Management Plan, the pressures exerted by introduced predators and herbivores on the original mammalian fauna of central Australia were a major factor in the extinction of about 40 per cent of the native species.⁴⁴

3.10 Feral animal actions are an important element in all the management plans. Booderee introduced a Vertebrate Pest Management Plan in 1996. Similar operational plans are under development in the other jointly managed parks. Uluru-Kata Tjuta has a draft feral management strategy and Kakadu is currently developing one. Expenditure in excess of \$250 000 was approved in June 2001 to provide a 'strategic, long term framework for the management of a wide range of feral and exotic animals in Kakadu National Park.'

3.11 Of the 27 mammal species found in Uluru-Kata Tjuta, six are introduced (the house mouse, the camel, the fox, the cat, the dog and the rabbit). The introduction of the calicivirus and a rabbit-control program resulted in substantial reductions in rabbit numbers along with improvements in native vegetation and a reduction in introduced predators. However there has been little strategic effort to control introduced species such as camels in particular. Some 47 000 camels are reported in southern part of the Northern Territory. Controls will be considered by Parks Australia as part of the finalisation of the feral species management strategy.

3.12 In Kakadu, introduced animals include the cane toad, Asian water buffalo, cattle, horses, donkeys, domestic dogs, cats, European honeybees and pigs. Buffalo and cattle numbers were substantially reduced within the park as a consequence of the Brucellosis and Tuberculosis Eradication Campaign (BTEC) as well as through more limited and opportunistic control of population numbers

⁴⁴ Uluru-Kata Tjuta National Park Plan of Management, p. 87.

by parks staff in consultation with traditional owners. The BTEC program finished in 1997.⁴⁵ This has improved the water quality at key visitor sites such as Yellow Water. Further control of feral animals is contingent on the outcomes of the feral and exotic animal strategy. The ANAO notes that traditional owners also see some feral species such as rabbits, buffalo and pigs as food sources and important resources. These sensitivities and conflicts are managed through ongoing liaison with local communities.

3.13 A number of stakeholders commented about the management of feral animals. One stakeholder commented in relation to Kakadu that there is:

...no clear rationale for the level of control [of feral animals] attempted and its cost. There is no means of judging effectiveness in achieving damage mitigation. ... Implementation is spatially patchy and effort is not necessarily focussed on the most sensitive or significant conservation assets.⁴⁶

3.14 A feral species given particular focus in Kakadu is the cane toad, which is likely to have a major negative effect on the natural heritage of the park. Cane toads were first detected in the park during 2001, and significant effort is underway to monitor their impact. Staff have been focussed on developing a better understanding of the risks so that mitigation strategies can be developed, working with neighbours to reduce the impact of the cane toads spread, and engaging in community education strategies. In 2000, Parks Australia and the Environmental Research Institute of the Supervising Scientist (ERISS) co-funded a risk assessment project into the likely effect of cane toads on Kakadu. This assessment indicated that the arrival of cane toads was likely to cause an initial decline in local populations of a range of species including quolls, goannas, monitors, snakes, and dingoes. Parks Australia has advised that evidence from other areas of Australia suggests that animals initially susceptible to cane toads may recover in terms of population numbers and distribution over time.⁴⁷

3.15 Kakadu has established a frog monitoring project using 'state of the art' remote automatic monitoring devices, or 'frog poles', to record and identify frog calls to estimate the abundance of various species at a number of sites within the park. The arrival of cane toads is also a significant concern for traditional owners and tourism operators, and Parks Australia has involved community representatives in its risk assessment work to facilitate the sharing of knowledge.

3.16 To address the risk more effectively, over \$1 million has been allocated from the Natural Heritage Trust for research into the viability of biological

⁴⁵ Numbers were reduced from an estimated 20,000 in 1988 to probably fewer than 250 in 1996.

⁴⁶ ANAO survey response no. 34.

⁴⁷ Letter from Australian Permanent delegation to UNESCO 20 March 2001. The ANAO notes that this issue is contentious and subject to debate amongst some scientists.

control—a ‘gene switch’ in cane toads, which could be turned ‘off’ to prevent maturation and reproduction—to reduce the impact of cane toads on native wildlife. The results of the research are expected towards the end of 2002. However, for the foreseeable future there is no effective method of preventing a negative impact on park wildlife.

3.17 At present, without an effective tool or strategy to control cane toads, Parks Australia is focussing on developing a better understanding of the native species that may be at risk.



Cane toads threaten Kakadu National park.

Source: Environment Australia: National objectives & targets for biodiversity conservation (June 2001)

3.18 In Booderee, there are 13 known introduced terrestrial vertebrate species in the park including rabbits, foxes, cats, dogs, mice, black rats, and seven bird species. With the exception of foxes and black rats around the camping areas, the management plan states that the numbers of pests species is relatively low. Parks Australia was successful in reducing fox numbers in Booderee during 2000–01 when a major fox-baiting program was undertaken to reduce the fox population’s impact on threatened species within the park. Unfortunately, while fox numbers were reduced, the impact of the baiting program could not be clearly established as monitoring of wildlife numbers was not undertaken prior to the baiting program being implemented.

3.19 Introduced ants are a major pest for some parks. For example, big-headed ants are a pest in the Northern Territory and crazy ants (*Anoplolepis gracilipes*)

cause concern on Christmas Island. Crazy ants have infested 14 per cent of the Island's rainforest. These ants have a destructive impact on the island's ecosystems. Native species of Robber Crabs, Red Crabs and Blue Crabs have been '*completely wiped out from infested areas*'.⁴⁸ It is also likely that populations of other ground and canopy dwelling animals such as reptiles and other leaf litter fauna have also declined. Seedlings that were previously eaten by crabs are now growing and as a result, changing the structure of the forest. Weeds have also spread into the forest because there are no crabs to control them. The control of crazy ant infestations on Christmas Island, however, is regarded as encouraging. In 1999–2000, PAN prepared a three-year action plan to control and mitigate the impact of the yellow crazy ant on the ecology of Christmas Island. Poison baiting, research and education are key components of the action plan. By March 2001, the area of Christmas Island known to be infested by crazy ants was 1390 hectares. Total expenditure on crazy ant eradication to date is over \$400 000 which includes a research grant through Monash University. The three-year action plan includes time lines, priorities, targets, and is linked to resource allocations.



Crazy ants on Christmas Island have proven to be difficult to control. The baiting program by Parks Australia has had some success.

Source: Environment Australia 2000, 'The Yellow Crazy Ant'

⁴⁸ Environment Australia 2000, 'The Yellow Crazy Ant'.

Conclusion

3.20 Overall, Park Australia's control of feral species has been effective in some areas. However in a number of other cases, success has been limited because the control measures do not yet exist. This point is a particular constraint on dealing with the cane toad which is currently the major feral animal challenge facing Kakadu National Park.

3.21 The persistent nature of feral species both within and outside of the parks (such as foxes within the south coast region of NSW or camels in southern areas of the Northern Territory) means that it is impractical to totally eradicate feral species populations in mainland parks. This highlights the importance of finalising feral animal strategies in parks such as Kakadu and Uluru-Kata Tjuta so that priorities can be more clearly set, resources earmarked over successive years and cost effective monitoring introduced systematically to minimise the impacts on the environment of the parks. Demonstrating value for money outcomes as part of regular monitoring of measures to control feral species should also be a priority.

Weeds

3.22 Weeds are one of the most significant threats to parks' ecosystems Australia-wide. A weed management strategy exists in each of the jointly managed parks although few have any targets or timeframes or specific financial allocations. Consequently it is difficult to make an assessment of what has been achieved at either the park or agency scale and whether value for money has been achieved. Park staff work with traditional owners, scientists, and other relevant stakeholders in managing threats from weeds including Buffel Grass in Uluru-Kata Tjuta, Bitou Bush in Booderee, and *Mimosa pigra* in Kakadu. Buffel Grass and other weeds were a particular concern for several stakeholders at Uluru-Kata Tjuta. One of these noted that:

Buffel Grass has grown unchecked to cover between 20–25 ha of park land. The Buffel Grass strategy estimates that it will double its coverage every year. It can be found choking the creek beds, some waterholes and in the entrance of caves around Uluru. It is a monoculture that threatens the biodiversity of the park ... There are many reports, strategies and action plans to deal with these issues. They are simply not being implemented.⁴⁹

⁴⁹ ANAO survey response no. 25.



Buffel grass at Uluru-Kata Tjuta and Bitou Bush at Booderee are two serious weed pests yet to be effectively controlled by Parks Australia.

Source: Parks Australia

3.23 In Booderee, weed control is a major issue for the park. There are 23 weed species within the park of which Bitou Bush is one of the most persistent and threatening to biodiversity. Bitou Bush is classified as a weed of national significance. Bitou Bush is tackled through burning, biological controls, and spraying with herbicide. To date, these strategies have not been effective in eradicating the weed and it continues to spread through Booderee National Park. The objective of park administration is to eradicate Bitou Bush from Booderee National Park within 10 years. There is little evidence that this will be achieved with current progress although Parks Australia is exploring a wide range of available ‘best practice’ options.

3.24 Kakadu’s management of the invasive weed, *Mimosa pigra*, is regarded as best practice by park staff and stakeholders alike. *Mimosa pigra* is a spiny shrub capable of devastating floodplains in a very short space of time. Seed production is prolific with as many as 9000 seeds per square metre produced by year-old plants. Seeds can remain viable for over 20 years in optimum conditions such as those that exist at Kakadu. When established, *Mimosa pigra* has the potential to exclude all other species and the weed will double its infestation area each year. The Kakadu *Mimosa pigra* strategy has been developed over 20 years and is based on a regional approach with a range of stakeholders including park neighbours and other government agencies. Currently, all known infestations within the park are considered to be under control, although ongoing attention is required due to the long period of dormancy the *Mimosa pigra* seeds can sustain.⁵⁰

⁵⁰ Jeremy Russell-Smith, ‘Flora’ in T. Press et al (eds) 1995 *Kakadu: Natural and Cultural Heritage and Management*, Australian Nature Conservation Agency, Darwin. pp. 156–157.



Mimosa Pigra a noxious weed in northern Australia has been successfully treated at Kakadu National Park.

Source: Parks Australia

3.25 The need for vehicle washdown facilities for weed control was listed as a priority action in the 1996–2001 weed management strategy for Kakadu National Park⁵¹. The Kakadu Plan of Management also notes that washdown facilities would be introduced at park entry points and other central locations⁵². The need for washdown facilities and the seriousness of the weed threat to the natural heritage of Kakadu was raised by a number of stakeholders. Parks Australia has advised that washdown facilities were installed near the information bay at the Northern Entry Station a few years ago. Unfortunately, the high-pressure wash down equipment was stolen within a short time of installation rendering the facility useless. The strategy for dealing with washdown and weed seed dispersal is currently being re-examined as part of a park wide review of weed management and control.

Conclusion

3.26 The ANAO notes that weed control is a particularly difficult challenge for all park managers. Parks Australia is achieving good results in some areas, particularly the management of *Mimosa pigra*. However, there needs to be a more systematic approach to the management of weeds through the implementation

⁵¹ Australian Nature Conservation Agency (1996) *A Weed Management Strategy for Kakadu National Park 1996–2001*, p.7.

⁵² Kakadu National Park Plan of Management 1999-2004, p. 74.

of weed management strategies that link targets and indicators at the local level to agency-wide objectives. Implementation strategies should include clearer priorities, and specify timelines and resources for achieving these, to allow parks to report systematically on the value for money achieved as well as better practice.

Recommendation 4

3.27 In order to improve the management of natural heritage of Commonwealth parks and reserves, the ANAO *recommends* that Parks Australia should give priority to finalising feral animal and weed control strategies where appropriate and explicitly linking financial and staffing resources to feral animal and weed control priorities identified at the agency and park levels. These should have time lines and provide the basis for determining value for money from feral animal and weed control.

Director's response

3.28 Agree.

The rehabilitation of former mine-sites in Kakadu

3.29 A particular issue for Kakadu is the potential impact of former uranium mine sites on the natural heritage of the park. There are approximately 20 former mine sites located within the national park, with varying degrees of contamination. These sites were mined in the 1950s and 1960s when there were minimal requirements for rehabilitation or environmental protection. The sites are located within the Gunlom Aboriginal Land Trust area of Kakadu and, as such, became part of Parks Australia's responsibilities in 1996.⁵³ Hazard reduction work was undertaken in the 1990s to minimise the risk of contamination from the sites and the Office of the Supervising Scientist (OSS) checks the durability of this work at least annually. The long-term aim of rehabilitating these sites was included as a key feature of the Gunlom Aboriginal Land Trust lease, and consequently also of the Kakadu Plan of Management. Recently, however, it became apparent that uranium residue had become exposed at a particular site within the park.⁵⁴ An interim remediation program has been

⁵³ Gunlom Land Trust is one of the more recent leases that make up the current area of Kakadu National Park.

⁵⁴ The Supervising Scientist considers that the radiological hazard presented by this residue was extremely low. There was no evidence of hot spots arising from the dispersal of tailings into the South Alligator River system during the Wet season. Analysis of fish and fresh water mussels collected from the South Alligator River showed that the risk of radiation exposure resulting from the consumption of these food items was very small. The completion of the residue clean up will be a priority once the issues of site specific standards for radiological protection and containment have been finalised with the regulating agency, The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). Annual Report of the Supervising Scientist 2000–01.

undertaken for this site, and contaminated material has been removed and stored in drums in a secure area within the park. In the long term, the clean up of the area will be considered within the context of a rehabilitation plan for all former mine sites within the Gunlom Aboriginal Land Trust area of Kakadu.

3.30 The Director of National Parks undertook to develop a plan of management for the rehabilitation of the former mine sites by 31 December 2001⁵⁵. In December 2001, an advanced draft of 'Part A' of the plan was provided to the Northern Land Council and traditional owners. Part A addresses the majority of mine sites and associated infrastructure, with the exception of mine sites and associated infrastructure that have significant/complex radiological contamination. There is no time frame for completing Part A. A rehabilitation plan for the latter sites cannot be completed until agreement has been reached between various stakeholders (most notably the OSS and the Australian Radiation Protection and Nuclear Safety Agency—ARPANSA) in relation to appropriate radiological standards. The rehabilitation of these sites will be addressed by Part B of the Plan. No completion date has yet been determined.

3.31 Parks Australia considers that the risk to people is negligible, on the basis of radiological monitoring undertaken by the Office of the Supervising Scientist. Parks Australia is aiming to take a risk-based approach to the rehabilitation of old mine sites, in consultation with traditional owners⁵⁶. Parks Australia considers that it would not be practical to restore all of the former mine sites to pristine condition for a variety of technical, financial and cultural reasons. The likely cost of the rehabilitation is unknown at the present time. However, the final cost will be considered within the context of the standards recommended by ARPANSA.

3.32 The cost to date of developing rehabilitation plans and initial studies is over \$234 000. This is much higher than the \$161 000 originally envisaged due to the expanding scope and significance of the project. Nevertheless, the contract recognised that there were a number of matters that would require variations to the contract and subsequently the ultimate cost. In particular, Parks Australia has indicated that very little site characterisation had taken place prior to the consultants being engaged and that field trips and meetings with consultants and traditional owners have been far more extensive than was originally anticipated due to sensitivities associated with sacred sites. Additional work was also required with ARPANSA on standards for rehabilitation. While recognising the complexity and scale of the task, the ANAO considers that this highlights the importance of planning and scoping efforts in the early stages of significant contracts.

⁵⁵ Director of National Parks Annual Report 2000-2001, p. 25.

⁵⁶ Some sites can simply be sealed up, others may need more extensive rehabilitation work. The sites that have significant/complex radiological contamination include: the Gunlom residues sites, El Sherana West, and various sites at the El Sherana Camp.

Performance monitoring of natural heritage

3.33 Performance monitoring of natural heritage in Commonwealth national parks and reserves is an important compliance issue in relation to the EPBC Act. The Act states that a key function of Boards of Management in jointly managed parks is, ‘in conjunction with the Director, to monitor the management of the reserve’. In addition, the Operational Guidelines to the World Heritage Convention state that it is ‘the prime responsibility of the States Parties to put in place appropriate on-site monitoring arrangements as an integral component of day-to-day conservation and management of sites.’ This was discussed in the background section of this audit report. The management plans also outline monitoring actions such as in relation to feral animal control.

3.34 While monitoring of natural and cultural heritage can be complex and resource intensive, it is essential for the assessment of change over time. Currently, individual parks conduct rolling monitoring programs in a range of areas including fire, weeds, feral animals, wildlife, vegetation, and water quality as well as focussing monitoring efforts on various areas of specific emerging risk. For example, crazy ants on Christmas Island, cane toads in Kakadu and the potential infestation of *Caulerpa taxifolia* (a type of invasive seaweed) adjacent to Booderee have all been the focus of specifically targeted monitoring programs in response to identified or emerging risks.

3.35 All jointly managed parks have baseline data that would enable them to conduct analyses of trends over time and measure changes in natural heritage. The main gap is that monitoring of natural heritage tends to be opportunistic and focussed on specific issues, rather than occurring systematically at the landscape scale. While the management plans may specify particular monitoring actions to be carried out, in general these actions are not consistently prioritised or linked to long-term trends. This means that it is difficult to demonstrate that resources are targeted to areas of greatest need. It is consequently difficult to make an assessment of the extent to which conservation of natural and/or cultural heritage has been achieved over the life of a particular plan. This is a particular challenge for the Director of National Parks and Board members in jointly managed parks, as it significantly limits their ability to make decisions relating to the management of the reserve as required under the EPBC Act.

3.36 The ANAO notes that the majority of stakeholders surveyed by the ANAO considered that, while Parks Australia staff were highly committed and working extremely hard under considerable pressure, there was room for improvement in relation to the monitoring of natural heritage.

3.37 As one stakeholder commented:

A comprehensive change of approach to conservation management is required, involving a clear articulation of specific management goals and associated performance indicators, the establishment of an effective monitoring program that feeds back to management in an adaptive management framework, and encouragement of research to improve ecological understanding.⁵⁷

3.38 The importance of landscape-wide monitoring was also reinforced through the World Heritage Convention as illustrated in case study 2.

Case study 2

Monitoring mining activities adjacent to Kakadu

Monitoring at the landscape scale is important because of the potential risks to the natural and cultural heritage of the park from mining activities adjacent to Kakadu National Park in the Alligator Rivers Region. Mining is on separate mineral leases adjoining the national park. The Supervising Scientist is responsible for overseeing the protection of the Alligator Rivers Region from the potential impacts of uranium mining. Parks Australia is consulted, along with traditional owners as part of this process.

Concerns about the possible impact of uranium mining on the natural and cultural heritage of the Jabiluka mineral lease, and on the adjacent Kakadu National Park, were raised in 1998 by the Jabiluka traditional owners and other parties. In response to these concerns, the World Heritage Committee sent a mission to Kakadu in late 1998 and a number of scientific issues were raised. The mission was followed by a visit from the WHC Independent Science Panel (ISP) who found that the risks to the natural values of Kakadu were very small or negligible although unforeseen environmental impacts may occur in the future. However, the ISP considered that it would be prudent for more extensive landscape and ecosystem analyses and monitoring program to be developed in cooperation with key stakeholders. The ISP recommendation to improved monitoring arrangements was designed to minimise these risks, as well as to strengthen the transparency of current review mechanisms.

During the 1999–2000 wet season, there was a leak of tailings water (or process water) from a pipe at the Ranger mine into the external environment⁵⁸. This incident triggered significant national and international interest with the possibility that Kakadu National Park could be placed on the List of World Heritage Properties in Danger due to the potential impact of the mining on the natural and cultural heritage of the park. The Supervising Scientist

⁵⁷ ANAO survey response no. 2.

⁵⁸ Supervising Scientist 2000, Annual Report 1999-2000, Supervising Scientist, Dawn, p. 9.

investigated the tailings leak issue and concluded that the leak had a negligible impact on people and the environment. This conclusion was supported by the ISP.

In early 2002, prior to implementation of the ISP recommendation, there was a further incident involving uranium mining. In this case, wet season runoff from a low grade ore stockpile resulted in elevated uranium levels at checkpoints in the Ranger lease area. The OSS considers that the incident does not pose a health risk to Aboriginal communities or a threat to the environment of Kakadu. The wetland filtration system on the Ranger mine site returned the runoff to a safe standard before it entered the park. The incident highlights the limitations of monitoring if it is not integrated into the management process so that it can provide early warning of new or emergent issues or challenges.



Jabiluka mine site near Kakadu National Park.

Source: Environment Australia

3.39 The ANAO notes that, in Kakadu National Park, Parks Australia is considering the development of a landscape-wide monitoring program in consultation with traditional land owners. In addition, the OSS is developing, in conjunction with Parks Australia and the World Heritage Branch a specific monitoring program to address the ISP recommendation. The Marine and Water Division is also intending to develop performance assessment plans that include quantitative indicators, such as permits issued, population status of endangered species and visitor satisfaction versus expectations. An overall performance assessment framework has already been completed for all marine protected areas.

3.40 It is anticipated that the Parks Performance and Planning Task Force may provide the basis for addressing the gaps in monitoring identified in this report. The Task Force aims to complete a framework for performance assessment during 2001–02 based on pilots from a number of parks. The goal ultimately is to undertake outcome measurement periodically (for example, once every seven years) with annual measurement of outputs and selected indicators of efficiency/effectiveness to be applied to all parks for the purposes of annual reporting from 2001–02 onwards. In addition, a Parks Australia risk management strategy is to be finalised for all parks and management plans and implementation plans are to be standardised. These matters should be a high priority for Parks Australia.

Recommendation 5

3.41 In order to strengthen the monitoring of natural heritage in Commonwealth national parks and reserves over time, the ANAO *recommends* that Parks Australia should give priority to the development and implementation of a comprehensive, consistent monitoring system at the agency and park level.

Director's response

3.42 Agree. There is no generally accepted 'best practice' process for assessing the effectiveness of park management. Work is currently being undertaken within the Environment portfolio, State and Territory agencies and internationally on development of park management performance assessment systems. Parks Australia is actively engaged in this work and will continue development and progressive implementation of a comprehensive monitoring system.



The Mulgara—a listed threatened species under the EPBC Act.

Source: Parks Australia, Uluru Fauna.

Wildlife management

3.43 The EPBC Act contains important provisions for identifying and monitoring biodiversity and introducing recovery plans for listed threatened species. Inventories that identify and state the abundance of listed threatened species, listed threatened ecological communities are also required by 2005. A recovery plan is required to be enforced for each listed threatened species and ecological community.⁵⁹ While the statutory responsibility for making or developing recovery plans is the Minister's, this is achieved through Wildlife Australia in Environment Australia. The Commonwealth is required by s269(1) of the EPBC Act to implement recovery plans in Commonwealth areas, including Commonwealth reserves.

3.44 All parks examined during the audit have documentation and inventories of wildlife species linked to the plans (or draft plans) of management. For example, Kakadu has an abundance and variety of fauna. Records indicate over 60 species of mammals, 289 species of birds, eleven species of turtle, two crocodile species, 76 known lizard species and 39 snake species, 26 species of frog, 55 fish species and over 10 000 species of insect. Eleven fauna species are currently listed as threatened compared with the eight species listed when the current management plan was introduced in 1999. One species, the Ghost bat was taken off the list in April 2000 as it is no longer threatened. In Kakadu, a park-specific monitoring plan is in place for only one of eleven relevant species listed as endangered or vulnerable—the flat-back turtle. A draft recovery plan for all listed marine turtles has been developed but not for other listed species.

3.45 Kakadu's current major species management efforts are related to the impact of cane toads, so northern quolls and goannas are a particular focus for wildlife management. In addition, management programs are in place for flat-backed turtles, estuarine fish and crocodiles. In 2001, Kakadu commenced a park-wide fauna survey to provide additional data on distribution and relative abundance of mammals, birds, reptiles and amphibians at a number of locations across the park. The survey is being conducted by the NT Parks and Wildlife Commission, in conjunction with Parks Australia staff, and builds on surveys undertaken in 1991 at the same locations. This is an important initiative as it potentially will provide some indication of changes in natural heritage over time.

3.46 In Uluru-Kata Tjuṯa, fauna surveys have documented 178 bird species and 72 species of reptile. Lizard species include the rare giant desert skink and Australia's largest lizard, the perentie, which can reach a length of 2.5 metres. Some 46 native species of mammals have been recorded at Uluru-Kata Tjuṯa although only 22 species were found from a survey in 1993. Many of the medium

⁵⁹ See sections 267-284 of the EPBC Act.

sized marsupials and larger rodents that once inhabited the park area have become extinct including the Common Brushtail Possum and the Black-footed Rock Wallaby. The Uluru-Kata Tjuta Plan of Management lists 32 important species (of which two are listed under the EPBC Act), as well as important communities, habitats and locations. A 1999 vertebrate resurvey completed in 1999 and reported in July 2001 indicated no concern over the general health of the parks ecosystem and vertebrate communities. However, the survey commented on the importance of monitoring Buffel Grass and ensuring that data collected by rangers is analysed to improve performance. It also noted the constraint of staff turnover which is why this has not been done to date. Uluru-Kata Tjuta has a park-specific recovery plan for the Mulgara and is working on a draft recovery plan for the Marsupial Mole. The Minister for the Environment and Heritage is currently considering the recovery plan for the Great Desert Skink.

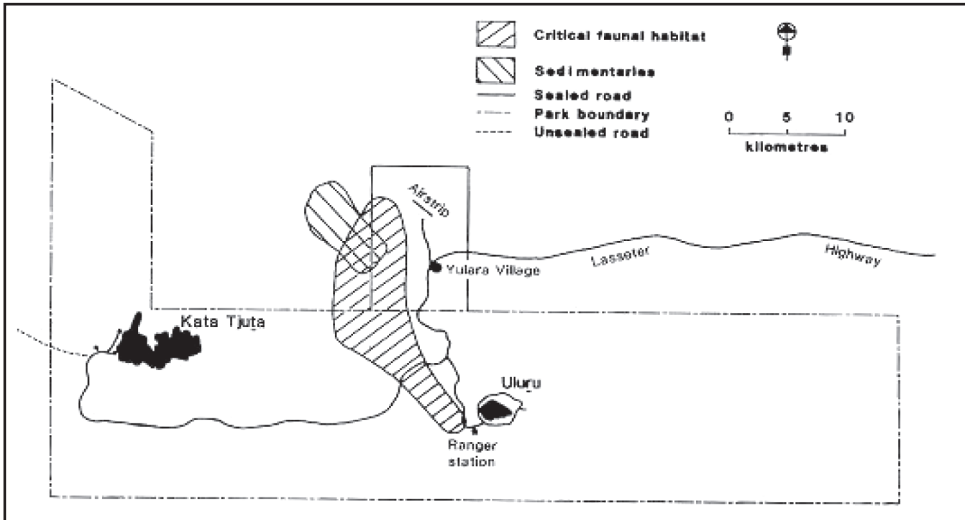


The desert skink and marsupial mole, two species from Uluru-Kata Tjuta that are subject to protection actions by Parks Australia.

Source: Parks Australia Uluru Fauna 1993.

As can be seen in Figure 4, Uluru-Kata Tjuta has mapped important habitat both within and adjoining the park.

Figure 4
Uluru-Kata Tjuta National Park



Source: J R W Reid, J A Kerle, and S M Morton (1993) *Kowari 4 Uluru Fauna The Distribution and Abundance of Vertebrate Fauna of Uluru National Park NT*, p. xvii

3.47 Surveys at Booderee National Park have documented more than 30 species of mammals, some 200 species of birds, 37 species of reptiles, 17 species of amphibians and at least 180 species of fish within the Park. Twelve fauna species are listed as either vulnerable or endangered under the EPBC Act. Survey work by Parks Australia is supplemented by good quality, independent scientific studies of species or habitats. However these are not used to their full advantage in terms of monitoring performance. There are no final recovery plans in place for listed threatened species although draft recovery plans have been prepared for the Eastern Bristlebird⁶⁰ and Gould's Petrel. The plan for the Eastern Bristlebird has been drafted by NSW National Parks and Wildlife Service with input from Parks Australia. Booderee is an important refuge for the Bristlebird in NSW.

⁶⁰ This plan involves consideration of the relocation of a number of Eastern Bristlebirds from Booderee National Park to the RAN Weapons Range Beecroft.



The Eastern Bristlebird—subject of a draft recovery plan in Booderee National Park.

Source: Booderee Visitors Guide.

3.48 In all of the jointly managed parks, there is ongoing consultation with traditional owners in relation to wildlife management. In Booderee, effective working arrangements with neighbours are fostered through consultative committees and other fora, such as the Shoalhaven Catchment Management Committee and 'Conservation through Cooperation—Integrated Management for the Jervis Bay Region' which involves different levels of government in addressing regional issues of development and conservation.

3.49 In the islands and marine reserves, inventories have been prepared in conjunction with management plans or draft management plans. A number of recovery plans occurring on Commonwealth land are in preparation. The recovery plan for the Green Parrot on Norfolk Island is currently being reviewed in order to meet the requirements of the EPBC Act. Plans have been developed and approved for two of six threatened fauna species on Christmas Island (the Abbott's Booby and the Christmas Island Shrew). Draft recovery plans exist for the Christmas Island Goshawk, Christmas Island Hawk-Owl and the Christmas Island Frigatebird. A consultant has been engaged to update these for compliance with the EPBC Act. Completion is expected by March 2002.

3.50 As part of managing wildlife, Parks Australia is also required to take account of cultural issues. These require careful balancing and consultation to achieve acceptable outcomes. The case study below illustrates the challenges.

Case study 3

The Red-Footed Booby in Pulu Keeling National Park

On Cocos (Keeling) Island, the management of the Red-Footed Booby is a particularly contentious issue, which has been heightened since the introduction of the EPBC Act. Approximately 44 000 Red-Footed Boobies range across the Cocos (Keeling) Islands and breed on North Keeling Island, which was declared Pulu Keeling National Park in 1995. This is the largest breeding colony of the species in Australia. The Red-Footed Booby is a listed migratory and marine species under the EPBC Act, as well as being listed in international agreements with both Japan and China (JAMBA and CAMBA), and its total population is in decline. Red-Footed Boobies have been hunted for almost 200 years by the Cocos Malay people and the harvest of these birds has cultural significance. The harvest was permitted under the former *National Parks and Wildlife Conservation Act 1975*, provided traditional hunting methods were used, the harvest was supervised by park staff, and Red-Footed Booby breeding seasons were successful. The lease by the Cocos Malay Shire Council of Pulu Keeling to the Commonwealth as a National Park was agreed to on the 'expectation' that the community would be allowed to undertake an annual harvest of Red-Footed Boobies.



(Source: Cocos (Keeling) Islands Tourist Association.)

As a result of the introduction of the EPBC Act, the mechanism by which the Director of National Parks could authorise a harvest of Red-Footed Boobies by Cocos Malay people has been removed. Cocos Malay people are not 'indigenous persons' for the purposes of the EPBC Act, and the impact of the new legislation was not discussed with the Cocos Malay community. Legal advice from the Australian Government Solicitor to Parks Australia indicates that the only avenue by which Cocos Malay people could legally kill Red-Footed Boobies would be if the Minister for Environment and Heritage were to approve a referral under the EPBC Act. The issue is yet to be resolved, and is particularly sensitive. Cocos Malay people have used firearms to kill the Red-Footed Boobies in recent years, and over the past four years there have been at least four successful prosecutions for poaching. Cocos (Keeling) stakeholders surveyed by the ANAO raised the issue of the Red-Footed Booby harvest and its importance to local people. Parks Australia has been advised that the Cocos Malay people may campaign to discontinue the lease of North Keeling Island to the Commonwealth as a National Park if they are not

permitted to resume the harvesting of Red-Footed Boobies for food. This demonstrates the challenges of administering new and complex legislation, the importance of comprehensive consultation with stakeholders that anticipates risks, as well as the difficulty of balancing natural and cultural pressures on Commonwealth national parks and reserves.

Conclusion

3.51 While Parks Australia has good information from park inventories on fauna species information collected by Park rangers as well as scientific information needs to be better analysed so that it can be used for performance management purposes. Wildlife monitoring should provide information on to what extent wildlife conservation measures are cost effective and what changes in the number or abundance of species is occurring at the landscape scale across all parks over time. This should be a priority for Parks Australia.

3.52 The development of recovery plans has been slow and largely reflects the pressures from competing priorities as well as the technical and financial requirements for the plans. The development of recovery plans is an important function of the Wildlife Australia branch within Environment Australia and is a requirement under the EPBC Act. Having quality performance information would enable Parks Australia to better coordinate with Environment Australia on national priorities and ensure that resources are allocated to areas of highest need.

Recommendation 6

3.53 In order to enhance wildlife conservation, the ANAO *recommends* that Parks Australia:

- (a) ensures that information collected for management purposes is analysed and acted upon as appropriate at the park level;
- (b) undertakes an analysis of the cost effectiveness of wildlife conservation measures in different parks so as to identify lessons learned and better practice; and
- (c) coordinates with Wildlife Australia so as to progress the development of recovery plans for threatened species in national parks.

Director's response

3.54 Agree.

Managing cultural heritage

Introduction

3.55 As with the management of natural heritage, the protection and conservation of cultural heritage is core business for Parks Australia. As noted in the 2001 State of the Environment Report for Australia, ‘indigenous heritage is the most extensive category of heritage in Australia and is the most neglected⁶¹. It is a requirement under the EPBC Act that the Director of National Parks protects, conserves and manages both biodiversity and heritage in Commonwealth national parks and reserves.⁶² Cultural heritage management is particularly challenging in the jointly managed parks where the line between natural and cultural heritage is not always easily defined. The jointly managed parks have tried to come to terms with these challenges in a variety of ways with varying degrees of success. Some of these strategies will be discussed below.

3.56 Cultural heritage encompasses both tangible and intangible sites and heritage. It is an area of great sensitivity that is crucial in terms of providing assurance as to the performance of Parks Australia over time. It is also an important consideration as IUCN management criteria indicate that the protection and maintenance of cultural heritage and the benefit that traditional owners derive from enterprises established in the reserve or zone should be recognised and taken into account. Tangible cultural heritage features may include rock art and other archaeological sites; intangible cultural features include history, language, traditional skills and knowledge. Threats to cultural heritage can come from destruction by fire or feral animals as well as external factors including culturally insensitive tourism, poorly targeted education and interpretation strategies, and the impact of large numbers of visitors on particular sites. The challenge is for park managers to monitor and minimise or eliminate these risks effectively in consultation with traditional owners. The concept of joint management itself, while an effective starting point for the conservation of cultural heritage, must be actively supported and facilitated at all levels of the park administration and beyond.

Defining cultural heritage

3.57 Cultural heritage includes the knowledge, beliefs, customs and practices of local communities, as well as the tangible evidence of these such as artefacts, rock art and other archaeological sites, historic sites and sites of significance. It also includes other post-contact historic sites, including lighthouses, former safari camps, and other monuments or sites of local or national significance.

⁶¹ Environment Australia, State of the Environment Report, 2001, p. 8.

⁶² EPBC Act, s514B(b).

3.58 Both Kakadu and Uluru-Kata Tjuṯa are listed for their natural and cultural heritage under the World Heritage Convention. Article 1 of the World Heritage Convention defines ‘cultural heritage’ in the following way:

monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.⁶³

Cultural heritage protection strategies

3.59 Uluru-Kata Tjuṯa is currently the only park to have a formal operational plan for cultural sites. Uluru-Kata Tjuṯa’s Cultural Heritage Action Plan contains specific action plans that relate to the aims outlined in the Plan of Management, assigns specific timelines to projects, and specifies monitoring and reporting arrangements. The Cultural Heritage Action Plan reflects national and international best practice by drawing on other Australian cultural heritage studies, as well as being consistent with the Australian Burra Charter, which is the Charter for the Australian International Council on Monuments and Sites (ICOMOS) for protecting places of cultural significance. The Cultural Heritage Action Plan represents best practice amongst the jointly managed parks, and there would be value in other parks considering the wider relevance of the principles behind this approach to cultural heritage management.

3.60 Uluru-Kata Tjuṯa has also been innovative in its approaches to joint management relationships between park staff and traditional owners at all levels of park administration. Park managers have introduced the concept of *malpas* to enhance the way that park staff and traditional owners work together. A *malpa* is a traditional owner mentor, employed by the park, who accompanies and advises park managers and operational staff on traditional ways of doing park business. They may also advise on cultural sensitivities in relation to particular actions or projects. The park has also been proactive in terms of incorporating traditional owners into the conservation monitoring process. Park managers are developing check sheets that will allow the Anangu people to monitor those sites that cannot be accessed by non-indigenous staff due to cultural sensitivities to allow data on the physical condition of these sites to be collated.

⁶³ < http://www.unesco.org/whc/world_he.htm >

3.61 Uluru-Kata Tjuta is also in the process of implementing a detailed project management sheet that formalises the role of the *malpa* in project planning and implementation. In this way, the cultural heritage of Uluru-Kata Tjuta is given prominence in the day-to-day management of the park. For example, monitoring of some threatened species should only be undertaken by either men or women and these values are respected by park staff. The Uluru-Kata Tjuta approach goes beyond the cross-cultural training offered to non-indigenous staff in the other jointly managed parks. There would be value in the other parks developing similar strategies to ensure that awareness of, and respect for, the cultural heritage of Commonwealth national parks remain strong.

3.62 In 1995, the Director of National Parks signed a Memorandum of Understanding with the traditional owners in Kakadu on the control of Aboriginal cultural material in the park⁶⁴. The protection of cultural heritage in Kakadu is particularly challenging, as there are nineteen discrete clan and language groups with their own stories, significant sites and dreamings, recognised as traditional owners of the park⁶⁵. An estimated 533 Aboriginal people reside within Kakadu⁶⁶. Five Aboriginal Associations, which represent the larger clan and language groups within Kakadu, have been incorporated and have an ongoing role in management: the Gagudju, Djabulukgu, Gundjehmi, Minitja and Jawoyn Associations. These Associations have successfully bid for a number of contracts within the park, including contracts for interpretation and education officers at visitor and cultural centres.

3.63 Kakadu has also been proactive in terms of its liaison with tour operators to attempt to reduce the risk of damage to cultural heritage through insensitive tourism. The focus of this work is on interpretation and education, and Kakadu uses a quarterly newsletter, 'Kakadu Gun-Wok', to inform the tourism industry of emerging issues and concerns. Strategies for improving the relationship with the tourism industry across the parks will be discussed further in the section on visitor management.

⁶⁴ David Lawrence (2000) *Kakadu: The Making of a National Park*, Melbourne University Press, Carlton South, p. 282.

⁶⁵ ANAO survey response no. 26b.

⁶⁶ *Kakadu Region Social Impact Study: Community Action Plan 1997*. Report of the Study Advisory Group, July 1997. Supervising Scientist, Canberra. p. 8.



Cultural centres such as this one at Kakadu National Park provide the opportunity for visitors to appreciate indigenous culture.

Source: Environment Australia

3.64 Both Uluru-Kata Tjuta and Kakadu have cultural centres that assist in informing visitors about the cultural heritage of the parks. Booderee is yet to establish a cultural centre and this has been a priority for the Board of Management. Booderee has assisted in developing, however, a Cultural Education Program aimed at educating young people about *koori* (Aboriginal) culture. The program is a joint project involving the Jervis Bay Primary School, the Wreck Bay people and Booderee National Park. The objectives of the program are in keeping with the joint management philosophy of the park, as well as with the provisions and obligations of the lease agreement⁶⁷.

3.65 However, in Kakadu, 10 of 16 stakeholders felt that the potential offered by joint management for increased participation of indigenous people in park business was not being fully realised. This was a view that was also expressed to the WHC Independent Science Panel during its visit to Kakadu to assess the potential impact of mining at Jabiluka. Stakeholder comments to the ANAO on this issue ranged from the level of participation in park management, the level of participation in tourism and the integration of traditional and scientific conservation practices. In addition, it was noted that while a *Bininj* (Traditional Owner) Heritage Management Committee was established at Kakadu to address issues relevant to the conservation of the cultural heritage of the park, this committee was effectively obsolete having met only once in the past four years⁶⁸. Parks Australia has noted that the main difficulty with this Committee has been the mismatch of non-indigenous and indigenous ways of doing business. They consider that a more culturally appropriate clan based model is likely to have more success.

⁶⁷ Booderee National Park Draft Management Plan, p. 40.

⁶⁸ ANAO survey response no. 14.

3.66 Both Kakadu and Uluru-Kata Tjuta have recently focussed on the maintenance of oral histories. Kakadu has a full-time officer dedicated to oral history work, and Uluru-Kata Tjuta has developed a sophisticated software package to collect and disseminate traditional owner knowledge and skills. Park staff involved in this initiative are aware of cultural sensitivities around access to knowledge and histories and separate sections have been developed to protect secret men's and women's business. Access to such knowledge is restricted to senior traditional owners and park staff.

3.67 Outside the jointly managed parks, the management of parks also requires some consideration of cultural heritage. The Marine and Water Division is proactive in its management of risks in marine parks where cultural heritage is a consideration. For example, marine managers have been working closely with Indonesia over the last two years to try to manage the impact of fishing in northern Commonwealth waters. Indonesian fishers have an historic and ongoing association with islands and reefs in the region. Recognition of traditional fishing is incorporated into a Memorandum of Understanding (MOU) signed between Australia and Indonesia in 1974 and reviewed in 1989. Generally, traditional Indonesian fishers target species and products considered highly valuable in the Asian market including trochus, trepang and shark fins. However, Indonesian fishers have also been known to harvest sea turtles, dugong, seabirds, dolphins, giant clams and other molluscs, which are protected under the MOU. A number of these species are protected under international agreements and Australian legislation⁶⁹. While there has only been one recorded incident of blast fishing, the Ashmore reserve is under ongoing pressure due to the level of illegal fishing occurring.

3.68 This example also illustrates the challenges of protecting the cultural heritage of Commonwealth national parks and reserves given that culture is not static. Traditional Indonesian fishing methods may not have harmed the reef, however modern harvesting techniques and increased population pressures can. The same challenges apply in Kakadu where firearms may be used in exercising traditional hunting rights, with consequent implications for health and safety as well as for the natural heritage of the park. Finally, as discussed in the section on natural heritage, on Cocos (Keeling) Island there has been increased numbers of Red-Footed Boobies being killed as a result of firearms, rather than the traditional flail, being used to harvest the birds. This highlights the importance of ongoing monitoring and coordination with partners in cultural heritage management.

⁶⁹ Ashmore Reef National Nature Reserve and Cartier Island Marine Reserve Draft Management Plans, p. 25.

Monitoring cultural heritage protection

3.69 Most cultural sites are generally well known to traditional owners. Documentation and management of site information is very sensitive because of the cultural significance of many sites. In many cases, culturally sensitive sites are only known to traditional owners and park staff only become involved if requested by traditional owners. Ideally, traditional owners would have the major role in the monitoring of cultural heritage.

3.70 With the consent of traditional owners, park staff have documented some cultural sites in all three jointly managed parks, with comprehensive lists established and, in the case of Uluru (within Uluru-Kata Tjuṯa), a GIS component that allows staff to view an electronic map with cultural sites plotted. This allows staff to view the location of cultural sites in relation to sites that they may be using for other park business including controlled burning or fauna surveys. In Kakadu, it is estimated that there are more than 15 000 rock art sites in the park, and 5000 of these have been documented by park staff. Kakadu has a rock art maintenance program for the three major rock art sites promoted to the general public: Nourlangie, Nanguluwur and Ubirr. Other sites may be visited as part of other general duties in a particular area, or at the request of traditional owners. There is a permanent ranger presence at Ubirr, which provides both an interpretive and a security function for a site that has been vandalised several times in the past.

3.71 The RAN Weapons Range Beecroft, which is a protected Department of Defence site near Booderee, is managed by the Director of National Parks and is regarded as one of the richest places in Australia for Aboriginal sites⁷⁰. It contains at least 200 sites of significance and is home to the sacred sites of the Jerrinja people. Sites include middens⁷¹, rock shelters, burial sites, axe grinding groove sites, stone arrangements for ceremonial purposes and sacred trees from which bark was removed to be used for shelter or for making canoes. The cultural heritage of Booderee was documented in an academic paper that examined changes in archaeological sites from 1976 to 1996. The study showed that indigenous cultural sites had deteriorated during the study period because of factors such as land use intensification and natural landscape changes resulting from tourism, road works and the natural population growth of the penguin population on Bowen Island⁷². The study also indicated that the number of disturbed or destroyed sites more than doubled from 1976 to 1996⁷³. This type of quantitative data over time is not available for Uluru-Kata Tjuṯa or Kakadu.

⁷⁰ Zakharov 1987.

⁷¹ Middens are ancient refuse sites used by Aboriginal people prior to European settlement. They usually include shell remnants and other evidence of habitation.

⁷² Sachs, 1996 6.30.

⁷³ Ibid.

3.72 The 1996 resurvey of Aboriginal archaeological sites at Booderee and the RAN Weapons Range Beecroft, indicated that there has been little priority given to the conservation of indigenous cultural sites, with some exceptions such as the rock shelters which have National Estate status. However, middens in particular, are a challenging conservation issue because of the conflict between cultural heritage, natural heritage (i.e. the negative impact of the penguin colony on Bowen Island on ancient middens) and the need for infrastructure (Elmoos Road where works have largely destroyed an ancient midden). The management plan notes that Booderee also has early European cultural sites listed on the Register of the National Estate—for example, the historic Cape St George lighthouse. A conservation strategy for the historic lighthouse was prepared in 1993 and conservation works (such as fencing, stabilisation and upgrading interpretation media) have been carried out.



An exposed midden at Booderee National Park

Source: Parks Australia

3.73 Overall, the monitoring of risks to cultural sites in Booderee and Kakadu is generally not systematic. Sites are visited as part of the day-to-day management of the parks. However, Uluru-Kata Tjuṯa has developed a draft Cultural Heritage Action Plan that contains detailed monitoring and reporting mechanisms for cultural sites. Although this initiative was only recently introduced, the ANAO considers that it provides the opportunity for traditional owners to be increasingly involved in park management.

3.74 The ANAO recognises the challenges in systematic measuring and reporting on cultural heritage, which is clearly a sensitive and controversial issue. However, cultural heritage management is intrinsic to the core business of Parks Australia. It is also important because across Australia, 'the number of Indigenous languages and the percentage of people speaking them fell during the period 1986–96. Of the 20 Indigenous languages classified as strong in 1990, by 1996 only 17 are considered strong and three have become endangered'.⁷⁴ Measurement is also essential in order to meet accountability requirements under the EPBC Act and the CAC Act. Measures used to monitor cultural heritage could include:

- changes in the condition of cultural sites recorded for World Heritage or National Estate listing;
- surveys of the impact of interpretation/ educational material on visitors, school groups etc;
- percentage of tour operators, staff or other people undertaking cross-cultural training;
- trends in vandalism/incidents involving culturally sensitive sites or number of complaints from the local community relating to cultural heritage; and/or
- longitudinal or attitudinal surveys of traditional owners in different age cohorts on their perceptions of cultural heritage conservation including language retention and oral history.

Conclusion

3.75 While recognising the challenges and complexities of cultural heritage monitoring and the positive initiatives underway in different parks, there remains major gaps in terms of monitoring and its value in indicating changes or otherwise in cultural heritage. A more focussed and consistent approach to the application of core indicators would assist in better monitoring the effectiveness of park management practices. Overall, the ANAO considers that there is considerable scope for measuring aspects of cultural heritage and that the traditional owners, boards of management and local communities have the major role to play in this area.

⁷⁴ Environment Australia, State of the Environment Report 2001, p. 8.

Recommendation 7

3.76 In order to enhance cultural heritage management, the ANAO *recommends* that Parks Australia:

- (a) documents and disseminates better practice in cultural heritage management across all parks such as through the Parks Australia Forum; and
- (b) ensures, in consultation with traditional owners, that there is sufficient and consistent monitoring of cultural heritage sites and features to enable an assessment of the status of cultural heritage across all jointly managed parks.

Director's response

3.77 Agree. As the ANAO acknowledges, cultural heritage management, particularly in the joint management context, is very complex and requires a sensitive cross-cultural approach. Understanding and responding to the issues that are important to indigenous site custodians and striking a balance between the various expectations of Traditional Owners and others with interests in cultural heritage are key challenges faced by the Director.

3.78 Cultural heritage management covers a broad range of tangible and intangible attributes including physical site management (rock art, historic sites and objects), traditional knowledge and oral traditions and their transmission and evolution through future generations. The Director welcomes the positive observations about the cultural heritage management program at Uluru-Kata Tjuta National Park.

Compliance and enforcement

3.79 Compliance with, and enforcement of, the EPBC Act has been a major issue for both the terrestrial and marine parks. During the course of the audit the compliance and enforcement plan has been in the process of substantial revision. A draft report is currently being considered by the Director. The draft plan takes account of the requirements of the EPBC Act. Environment Australia has also developed a compliance and enforcement strategy for the Department as a whole, and both Parks Australia and the Marine and Water Division are currently reviewing and revising program-specific compliance and enforcement plans that are built on risk assessments for each park or marine protected area. This review is anticipated to be completed by June 2002.

3.80 The risks in the terrestrial parks differ markedly depending on the location of the park and its visitor profile. In Kakadu, the major risk is from illegal fishing and breach of permit conditions by tour operators. In Uluru-Kata Tjuta, managing compliance of tour operators with permit conditions is also a major challenge, as is enforcing climb closures. The major risks in Booderee reflect its

more accessible location with fee evasion and theft the major challenges. By contrast, fee evasion has been managed effectively in Kakadu with savings to the Commonwealth over the last four years of approximately \$130 000. The highest risks for the marine parks stem from illegal fishing. Illegal immigration is an additional threat for those marine parks in Northern Australian waters.

3.81 The Commonwealth has a prosecution policy that includes alternatives to prosecution. Parks Australia staff assess whether a breach is ‘minor’, ‘medium’ or ‘serious’ and action is taken accordingly. Generally, the preference is for education rather than prosecution, given that many visitors to national parks are not local and therefore not likely to re-offend. Standard letters have been produced by the national compliance and enforcement officer and reviewed by the Australian Government Solicitor. These letters are used in each of the parks reviewed. In the last 12 months, there has been no convictions in either Booderee or Uluru-Kata Tjuta, and four convictions in Kakadu⁷⁵.

3.82 The introduction of the EPBC Act in 2000 has generated significant challenges in terms of compliance and enforcement as the Act states that the Minister ‘must take account of the ‘precautionary principle’ in making a decision in relation to prescribed decisions such as whether or not to grant a permit or making a wildlife conservation plan.⁷⁶ As a result, Parks Australia has undertaken a broad scale restructuring within existing resource levels. The aim was to have officers complete Commonwealth Law Enforcement Board (CLEB) training to enable them to act effectively as rangers and wardens under the EPBC Act. Without this training, there is a significant risk that prosecutions will fail. In Kakadu, the aim was to have 50 per cent of officers CLEB trained by the end of 2001–02. The ANAO notes that approximately 65 per cent of staff in Kakadu are now CLEB trained. In Booderee, 70 per cent of rangers are trained.

3.83 All staff in the external territories have been CLEB trained as their additional ‘non-core’ functions require a sophisticated understanding of the EPBC Act and its implications for activities both within and outside of the national park boundaries. As discussed in the section on cultural heritage, managing the conservation of the Red-Footed Booby continues to be a particular challenge for staff at Cocos (Keeling) Island. The ANAO notes that the construction of wastewater treatment plants, new sewerage systems, new passenger and freight handling facilities, and resort developments have been recent pressures impacting on Parks Australia staff.

⁷⁵ Since November 2000 (when statistics were first collected), there have been 121 recorded incidents in Kakadu. Of these, the majority received a verbal caution and no further action was taken. Nineteen resulted in a warning letter being issued, and four resulted in prosecutions. There is no national data base on incidents and accidents. Comparable consolidated statistics are not available for other parks.

⁷⁶ The precautionary principle is that lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage. Section 391 EPBC Act.

3.84 A number of staff of the Marine and Water Division, as well as supporting staff from other Commonwealth and State agencies have been CLEB trained and appointed as wardens in an effort to increase compliance and enforcement effectiveness in marine protected areas. Twenty-eight wardens have now been appointed to work in Commonwealth marine protected areas.

3.85 Parks Australia is aiming to have dedicated compliance and enforcement officers in each of the major terrestrial parks. However, at present, only Kakadu and Booderee have been able to meet this target⁷⁷. In addition, there is a compliance and enforcement officer with national responsibilities located in the Darwin office. Compliance and enforcement matters have largely been managed on an individual park basis in the past. Compliance and enforcement databases are under development in both Kakadu and Booderee, although access to these databases is limited to staff in each individual park. There would be value in extending access to information on compliance and enforcement issues in each park throughout Parks Australia, particularly to officers with policy development or implementation responsibilities.

3.86 In addition, the Marine and Water Division issues its own permits and maintains a separate permits database from Parks Australia. There would be value in both program areas sharing a permit database to enhance information-sharing and assist the Director of National Parks in the conduct of his duties. Marine and Water Division utilise the Wildlife Australia permit database. This arrangement enhances information-sharing with Wildlife Australia. The new Wildlife Management Database includes provision for the addition of new permit types and has been developed to provide a flexible permit distribution and tracking mechanism.

3.87 The Marine and Water Division takes advantage of partnership arrangements to manage compliance and enforcement risks in the marine protected areas. Coastwatch is the primary provider of surveillance information to the Marine and Water Division, with resources currently targeted towards northern Australian waters. Coastwatch also has arrangements with the Australian Navy to provide surveillance information. Regular Navy patrols are undertaken in the higher risk marine protected areas with patrol reports issued to the Marine and Water Division on completion. Patrols are less frequent or non-existent in the more remote parks like the Tasmanian Seamounts or Macquarie Island. Marine and Water Division indicated that while Coastwatch activity is limited in southern waters, alternative surveillance arrangements have been increased in the Great Australian Bight Marine Park by using state agencies, local operators and indigenous land owners.

⁷⁷ Booderee currently has an officer acting in this position. A permanent officer was to be employed by the end of 2001.

3.88 As discussed in the section on cultural heritage, the Marine and Water Division has been working closely with Indonesia over the last two years to try to manage the impact of fishing in northern Commonwealth waters. The Marine and Water Division is concerned that the imminent closure of the Cartier Island Marine Reserve to fishermen will increase pressure in the region. Marine and Water Division are in the early stages of negotiating funding through AusAID to provide an alternative source of income for the illegal fishermen. In addition, there is pressure on the northern marine protected areas from illegal immigration. In 1999, there were approximately 40 illegal immigration vessels detected around Ashmore Reef. There is now a constant Commonwealth presence in the area in the form of a Customs vessel.

3.89 Approvals and Legislation Division (ALD) of Environment Australia also has an overarching policy coordination role for implementation and review of the Portfolio-wide compliance and enforcement strategy. Informal information sharing between program areas also occurs through the Environment Australia Compliance and Enforcement Network coordinated through ALD. This forum has been established to facilitate discussion of compliance and enforcement issues. The network comprises:

- (a) a representative from each responsible area;
- (b) a representative from the program evaluation and audit unit;
- (c) a representative from the training and development area; and
- (d) partnership managers.

3.90 The Compliance and Enforcement Network is required to report annually to the departmental Executive. This report must include:

- (a) information on progress of responsible areas in developing, reviewing, and implementing compliance and enforcement plans; and
- (b) information on compliance and enforcement training and training needs.⁷⁸

3.91 This approach is a positive step towards strengthening knowledge sharing in relation to compliance and enforcement as well as facilitating a more consistent approach across the Portfolio. However, there is still room for Parks Australia to strengthen the consistency and priority given to planning, management and reporting of compliance and enforcement across parks.

Reporting on compliance and enforcement

3.92 Compliance and enforcement issues in both the terrestrial parks and the marine protected areas are not consistently reported in the Director of National

⁷⁸ Environment Australia Compliance and Enforcement Strategy 2000 (Draft), p. 12.

Parks Annual Report. The Orders made by the Minister for Finance under the CAC Act require that narrative discussion of major factors, events and trends influencing agency performance, including risks and opportunities faced by individual agencies, are included in annual reports. Compliance and enforcement activity is crucial to the protection of natural and cultural heritage of Commonwealth reserves. Monitoring the risk of illegal activity and trends over time provides an important management tool, which should be used to inform ongoing priority-setting and resource use allocation. It would enhance transparency and accountability if this type of information was explicitly included in the annual report. Kakadu produces a formal monthly internal report that discusses compliance and enforcement activity. The effectiveness of this form of reporting is limited, however, as it does not reach the officer with national responsibility for compliance and enforcement matters. As this officer is responsible for setting national priorities and developing compliance and enforcement plans, there would be value in information on compliance and enforcement issues in all parks being reported to a central source.

Recommendation 8

3.93 In order to enhance the management of compliance with, and enforcement of, the *Environment Protection and Biodiversity Conservation Act 1999* the ANAO recommends that Parks Australia should:

- (a) extend access to information on compliance and enforcement issues (including permits, incidents and accidents) to appropriate officers in Parks Australia; and
- (b) ensure that major compliance or enforcement matters across all parks are included in the Director of National Parks annual report to Parliament, consistent with the requirements of the Orders made by the Minister for Finance under the *Commonwealth Authorities and Companies Act 1997*.

Director's response

3.94 Agree.

Visitor management

3.95 Visitors to national parks provide a significant revenue stream for Parks Australia, and also for traditional owners. In 2000–01, \$9.76 million was raised from some 1.5 million visitors to Commonwealth national parks. Visitor numbers have increased significantly over time. For example, at Kakadu in 1985 approximately 100 000 people visited the park compared to an average of

230 000 people per year in the 1990s. This has declined to 183 100 in 2000–01. At Uluru-Kata Tjuta park visitors have increased from 371 939 in 1999 to 396 500 in 2000–01.

3.96 Tourism is important because of the revenue and job opportunities it brings to people in rural and remote regions of Australia. However, there are potential risks to natural and/or cultural heritage, as well as to visitor safety. In addition, Parks Australia has legal responsibilities associated with duty of care for visitors. The risk to visitors of injury or death in Commonwealth parks and reserves is low when assessed against total visitor numbers. However, a relatively small number of deaths and serious injuries do occur—particularly in summer and for those climbing Uluru or for those undertaking the longer walks in Uluru-Kata Tjuta or Kakadu. The Uluru-Kata Tjuta plan of management notes that on average, there is one death in the park every year and a medical incident every one to two weeks.⁷⁹ Overall in 2000–01, there were 24 accidents or incidents involving visitors to Commonwealth national parks compared with fourteen in 1999–2000.

3.97 Public liability insurance is one way that Parks Australia manages these risks. For Parks Australia, the core of the issue is visitor safety in parks. Parks Australia has one public liability insurance policy that is administered centrally and applies across all parks. The level of cover for general public liability over the last three years has remained steady at \$100 million while the premium paid by Parks Australia has risen from approximately \$65 000 in 2000–01 to approximately \$70 000 in 2001–02. No claims have been paid in the last three years although there is legal action currently in train for one incident. Parks Australia also requires tour operators to hold public liability insurance and to provide an indemnity to the Director of National Parks in writing.

3.98 Parks Australia has been actively discussing the issue of public liability insurance with its state counterparts, in particular with Parks Victoria. A contact group has been established that focuses on sharing relevant experiences. Some park management agencies have demonstrated interest in capping visitor numbers as a mechanism to reduce risk, and this is discussed later in this section.

3.99 Visitor management is recognised as a high priority by Parks Australia. It is included in management plans for all of the major Commonwealth national parks. While there is no central database for monitoring trends and disseminating better practice in relation to incidents and accidents involving visitors individual parks maintain a file record of these events. Parks Australia is aware of some of the potential risks to visitors and action has been taken to improve the safety of facilities or services. Water depots are supplied for major walks such as the Valley

⁷⁹ Uluru-Kata Tjuta Plan of Management, p. 129.

of the Winds at Kata-Tjuta. Higher risk walks are closed when temperatures are too high. Training of rangers involves a significant component of rescue—such as rescuing climbers from Uluru. Popular swimming holes are checked for crocodiles at the start of the season in Kakadu and warning signs (regarding risks such as from crocodile attack at Kakadu) are used at many key camping and/or sight-seeing locations. However some areas such as Ubirr in Kakadu (which can accommodate 200–300 people to watch the sunset) have no signs advising of the risks or dangers in relation to the escarpment or the rough terrain, although there is a ranger presence. There are plans to improve visitor safety—particularly in terms of high risks such as the ring road system around Uluru. Information and warning signs are currently being upgraded at Uluru.

3.100 Different parks have developed their own strategies to enhance communication with visitors and the tourism industry. Kakadu has undertaken two visitor surveys on visitor numbers, characteristics, expectations, activities and experiences—the first of these in 1993 and the second in 2001. The 2001 survey was designed in accordance with ANZECC best practice standards for visitor monitoring, in conjunction with the Northern Territory Tourism Commission. This helped to ensure a consistent approach between this survey and others used in the Northern Territory. Kakadu and Uluru-Kata Tjuta park staff participate in a Tourism Consultative Committee and, as noted earlier, Kakadu produces a tourism industry newsletter, ‘Kakadu Gun-Wok’ to inform tour operators about current issues and provide guidance on cultural and natural features of the park. In Booderee, the Director of National Parks is represented in the South Coast Regional Tourism Organisation. Booderee park management is also engaged in managing tourism in conjunction with the NSW National Parks and Wildlife Service, NSW Marine Park Authority, Tourism NSW, and the Shoalhaven City Council. A visitor survey was conducted in 1993–94.

3.101 Responses from stakeholders indicated both positive and negative aspects of visitor management by Parks Australia. In particular, stakeholder comments illustrate the tensions between the maintenance of cultural and natural heritage and tourism development. For example, one stakeholder commented that:

Tourists are necessarily funneled to several ‘sacrificial’ sites. Some camping sites and access routes are at high risk from damage. Risk management strategies need to be openly discussed and debated.⁸⁰

Another noted that:

Our concern with current Parks Australia management is that it only recognises the natural and cultural values of the parks. ... Management has little consideration of the tourism values of the parks and the role of the industry in enabling the

⁸⁰ ANAO survey response no.19.

sustainable management of the parks, and also in providing social and economic value to their indigenous communities.⁸¹

A further comment was that:

There is a consistent pressure upon traditional owners and the Board of Management to accommodate increased tourism access and activity levels. The resulting stresses upon traditional owners are exacerbated by the common, though erroneous, perception of many visitors that national parks are public land.⁸²

This view was also evident in the record of meeting of a Joint Management Workshop held in Kakadu in December 2000. One traditional owner commented:

In the beginning, people thought that they would be looking after country, but now they seem to be looking after tourism.

Other stakeholders commented positively on tourism in the parks, for example one stated:

I have found the staff at Booderee excellent to work with. I believe the park to be one of the foremost in the country. This is a combination of its natural beauty and staff management, particularly the way recreational activities are organised in the park.⁸³

3.102 The management of visitor numbers is particularly important as one of the Australian IUCN reserve management principles indicates that 'visitor use should be managed ... at a level that will maintain the reserve or zone in a natural or near natural state'. Mechanisms to achieve this include: pricing policies; licensing arrangements; ballot systems; and setting maximum visitor caps. The ANAO recognises that capacity is a dynamic concept that could vary according to investment in infrastructure, the site characterisation and other relevant issues. Where district plans set numbers for camping such as at Jim Jim falls in Kakadu, these can be exceeded which puts a considerable strain on facilities and diminishes the quiet enjoyment of some visitors to the park. At 'Greenpatch' at Booderee, there have been problems in the past at peak times in terms of the sewage treatment and the capacity of the camping ground to accommodate the demand from visitors. Parks Australia has indicated that the Booderee sewerage system has recently been upgraded which should alleviate former pressures. Visitors also bring firewood into the park at Kakadu, which introduces the risk of introduced pests such as the big-headed ant which is a pest in Darwin and surrounding districts.

⁸¹ ANAO survey response no. 22.

⁸² ANAO survey response no.14.

⁸³ ANAO survey response no.1.

3.103 Only Uluru has a Visitor Infrastructure Master Plan. It has been designed to cater for 650 000–700 000 visitors per year. The plan identifies:

...a large number of planning issues associated with visitation and the existing visitor infrastructure and a set of overarching management problems...Crowding is considered to be the most significant broadscale impact on the recreational amenity of the Park. Visitor safety is also regarded as a key recreational concern...⁸⁴

3.104 The master plan provides the scope for greater attention to the sustainability of park facilities—particularly as in some cases facilities have been sited in fragile environments resulting in the degradation of natural values. Appreciation of the cultural sensitivities of traditional owners is also a frequent source of tension at Uluru regarding climbing of the rock as well as in relation to the siting of some facilities. The cultural centres at Uluru-Kata Tjuta and Kakadu play an important role in sensitising tourists to the cultural heritage of traditional owners. However, one stakeholder commented that there is a need for:

more information about sacred sites—not culturally sensitive information, just more information so that visitors can get an appreciation of why they should respect the wishes of traditional owners in these areas.⁸⁵

Accreditation of tour operators

3.105 A further issue with visitor management is accreditation of tour operators. Currently there is no formal accreditation scheme although this is a requirement under both the Kakadu and Uluru-Kata Tjuta management plans. Both the parks run training courses for operators and document training requirements in a Tour Operator Workbook that is well regarded by the industry. However, stakeholders commented that they would like the workshops held more frequently. Given that this is a pressure on park staff and resources, there could be scope to seek partnership arrangements with bodies that could provide the training required to a specified standard. Several stakeholders pointed to the need for Parks Australia to do more in this area. For example, one said:

The tour operator [accreditation scheme] has stalled and operators have lost faith in the process. Tour operator training sessions are not provided regularly enough.⁸⁶

3.106 The ANAO considers that accreditation has the potential to enhance compliance with the EPBC Act. From the ANAO perspective, accreditation should go hand in hand with any permit system. It makes sense for accreditation to be progressed in conjunction with State/Territory agencies where possible.

⁸⁴ Parks Australia, January 2000, Uluru-Kata Tjuta National Park Visitor Infrastructure Master Plan.

⁸⁵ ANAO survey response no. 22.

⁸⁶ ANAO survey response no. 22.

Accreditation could enhance the capacity of Parks Australia to conduct its core business by providing accurate information about the national parks, engendering in visitors a heightened awareness and appreciation of the region's natural and cultural values and promoting the practice and development of minimal impact techniques as a means of educating park visitors in these practices.

3.107 The ANAO considers that the principles behind accreditation are valid and provide the opportunity for enhanced efficiency and customer focus in parks services as well as for involving traditional owners in setting culturally appropriate standards and targets. There is potential for Parks Australia to consider extending the scope of its existing tour operator training workshops by linking incentives to voluntary completion of the course by tour operators. Incentives could include, for example, priority processing of permit applications, priority access to campgrounds at peak times, and/or discounts on bulk ticket purchases.

3.108 Accreditation schemes are already in place in other parts of Australia and overseas. For example, the Ecotourism Association of Australia has developed a National Ecotourism Accreditation Program (NEAP), and a Nature and Ecotourism Guide Certification Program. There are also several examples where an agency's requirement for tour operators to have some form of accreditation has led to commercial benefits or advantages. For instance, the Wet Tropics Management Authority has developed a Nature-Based Tourism Strategy that incorporates NEAP and will allow extra access for operators who meet the highest standards of activity. The Wet Tropics Management Authority has also required tour operators to attend a TAFE course. Canada has National Occupational Standards for the tourism industry with standards for 'local tour guides' and 'tour operators'. Canada also provides operators with a badge to demonstrate their standard.⁸⁷

3.109 PAN has been working on a Tour Operator Licensing and Training Project for both Northern Territory parks but as yet it is incomplete. The aim has been to establish a tour operator licensing system that ensures tour operators are appropriately prepared and qualified to deliver a safely managed experience that is environmentally sustainable and culturally appropriate. Parks Australia has indicated that substantially more work is required with the Northern Territory Government and the tourism industry before the accreditation project can progress. As the implementation of an accreditation scheme is prescribed in both the Uluru-Kata Tjuta and Kakadu management plans, Parks Australia will need to consider a formal mechanism for revising management plans if a decision is made not to proceed with the accreditation scheme. As discussed in Chapter 2, this is a current shortcoming in the Parks Australia planning framework.

⁸⁷ Australian Alps Liaison Committee, 'Tourism industry accreditation and licensing in the Australian Alps national parks' (Draft), October 2000.

Conclusion

3.110 Parks Australia has recognised visitor management as a high priority. This reflects the 1.5 million visitors to national parks and the \$9.76 million raised from entry fees and other sources. Visitor management is included in the management plans for all of the major Commonwealth national parks. While risks to visitors is relatively low, the number of incidents or accidents increased from 14 in 1999–2000 to 24 in 2000–01. Incidents and accidents involving visitors are recorded on file by individual parks however there is no central database for monitoring trends and disseminating better practice. There are substantial tensions between traditional owners and tourism interests over access to sensitive sites and the number of visitors, but currently there is no mechanism to manage visitors within optimum levels. The completion of the accreditation of tour operators in Parks Australia North has not been progressed due to difficulties in reaching a consensus on a territory-wide system. In this case a modified approach to the accreditation issue may provide an interim step in implementing the recommendations from the management plan.

Recommendation 9

3.111 In order to better balance visitor pressures with the conservation of natural and cultural heritage, the ANAO *recommends* that Parks Australia:

- (a) explicitly recognises in all future management plans and operational plans, mechanisms to manage visitors within optimum levels, particularly for sensitive sites within the parks; and
- (b) considers, as a priority, implementing an accreditation scheme or a modified permit scheme that includes incentives for voluntary completion of tour operator training endorsed by Parks Australia.

Director's response

3.112 Recommendation 9(a). Agree with qualification. The Director considers that current levels of visitor use are consistent with conservation of natural and cultural heritage objectives in the parks. As the report recognises, it is difficult to define what is an 'optimum level' of visitor use at any one site given that this may vary according to perceptions of individual users. In addition, traditional owners in the jointly managed parks play a defining role in determining what are optimum visitor numbers. The number of visitors that may use a site without affecting conservation of natural and cultural values depends on site infrastructure and visitor use patterns. Within these constraints and recognising the differing priorities of traditional owners, conservation management and tour operators, consideration will be given to implementing the intent of this recommendation within future management and operational plans.

3.113 Recommendation 9(b). Agree. The Director will continue to consider schemes, including tour operator accreditation schemes that encourage appropriate commercial operations in parks coupled with delivery of a high degree of satisfaction of visitor expectations.

4. Business Support Systems

Introduction

4.1 Business support systems are important in managing financial and human resources to allow Parks Australia to fulfil its protection and conservation functions and demonstrate efficiency and effectiveness in the use of Commonwealth resources. The ANAO examined Parks Australia’s contract management systems, including the controls in place to protect the Commonwealth’s interests and demonstrate value for money. The ANAO also examined the systems for ensuring effective human resource use, such as workforce planning, recruitment, staff retention and training.

Parks Australia administrative structure

4.2 The Director of National Parks performs his functions with the assistance of two branches with responsibilities for the terrestrial parks: PAN, is managed from Darwin, and Parks Australia South (PAS) is managed from Canberra. Managers of the individual parks report to the Director of National Parks through PAN and PAS depending on their geographic location⁸⁸.

⁸⁸ Reporting to PAN: Kakadu National Park; Uluru-Kata Tjuta National Park; Christmas Island Conservancy; Cocos (Keeling) Islands Conservancy. Reporting to PAS: Booderee National Park and Botanic Garden; RAN Weapons Range Beecroft, Calperum Station; Norfolk Island Conservancy; Australian National Botanic Gardens. Other business sections including Financial Management, Parks Executive and Coordination, Park Policy and Management, Indigenous Policy and Coordination, report to the Director.

Table 3
Financial details for Parks & Reserves 2000–01

Parks and Reserves	Year park declared	Net operating cost	Revenue from fees or charges	Payments to traditional owners (\$)
<i>Parks Australia North</i>		(m)	(m)	(m)
Uluru-Kata Tjuta	1977	11.32	5.9	1.51
Kakadu	1979	14.51	2.69	1.35
Pulu Keeling	1995	0.82	0	-
Christmas Island	1980	1.76	0	-
<i>Parks Australia South</i>				
Norfolk Island Botanic Gardens	1986	Included above	0	-
Norfolk Island National Park	1986	0.73	0	-
Australian National Botanic Gardens	1991	7.16	0.15	-
Booderee	1992	5.07	0.62	0.33
Calperum Station *	-	0.4	0.4	-
RAN Weapons Range Beecroft *	-			-
Total ^	-	\$41.77⁸⁹	\$9.76	\$3.19

* These areas are managed by Parks Australia but are not statutory reserves.

^ In addition to the terrestrial parks, \$900 000 was expended by the Marine and Water Division in the management of 12 national marine parks or reserves.

Source: Parks Australia Annual Report 2000–2001

4.3 In the past, the individual parks have operated with a large degree of autonomy. This reflects the remote locations of many of the parks and the need for local park managers to respond quickly to emerging issues. However, this has resulted in different parks developing different practices for common business processes such as contract management and compliance and enforcement of park regulations. While this approach allows for innovation, it requires adequate support systems and the consistent sharing of knowledge of business risks and performance to avoid ‘reinventing the wheel’ and to maximise better practice approaches.

4.4 The Director of National Parks is also supported by a range of committees including the Parks Australia Internal Audit Committee, consultative committees involving major stakeholders including scientific experts and the tourism industry, and advisory committees. In addition, senior representatives from each park meet twice a year to discuss areas of common interest at a two-day Parks Australia Forum. The Parks Australia Forum covers issues such as risk management, performance information, occupational health and safety, compliance and enforcement, and legal issues. The Parks Australia

⁸⁹ The ANAO notes that there is also a capital expenditure budget totalling \$6.97 million across all terrestrial parks and reserves.

Forum is a positive initiative as it is currently one of the few opportunities for senior managers to share information and common experiences. For example, during a Parks Australia Forum in 2001 Parks Australia developed an agency-wide risk management program (i.e. Parks Australia Risk Watch List) for the identification, prioritisation and treatment of business risks across the agency.

4.5 The ANAO found that delays in finalising the CEO Instructions following the introduction of the EPBC Act in 2000 have also not assisted in strengthening common approaches to business management across parks. Parks Australia has indicated that a review of the CEO instructions will commence in February 2002 and will be finalised by mid-2002.

4.6 Responsibility for day-to-day management of the marine protected areas has been delegated to the Marine and Water Division of Environment Australia. Five parks are jointly managed with the States: Solitary Islands (with NSW); Great Australian Bight Marine Parks (with SA); Ningaloo (with WA); Mermaid Reef (with WA); and Lord Howe (with NSW). Standard generic management agreements are in place with each of these States. The relationship between the Director of Parks Australia and the Marine and Water Division has been weak in the past as the Marine and Water Division reports directly to the Minister under a delegation from the Director of National Parks. While both the Director of National Parks and the First Assistant Secretary of the Marine and Water Division must comply with the EPBC Act, stronger communications could assist in the promulgation of better practice. Both divisions are aware of the need for improvement in this area and new strategies to enhance information flow have been initiated.

Contract management

4.7 Contract management supports the core functions of Parks Australia and should also demonstrate probity and compliance with Commonwealth policy. While the Commonwealth's contracting and tendering guidelines do not legally apply to the Director as a CAC Act entity, the Portfolio Budget Statements for 2001–02 indicate that 'the Director of National Parks follows the Commonwealth Procurement Guidelines conditioned by relevant special lease provisions and obligations'.⁹⁰

⁹⁰ Portfolio Budget Statements (PBS) 2001-02, p. 221. The Director follows the Commonwealth Procurement Guidelines by convention as indicated in the PBS to Parliament. The ANAO notes that under section 28 of the CAC Act the guidelines do not legally apply to the Director unless a direction has been given by the Minister. No such direction has been given.

4.8 Some \$4 million was managed through contracts in the jointly managed parks in 2000–01.⁹¹ Well-managed contracts can deliver significant benefits to an organisation. The difference between a contract that delivers benefits and one that does not, can often be attributed to the way that the risks associated with the delivery of those services are managed. For the Director of National Parks, effective contract management is supported by a legislative and procedural framework specified in the CAC Act.⁹²

4.9 The ANAO reviewed the five most financially significant contracts in each of the jointly managed parks. Overall, the process for contract management in Parks Australia is consistent with good practice. There are formal delegations and approval for contracts of different value, and dedicated contract management staff in all the major parks (as well as in PAN and PAS). Expert consultants generally scrutinise tender documents when required, reasons for decisions are documented, and contracts generally include standard clauses protecting Commonwealth legal liabilities.

4.10 Savings have been recorded as a consequence of out-sourcing previous park functions such as entry stations, visitor information services, cleaning and maintenance. For example, the out-sourcing of entry stations at Kakadu saved \$216 000 per annum (approximately). \$120 000 was saved as a consequence of out-sourcing the visitor information service function at Kakadu. An additional benefit has been the proactive stance of a particular contractor in managing fraud. As noted earlier, a conservative estimate is that \$130 000 has been saved since 1997 as a consequence of tighter fraud control over illegal ticket transfers at Kakadu. At Booderee, cleaning and road maintenance services have been out-sourced to the local Wreck Bay community with savings and improvements to service quality. In addition, some 25 community members are now employed to undertake a range of park service contracts.⁹³

4.11 However shortcomings in particular aspects of the design and implementation of contract monitoring and control were:

- (a) while there are generally standard contract clauses in use in the major national parks, there were two cases involving out-sourcing arrangements where there was no standard form contract in place to protect Commonwealth interests. These were the northern entry station and the public contact officers contracts at Kakadu which together total over \$296 000 per annum. Both of these contracts are long-standing agreements formalised through contract specifications, a tender process and a letter

⁹¹ Kakadu: \$2.4 million, Uluru-Kata Tjuta: \$0.75 million and Booderee: \$0.833 million.

⁹² ANAO Contract Management Better Practice Guide, February 2001.

⁹³ Director of National Parks Annual Report 2000–01, p. 29.

of offer provided to the successful tenderer. However, the absence of standard form contracts in these cases exposes the Commonwealth to unnecessary risks;

- (b) in Kakadu, there are several examples of delegations being exceeded which constitute a breach of section 514D(5) of the EPBC Act. For example, the delegations for both the building and power generation period contracts involving over \$600 000 per annum in total were exceeded in February 2001⁹⁴. In relation to the period contract for the repair and maintenance of buildings in Kakadu, cumulative expenditure since December 1998 had reached \$920 000 in 2001 without the required Ministerial authority⁹⁵. Park management noted that this was '*as a result of the failure of local administrative arrangements*'. The ANAO notes that Parks Australia has briefed the Minister on this latter contract and steps have been taken to tighten financial controls through the Darwin Office. Tightening financial controls is particularly important to avoid any breach of s514D(5) of the EPBC Act⁹⁵;
- (c) the frequency of monitoring of expenditure across parks varies, with Booderee representing best practice. Booderee has monthly financial monitoring and reporting and, in some instances, review and evaluation is built into the contract management process. At both Kakadu and Uluru-Kata Tjuta, there have been ongoing problems with the attribution of expenditure to the correct cost centres in the electronic financial system, which has contributed to significant end-of-year reconciliation difficulties. This makes it particularly difficult for Parks Australia to be assured that expenditure has matched approvals;
- (d) payments to contractors in Uluru-Kata Tjuta and Kakadu in some instances does not conform to good practice. For example, there has been some substantial delays with payments because the amount of funds budgeted against each individual contract did not represent the full amount approved for the full year period. This meant that some contractors did not receive payment within the 30-day Commonwealth benchmark. In some cases the records were incorrectly showing that there had been an overpayment⁹⁷. At present, the financial management system used by Parks Australia is not able to provide management information on the number of payments within benchmarks such as the 30-day period; and

⁹⁴ Kakadu National Park Monthly Report, February 2001.

⁹⁵ Ministerial approval is required by the Director to enter contracts that involve the receipt or payment of an amount more than \$250 000.

⁹⁶ Section 514D(5) of the EPBC Act states that the Director must not enter into a contract involving the payment of receipt of an amount more than \$250,000 without the Minister's approval.

⁹⁷ Minute from Branch Administration Coordinator to Director, Finance, 01/07/2001.

- (e) quality control is patchy. In some cases there are formal reviews of contracts, such as the six-monthly review in the case of the road maintenance contract in Booderee. Generally, however, quality control is reliant on complaints from service users. This is largely a resourcing issue, however support systems for Parks Australia's core business should be sufficiently robust to provide assurance in relation to value for money results for the Commonwealth.

Conclusion

4.12 Overall, Parks Australia's contract management systems are consistent with good practice. There are formal delegations and approval requirements for contracts, dedicated contract management staff, and a focus on documenting reasons for decisions for accountability purposes. In addition, substantial savings have been achieved as a consequence of out-sourcing functions, as well as from implementation of effective fraud control. However, the ANAO found some shortcomings in contract management relating to inadequate monitoring and financial controls over contracts in some parks. This could be addressed through standardised and strengthened financial monitoring and reporting for operational contracts.

Recommendation 10

4.13 In order to improve contract management practices, the ANAO *recommends* that Parks Australia:

- (a) ensures that there are standard form contracts or service level agreements in place for all contractual undertakings;
- (b) implements monthly financial monitoring and reporting on period and operational contracts;
- (c) standardises and strengthens financial monitoring and reporting controls at agency, branch and park level to improve the timeliness of payments to contractors and to enhance reconciliation at the end of financial year; and
- (d) enhances the consistency of quality control as a standard operational requirement for contract management.

Director's response

4.14 Agree. Financial management within Parks Australia is being strategically reviewed and a program of continuous improvement is being implemented. This program will to some extent rely upon the Booderee approach which is viewed favourably in the Report and Parks Australia will continue to work closely with its key financial service provider to progress its program.

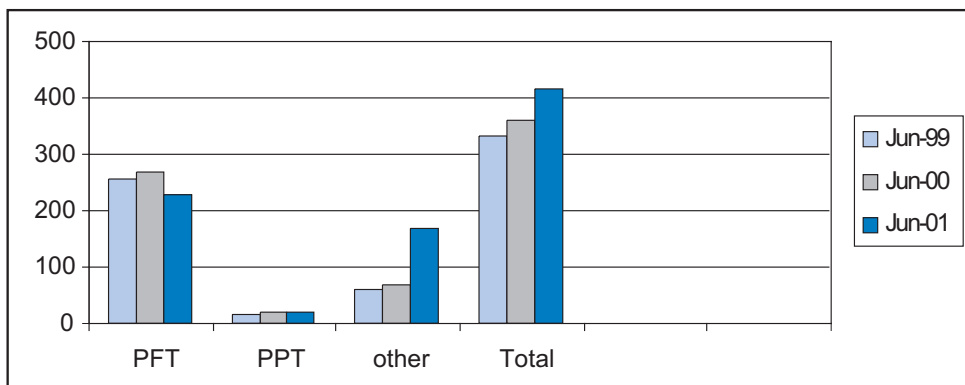
Human resource management

4.15 Human resources are the most vital asset of Parks Australia to enable it to perform its functions. Two hundred twenty-one full time staff as well as other part time and casual staff assist the director to meet his obligations under the EPBC Act. Efficient and effective human resource management is essential to an organisation's capacity to achieve its anticipated outputs and outcomes. Staff need a supportive operating framework including employment contracts, workplace safety rules and skills training. Systems need to be in place to evaluate and monitor staff performance so that professional standards remain high. Workforce planning can assist agencies to deliver better business outcomes by strengthening the capacity of the agency to respond rapidly and strategically to change. In terms of succession planning, it also assists in identifying and retaining intellectual capital. People-related expenditure is usually a significant component of agency expenditure.

4.16 For Parks Australia employee expenses account for 36 per cent of total expenses (\$17.8 million).⁹⁸ As a result, the costs associated with turnover, replacement and retraining are considerable. If human resource strategies are not fully aligned with business objectives, there is the potential for an agency's investment in its people to be less than cost effective. The following figure indicates the changing nature of the Parks Australia workforce over time. In particular, the figure illustrates the marginal decline in permanent full time staff and the increase in temporary casual and day labour employees. Parks Australia has indicated that a shift in workforce dynamics from full-time to part-time, day labour and short-term employment can assist the agency in complying with lease agreements through more flexible employment patterns.

Figure 5

Permanent Full-time (PFT), Permanent Part-time (PPT) and other (temporary casual, day labour) employed by Parks Australia June 1999–2001



Source: Parks Australia human resource management data.

⁹⁸ Parks Australia Annual Report 2000-01 p. 65.

Workforce planning

4.17 To be successful in workforce planning, agencies need to be forward looking and position themselves to ensure they have access to people with the necessary skills and knowledge.⁹⁹ The ANAO notes that a workforce planning strategy could be developed as part of Environment Australia's Strategic People Management Plan. However, while there may be similarity between administrative staff in EA and Parks Australia, field staff are a different matter and would require separate plans for each park. Such plans could be linked to a broader Parks Australia plan, which in turn could be linked to the EA Strategic People Management Plan through the Parks Staffing Committee.¹⁰⁰ Such a strategy could include strategies for the recruitment and retention of staff, fitness for duty and a development program for indigenous staff. The ANAO notes that the People Management Branch of EA and Parks Australia are currently working on some of these issues such as fitness for duty.

Recruitment and Retention

4.18 The recruitment and retention of staff has been an ongoing challenge for Parks Australia. To some extent, this is due to the remote location of Commonwealth national parks and reserves, as well as the shortage of housing and the limited range of services available at such remote locations. Uluru-Kata Tjuta has had particular problems with the turnover of Park Managers. There have been seven Park Managers since February 1994, some of these on very short-term stays. Turnover of senior managers also affects joint management arrangements as traditional owners find it difficult to build relationships with different Park Managers and staff who are often not there for long. In addition, there is significant potential for the loss of corporate knowledge and a serious inability to complete projects due to understaffing. Uluru-Kata Tjuta staff are currently providing the Park Manager with options for increasing staff retention. The ANAO notes that the NSW National Parks and Wildlife Service has been implementing workforce planning since 1997–98.¹⁰¹ In particular, it has encouraged innovative approaches to rewarding staff operating in remote locations. An example of this is discussed in the case of Montague Island Nature Reserve—Case study 4.

⁹⁹ ANAO Better Practice Guide (2001) *Planning for the Workforce of the Future*.

¹⁰⁰ Parks Australia's staffing committee has responsibility for overall staffing policy coordination in Parks Australia.

¹⁰¹ NSW National Parks and Wildlife Service (1997) Workforce Management Strategic Plan.

Case Study 4

Montague Island Nature Reserve

Montague Island Nature Reserve is located offshore from Narooma on the south coast of NSW. While it is close to the mainland, it is separated by seven kilometres of ocean. In rough weather, access to the port of Narooma is difficult. The island supports rich colonies of wildlife including Australian fur seals and penguins. There is a permanent NSW National Parks and Wildlife Service (NPWS) officer stationed on the island. The NPWS introduced an innovative management model for staffing on the island. It recognised the difficulties arising from long term postings to the island including education for children and access to routine services. The NPWS response was to offer appointment on the island as a 12-month posting for experienced staff. The posting was promoted as a reward for good service state-wide. A fully serviced house is provided as well as training for tasks specific to Montague Island. The 12-month position is secured by interview. The NPWS approach has transformed Montague Island from being a hardship post to being a highly sought after opportunity.

Source: Mr G. Worboys, audit consultant.

Aboriginal staffing

4.19 Under the lease agreements, the Director of National Parks is required 'to take all practicable steps to promote Aboriginal administration, management and control of the Park'. Increased traditional owner participation in the delivery of park management is also a key indicator identified in the Portfolio Budget Statement 2001–02. While the total number of Aboriginal staff has increased from 61 in 1995–96 to 80 in 2001–02, they are generally clustered at the more junior levels of park administration. This limits the capacity of the Director to meet his longer-term obligation to achieve Aboriginal administration, management and control of the parks under the lease agreements.¹⁰²

4.20 Defining staff competencies is important so that the organisation can deal with the range of functions required to fulfil its objectives. For staff in the parks, there are particular technical and physical skill sets required and these need to be supported by ongoing operational training. Both Kakadu and Uluru-Kata Tjuta, have implemented specific initiatives to support indigenous staff. For example at Kakadu, literacy and IT training has been developed with the assistance of expert consultants. At Uluru-Kata Tjuta, an indigenous skills recognition project

¹⁰² Aboriginal park staff may take on a number of roles in park administration. For example, one individual may be employed as an EA Level 1/2 officer, but also be a member of a Board of Management or a Director of a company providing services to Parks Australia due to the nature of operations in small or remote communities.

is underway to identify and document traditional skills and competencies that could be used in the future recruitment of Aboriginal staff. Parks Australia has developed the Indigenous Career Development and Recruitment Strategy. This Strategy is designed to assist indigenous staff and enable the Director of National Parks to fulfil his role under the lease agreements. The ANAO considers that, while these are positive initiatives, there would be benefit in strengthening the alignment between Parks Australia's strategic goals in the Portfolio Budget Statements and Divisional Plan, (including those derived from lease agreements), and the human resource capacity required to achieve them. For example, a stronger focus on the training and development of Aboriginal staff in middle management positions within the life of a management plan.

Training and Development

4.21 Training in Parks Australia is evolving towards a more strategic approach to people management development through the introduction of the Performance and Development Scheme (PDS) which targets training to individual as well as organisational needs. However, during the course of the audit the ANAO noted that there were still some gaps in implementing the strategy. Staff do not always receive mandatory training, including computer literacy and OH&S-related training such as handling chemicals and operating machinery. A Comcare audit undertaken in October 2000 had similar findings in relation to OH&S training¹⁰³. There are some instances of staff declining to undertake mandatory training, for example, there are a number of long-term abstainers in Kakadu who have not attended cross-cultural training. While training needs are identified in performance agreements and individual development plans, training officers do not consistently have access to these plans or to summaries of the training needs identified in these plans.

4.22 These examples are illustrations of gaps in and limitations on people management which require stronger leadership in building on key people management mechanisms. For example, the ANAO recognises that Parks Australia is seeking to address these problems through the introduction of the PDS as part of a more strategic approach to people development. Under this approach, development needs are related to the Environment Australia Corporate Plan, Divisional Plans, Branch Plans and individual development needs. The PDS was an integral part of Environment Australia's accreditation under the Investors in People scheme.¹⁰⁴

¹⁰³ Comcare Australia, 2000, *Health and Safety Management Systems Audit: Kakadu National Park*.

¹⁰⁴ Investors in People is the internationally recognised quality standard which sets a level of good practice for improving an organisation's performance through its people. It provides a framework for integrating human resource strategies with business strategies.

4.23 Training and development can lead to increased OH&S awareness which in turn can reduce costs. Effective OH&S can have a direct financial benefit in terms of reduced insurance premiums for workers compensation. This is particularly important in Commonwealth national parks and reserves because of the substantial risks arising from the nature of the work. However, the ANAO notes that the Comcare premium is currently paid centrally and there is little financial incentive for Parks Australia to improve its performance. However, in implementing the Comcare recommendations, Parks Australia should be able to strengthen its performance in this area. While the number of workers compensation claims in Parks Australia has nearly halved from 42 claims in 1999–2000 to 23 claims in 2000, the average cost of claims has *doubled* from \$8 432 in 1999–2000 to \$16 494 in 2000–01. This reinforces the importance of a systematic approach to OH&S training and development by Parks Australia.

4.24 The ANAO notes that under the EPBC Act, the Director of National Parks is required, amongst other things, to provide and assist in the provision of training and the knowledge and skills relevant to the establishment and management of national parks and nature reserves. Within this context, the Director is both a member of, and has responsibility for, supporting Boards of Management to assist in their effective operation.¹⁰⁵ Training for Board members at Booderee, Uluru-Kata Tjuta and Kakadu has been an ongoing function for Parks Australia. In addition to the indigenous skills recognition program in Uluru-Kata Tjuta, other initiatives taken by Parks Australia to address training gaps include the formation of a training committee at Kakadu (however, this committee has only met once in the last five years), and an audit at Uluru-Kata Tjuta that aims to identify the skills and competencies required for each position.

Conclusion

4.25 Human resource management is consistent with the requirements of the Strategic People Management Plan for the Department of the Environment and Heritage. However, particular problems are apparent largely as a consequence of the remote location of many parks and reserves. This is a particular issue at Uluru-Kata Tjuta where high staff turnover has implications for joint management relationships, loss of corporate knowledge and project completion. While Parks Australia has implemented indigenous training programs, Aboriginal staffing remains an issue with indigenous staff generally clustered at junior levels. There are also instances of staff declining to undertake mandatory training, for example cross-cultural training. Giving higher priority to key people management mechanisms, such as the PDS, could address this.

¹⁰⁵ *Director of National Parks Annual Report 2000–01*, p. 3; Environment and Heritage Portfolio Budget Statements 2001–02, p. 221.

Recommendation 11

4.26 In order to strengthen human resource management practices, the ANAO *recommends* that Parks Australia:

- (a) considers, in conjunction with Environment Australia's people management branch, the development of a Workforce Planning Strategy for Parks Australia staff aimed at strengthening the alignment between Parks Australia's strategic goals and the human resource capacity required to achieve those goals;

and ensures that:

- (b) field staff undertake mandatory training as standard procedure; and
- (c) training officers are provided with information on training needs identified as part of performance agreement and development plans and regular reports are provided to the Director of National Parks on the cost-effectiveness of training field staff.

Director's response

4.27 Agree. In agreeing with this recommendation, the Director notes that, in the jointly managed parks, lease agreements contain clear prescriptions concerning indigenous staff development and training that need to be reflected in any Workforce Planning Strategy.

5. Performance Reporting

Introduction

5.1 Performance reporting provides the basis for demonstrating accountability under Commonwealth legislation. Effective reporting enables agencies to demonstrate achievements and shortcomings to Parliament and other stakeholders. Ideally, performance reporting should be consistent across different functional areas, attributable (that is, the extent to which the accomplishments achieved can be attributed to the activities of the program) and accurate as to what is being disclosed.

5.2 The Director of National Parks is required to prepare an annual report as the Director of a Commonwealth authority under the CAC Act. For CAC agencies, the requirements for annual reporting are set out in the Orders made by the Minister for Finance under the CAC Act. The Orders state that the annual report must include, among other things a review of how the Commonwealth authority has performed in the financial year in relation to:

- its statutory objects and functions;
- its principal outputs and contribution to outcomes;
- factors, events, or trends influencing its performance over the financial year and in the future, including the risks and opportunities that it faces and the strategies adopted or proposed to be adopted to manage those risks and opportunities;
- key financial and non-financial performance indicators;
- the efficiency and effectiveness of the operations of the Commonwealth authority in producing its principal outputs; and notes that this review should
- make clear links between outcomes, strategies for achieving those outcomes and the principal outputs.¹⁰⁶

5.3 Annual reports should also provide an assessment of how the agency has performed against the goals and objectives outlined in the Portfolio Budget Statements. The Director of National Parks Annual Report must also address the matters relevant to the implementation of the EPBC Act and in particular, the requirements of Section 516A the EPBC Act by reporting on:

¹⁰⁶ *Commonwealth Authorities and Companies Orders 1998*, s10.

- how the Director's actions and administration of the legislation have supported the principles of ecologically sustainable development;
- the effects of the Director's actions on the environment;
- any measures that the Director is taking to minimise the impact of the Director's actions on the environment; and
- the mechanisms (if any) for reviewing and increasing the effectiveness of these measures.

5.4 A further requirement relates to the World Heritage Convention which requires (since 1998) periodic reports to assess 'whether the World Heritage values for which a property was inscribed on the World Heritage list are being maintained over time'. To meet accountability and management improvement objectives a robust reporting system should ideally build from systematic monitoring at the Park level through to comprehensive annual reports to Parliament and strategic longer term 'State of the Parks' or World Heritage reports as appropriate.

Reporting and accountability

Annual reporting

5.5 An Annual Report provides the primary means of accountability by which agencies demonstrate results over the financial year to Parliament and other stakeholders. As noted earlier, the Director of National Parks has specific reporting requirements under the CAC Act and the EPBC Act. Performance reporting should meet the needs of users, be balanced and indicate trends against targets or objectives over time.

5.6 The Director's Annual Report covers information on achievements, park and visitor management as well as staff training and development. Reporting is focussed on activities and discussion of outputs and ongoing risks. For example, the report notes under major achievements for Kakadu that among other things, 'the access track to Jim Jim falls was completed.' On Cocos (Keeling) Islands 'a trainee ranger position was created and a trainee recruited from the local Cocos community'. For Christmas Island 'the most significant risk remained the threat to the Island ecosystem posed by the invasive, exotic, yellow crazy ant.' For Ashmore Reef, the report noted the need to 'minimise the environmental impacts of illegal immigration'.

5.7 However, there is little information on outcomes or the extent to which outputs have contributed to outcomes. Quantitative data is reported, such as visitor numbers and the percentage of Aboriginal staff employed in individual

parks. However, there are no performance indicators or analysis and reporting of progress against any milestones achieved or targets set. The annual report contains data on the number of tour operators that were trained in individual parks but does not discuss whether this is in line with the park's expectations and how many tour operators the park hopes to train in the coming year. A greater focus on 'factors, events or trends influencing performance', as required under the CAC Orders, would assist Parliament and stakeholders such as Boards of Management to make informed judgements. There may also be scope for the Director of National Parks to seek further input from Boards of Management for the Annual Report.

5.8 Greater discussion in the annual report of emerging trends and changes over time would also strengthen the reporting of the Director's achievements and areas for improvement in the future. While the annual report lists activities such as Uluru-Kata Tjuta's fauna monitoring program and the implementation of the Green Parrot recovery plan on Norfolk Island, it does not demonstrate how these activities fit into a comprehensive conservation strategy or plan at the park or agency level. This also limits the Director's capacity to report effectively on ESD as required under the EPBC Act.

5.9 In general, it is difficult to gain an overall picture of the achievements and outstanding challenges of the organisation at the agency scale. For example, the specific number of incidents relating to visitor compliance and safety were reported for Uluru-Kata Tjuta, but not for all of the other parks. Similarly, the number of permits issued was reported for some reserves and conservation zones such as Kakadu and Coringa-Herald and Lihou Reef but not for other parks such as Booderee or Uluru-Kata Tjuta. The ANAO recognises that while issues and priorities differ across individual conservation zones, the annual report should aim for greater consistency in reporting across at least the individual parks and major reserves to assist Parliament in judging overall performance from the annual report. Where lead times are long, intermediate outcomes can be used to provide some assurance that performance is on track. This is important given the reporting requirements under the EPBC Act and CAC Act.

Intermediate outcomes

5.10 Intermediate outcomes provide a practical linking mechanism between base level outputs and higher level strategic objectives. Measuring intermediate outcomes assists in demonstrating how an agency is managing strategic risks and provides a means of reporting where there are long lead times for final outcomes.

5.11 In overseas experience, intermediate outcomes have been used in New Zealand and Canada. For example, the New Zealand Department of Conservation Annual Report noted:

approximately 71 per cent of recovery work planned for 1999–00 for threatened species was completed. This represented 75 per cent of the top priority category A programs 68 per cent of the next priority category B programs and 71 per cent of the third priority category C programs.

The reasons why the remaining 29 per cent of the recovery work was not completed was also listed in the annual report.¹⁰⁷

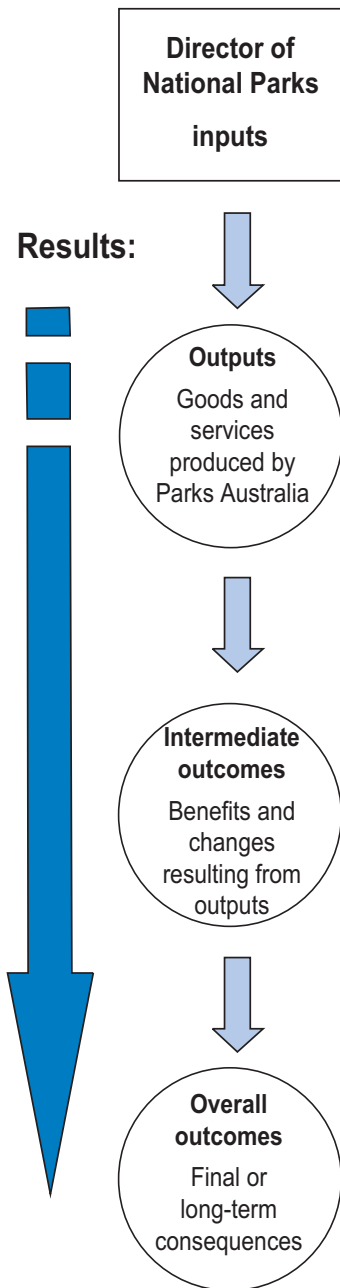
5.12 In 1997 in Canada, each national park provided an update on the status of the top five stress factors.¹⁰⁸ This showed that 50 per cent of the top five stress factors reported at each park were thought to be increasing while only five per cent were thought to be decreasing. In more than 95 per cent of cases, actions were taken to address the issues. Twenty-three per cent of the actions were directed at specific mitigation measures and monitoring the effects of the mitigation strategies.¹⁰⁹ Figure 6 illustrates the linkage between program inputs, outputs, intermediate outcomes and overall outcomes.

¹⁰⁷ New Zealand Department of Conservation Annual Report for the year ended 30 June 2000.

¹⁰⁸ Stress factors are synonymous with threatening processes such as fire, visitation, feral animals etc.

¹⁰⁹ Parks Canada Performance Report for the period ending March 31 2000.

Figure 6
Tracking Results



Examples

\$44 million in financial assistance to achieve the conservation and appreciation of Commonwealth reserves.

Examples

number of surveillance visits conducted; kilometres of tracks constructed; number of permits issued; number of workshops held; number of plans produced

Examples

ratio of disturbed habitat to total area of habitat, percentage of camp ground and visitor facilities maintained within benchmark capacity

Examples

quantifiable performance measures to assess compliance with the EPBC Act and demonstrate consistency with IUCN reserve management principles. Trends and changes in natural or cultural values over time.

Source: ANAO analysis of Parks Australia corporate documents.

World Heritage reporting

5.13 As noted in Chapter 1, a 1996 House of Representatives Environment Committee report, *Managing Australia's World Heritage*, found that the Australian Government's reports to the World Heritage Committee were not based on systematic monitoring. It recommended that the then Department of Environment, Sport and Territories provide regularly updated guidance on suitable monitoring systems, ensure that these systems were established, and scrutinise the results. The Government's 1998 response to the report agreed with these recommendations, and also considered that a small number of key indicators should be identified for world heritage values, constantly monitored, and reported upon annually. The agency was to progressively monitor and report on other matters in greater detail over time. In addition, monitoring and reporting guidelines were to be reviewed and revised, where necessary, once every five years.

5.14 Since 1998, there has been a requirement under the World Heritage Convention for signatories to provide routine reports on the state of conservation of World Heritage properties. In that year, the World Heritage Committee approved the introduction of a periodic reporting cycle in the Convention's Operational Guidelines. Under this provision, signatories would report on the application of the World Heritage Convention, including the state of conservation of the World Heritage properties located in their territories, once every six years. Australia is to report on all properties listed before 1994 (which includes Uluru-Kata Tjuta and Kakadu National Parks) as part of the first Asia-Pacific regional report in 2003. There are currently no systematic performance monitoring systems in place to measure and report on World Heritage values or the 'condition' of a World Heritage listed property as required by the World Heritage Committee. Consequently, Parks Australia is yet to satisfactorily address the recommendations of the House of Representatives Environment Committee, as agreed by the Government. However, to meet the 2003 reporting requirement, Parks Australia, in cooperation with the World Heritage Branch of Environment Australia, is developing a system to monitor and report on the condition of Kakadu's World Heritage values. Monitoring of World Heritage values will be one component of a broader monitoring system being developed to report on the condition of the entire park.

5.15 To date, Australia's reporting to the World Heritage Committee has been in response to issues raised by the advisory bodies to that Committee. This is consistent with existing World Heritage Committee reporting requirements. The report produced on Kakadu, *Protecting World Heritage: Australia's Kakadu* met Australia's obligations in this regard. The report was Australia's response to the proposal raised in the World Heritage Committee to place Kakadu on the List of 'World Heritage In Danger' due to proposed mining activities outside the park

boundaries. Other Kakadu-related issues reported to the World Heritage Committee include the invasion of cane toads. The World Heritage Branch has not produced any reports on Uluru-Kata Tjuta as there have been no issues raised by the Committee. However information on the property was provided as part of the successful nomination of Uluru-Kata Tjuta for the international Picasso Gold Medal for park management. There has been a high degree of interest in the management of Uluru-Kata Tjuta.

5.16 The ANAO notes that, in Kakadu National Park, Parks Australia is developing a landscape-wide monitoring program in conjunction with traditional landowners. The Supervising Scientist Division of Environment Australia, in conjunction with Parks Australia and the World Heritage Branch, is currently considering the scope and content of a landscape and ecosystem-wide monitoring program with the capacity to distinguish possible mining impacts at the landscape scale from effects due to other causes. Parks Australia has indicated that the World Heritage monitoring for Kakadu and Uluru-Kata Tjuta National Parks will be implemented within the context of the Park Management Effectiveness Program mentioned earlier. This Program should address the major current constraint on World Heritage reporting—that is the absence of adequate quantitative data to measure changes in World Heritage values. The ANAO considers that the implementation of a monitoring and reporting program for all parks should be a priority for Parks Australia.

Conclusion

5.17 Parks Australia has substantial shortcomings in its reporting systems. While Parks Australia has some good baseline data from a variety of sources, reporting is not sufficient for stakeholders to make an informed judgement as to the condition of Commonwealth national parks and reserves. Further, in relation to its international obligations, the ANAO notes that there is currently no systematic performance monitoring framework in place to enable Parks Australia to measure and report on the condition of World Heritage listed properties as recommended by Parliament and as endorsed by the Government. While work is currently underway, this should be a priority for Parks Australia and the World Heritage Branch of Environment Australia.

5.18 Reporting is predominantly activity focussed, rather than outcome focussed. There are no key performance indicators used consistently across parks that could provide the basis for internal benchmarking or for assessing whether overall objectives are being achieved at an agency-wide level. A greater focus on ‘factors, events or trends influencing performance’, as required under the CAC Orders, could assist Parliament and other stakeholders including Boards of Management to make informed judgements on Parks Australia’s performance over time.

Recommendation 12

5.19 In order to enhance compliance with the reporting provisions of the *Environment Protection and Biodiversity Conservation Act 1999* and the *Commonwealth Authorities and Companies Act 1997* in relation to natural and cultural heritage, the ANAO *recommends* that Parks Australia should:

- (a) incorporate in the Director of National Parks Annual Report an account of progress being made through the landscape-wide monitoring program; and
- (b) consider releasing periodically, a 'State of the Parks report' that provides an overview of Commonwealth park management, the treatment of major threatening processes and changes (if any) in the condition of important natural and cultural heritage matters.

Director's response

5.20 Agree.

Canberra ACT
13 May 2002



P. J. Barrett
Auditor-General

Appendices

Appendix 1

International Conventions relevant to Commonwealth national parks and reserves¹¹⁰

1. Agreement between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and their Environment (CAMBA) (1986)
2. Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment (JAMBA) (1980)
3. Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) (1991)
4. Convention on Wetlands of International Importance (Ramsar Convention) (1971)
5. Convention on Biological Diversity (1992)
6. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973)
7. International Convention for the Regulation of Whaling (1946)
8. Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (1972)

¹¹⁰ Note: These conventions will not apply to all reserves.

Appendix 2

Australian IUCN reserve management principles

Schedule 8 Australian IUCN reserve management principles (regulation 10.04)

Part 1 General administrative principles

1. *Community participation*

Management arrangements should, to the extent practicable, provide for broad and meaningful participation by the community, public organisations and private interests in designing and carrying out the functions of the reserve or zone.

2. *Effective and adaptive management*

Management arrangements should be effective and appropriate to the biodiversity objectives and the socio-economic context of the reserve or zone. They should be adaptive in character to ensure a capacity to respond to uncertainty and change.

3. *Precautionary principle*

A lack of full scientific certainty should not be used as a reason for postponing measures to prevent degradation of the natural and cultural heritage of a reserve or zone where there is a threat of serious or irreversible damage.

4. *Minimum impact*

The integrity of a reserve or zone is best conserved by protecting it from disturbance and threatening processes. Potential adverse impacts on the natural, cultural and social environment and surrounding communities should be minimised as far as practicable.

5. *Ecologically sustainable use*

If resource use is consistent with the management principles that apply to a reserve or zone, it should (if carried out) be based on the principle (the principle of ecologically sustainable use) that:

- (a) natural resources should only be used within their capacity to sustain natural processes while maintaining the life-support systems of nature; and
- (b) the benefit of the use to the present generation should not diminish the potential of the reserve or zone to meet the needs and aspirations of future generations.

6. *Transparency of decision making*

The framework and processes for decision making for management of the reserve or zone should be transparent. The reasons for making decisions should be publicly available, except to the extent that information, including information that is culturally sensitive or commercial-in-confidence, needs to be treated as confidential.

7. *Joint management*

If the reserve or zone is wholly or partly owned, by Aboriginal people, continuing traditional use of the reserve or zone by resident indigenous people, including the protection and maintenance of cultural heritage, should be recognised.

Part 2 Principles for each IUCN category

1. Strict nature reserve (IUCN category Ia)

The reserve or zone should be managed primarily for scientific research or environmental monitoring based on the following principles:

- habitats, ecosystems and native species should be preserved in as undisturbed a state as possible;
- genetic resources should be maintained in a dynamic and evolutionary state;
- established ecological processes should be maintained;
- structural landscape features or rock exposures should be safeguarded;
- examples of the natural environment should be secured for scientific studies, environmental monitoring and education, including baseline areas from which all avoidable access is excluded;
- disturbance should be minimised by careful planning and execution of research and other approved activities; and
- public access should be limited to the extent it is consistent with these principles.

2. Wilderness area (IUCN category Ib)

The reserve or zone should be protected and managed to preserve its unmodified condition based on the following principles:

- future generations should have the opportunity to experience, understand and enjoy reserves or zones that have been largely undisturbed by human action over a long period of time;

- the essential attributes and qualities of the environment should be maintained over the long term;
- Public access should be provided at levels and of a type that will best serve the physical and spiritual well-being of visitors and maintain the wilderness qualities of the reserve or zone for present and future generations; and
- Indigenous human communities living at low density and in balance with the available resources should be able to maintain their lifestyles.

3. National Park (IUCN category II)

The reserve or zone should be protected and managed to preserve its natural condition according to the following principles:

- Natural and scenic areas of national and international significance should be protected for spiritual, scientific, educational, recreational or tourist purposes;
- Representative examples, of physiographic regions, biotic communities, genetic resources, and native species should be perpetuated in as a natural a state as possible to provide ecological stability and diversity;
- Visitor use should be managed for inspirational, educational, cultural and recreational purposes at a level that will maintain the reserve or zone in a natural or near natural state;
- Management should seek to ensure that exploitation or occupation inconsistent with these principles does not occur;
- Respect should be maintained for the ecological, geomorphological, sacred and aesthetic attributes for which the reserve or zone was assigned to this category;
- The needs of indigenous people should be taken into account, including subsistence resource use, to the extent that they do not conflict with these principles; and
- The aspirations of traditional owners of land within the reserve or zone, their continuing land management practices, the protection and maintenance of cultural heritage and the benefit the traditional owners derive from enterprises, established in the reserve or zone, consistent with these principles should be recognised and taken into account.

4. Natural monument (IUCN category III)

The reserve or zone should be protected and managed to preserve its natural or cultural features based on the following principles:

- Specific outstanding natural features should be protected or preserved in perpetuity because of their natural significance, unique or representational quality or spiritual connotations;
- Opportunities for research, education, interpretation and public appreciation should be provided to an extent consistent with these principles;
- Management should seek to ensure that exploitation or occupation inconsistent with these principles does not occur; and
- People with rights or interests in the reserve or zone should be entitled to benefits derived from activities in the reserve or zone that are consistent with these principles.

5. Habitat/species management area (IUCN category IV)

The reserve or zone should be managed primarily, including (if necessary) through active intervention to ensure the maintenance of habitats or to meet the requirements of collections or specific species based on the following principles:

- Habitat conditions necessary to protect significant species, groups or collections of species, biotic communities or physical features of the environment should be secured and maintained, if necessary through specific human manipulation;
- Scientific research and environmental monitoring that contribute to reserve management should be facilitated as primary activities associated with sustainable resource management;
- The reserve or zone may be developed for public education and appreciation of the characteristics of habitats, species or collections and of the work of wildlife management;
- Management should seek to ensure that exploitation or occupation inconsistent with these principles does not occur;
- People with rights or interests in the reserve or zone should be entitled to benefits derived from activities in the reserve or zone that are consistent with these principles; and
- If the reserve or zone is declared for the purpose of a botanic garden, it should also be managed for the increase of knowledge, appreciation and enjoyment of Australia's plant heritage by establishing, as an integrated resource, a collection of living and herbarium specimens of Australian and related plants for study, interpretation, conservation and display.

6. Protected landscape/seascape (IUCN category V)

The reserve or zone should be managed to safeguard the integrity of the traditional interactions between people and nature based on the following principles:

- The harmonious interaction of nature and culture should be maintained through the protection of landscape or seascape and the continuation of traditional uses, building practices and social and cultural manifestations;
- Lifestyles and economic activities that are in harmony with nature, and the preservation of the social and cultural fabric of the communities in the reserve or zone concerned should be supported;
- The diversity of landscape, seascape and habitat, and of associated species and ecosystems, should be maintained;
- Land and sea uses and activities that are inappropriate in scale or character should not occur;
- Opportunities for public enjoyment should be provided through recreation and tourism appropriate in type and scale to the essential qualities of the reserve or zone;
- Scientific and educational activities, that will contribute to the long term well being of resident populations and to the development of public support for the environmental protection of similar areas, should be encouraged; and
- Benefits to the local community, and contributions to its well being, through the provision of natural products and services should be sought and promoted if they are consistent with these principles.

7. Managed resource protected area (IUCN category VI)

The reserve or zone should be managed mainly for the sustainable use of natural ecosystems based on the following principles.

- the biological diversity and other natural heritage of the reserve or zone should be protected and maintained in the long term;
- Management practices should be applied to ensure ecologically sustainable use of the reserve or zone; and
- Management of the reserve or zone should contribute to regional and national development to the extent that this is consistent with these principles.

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