SENATE ENVIRONMENT, COMMUNICATIONS, INFORMATION TECHNOLOGY AND THE ARTS COMMITTEE

INQUIRY INTO AUSTRALIA'S NATIONAL PARKS, CONSERVATION RESERVES AND MARINE PROTECTED AREAS

DEPARTMENT FOR ENVIRONMENT AND HERITAGE SUBMISSION

1. INTRODUCTION

On behalf of the Government of South Australia, the Department for Environment and Heritage (DEH) appreciates the opportunity to make a submission to the Senate Environment, Communications, Information Technology and the Arts Committee Inquiry into Australia's national parks, conservation reserves and marine protected areas.

South Australia has a long history in establishing protected areas, with its first national park – and Australia's second – established in 1891. South Australia now has approximately 26% of the land area conserved within a variety of types of protected areas, both public and private. South Australia is currently establishing a system of marine protected areas to conserve and protect comprehensive, adequate and representative examples of marine ecosystems, habitats and species.

Parks and reserves are enormously important in providing core areas for the long-term conservation of biodiversity. They protect a range of biological, geological and heritage values. Parks and reserves also encompass many areas of great importance to Aboriginal people, provide important areas for tourism and recreation activities, and protect many indigenous and non-indigenous heritage sites and places.

For the purposes of this submission, references to "national parks, other conservation reserves and marine protected areas" in the terms of reference will only refer to those reserves managed by the South Australian Department for Environment and Heritage (DEH) as part of its protected area system. These reserves specifically meet the IUCN definition of protected areas, being "An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means." (Guidelines for protected area management categories, IUCN, 1994) This is not to detract from the enormous value of land managed for conservation purposes by private landholders through a range of legal or other means (eg. the 1,200 Heritage Agreements protecting 500,000 hectares of native vegetation in perpetuity under the South Australian *Native Vegetation Act 1991*). However, the submission is focussed on meeting the objectives of the inquiry.

This submission provides an overview of the South Australian reserve system before addressing each of the terms of reference establishing the inquiry.

2. POLICY CONTEXT

The values and objectives of South Australia's reserve system are consistent with national and international commitments to the conservation of biodiversity and the role of reserves as the core of any conservation program. It is worth summarising some of the key national and international policy commitments before discussing the South Australian context.

2.1 National and international

As a signatory to the *International Convention on Biodiversity*, Australia is committed to establishing a protected area system to conserve biodiversity. Further, at the national level the goal of a comprehensive, adequate and representative protected area system for Australia has been endorsed by the Australian, state and territory governments as signatories to the *National Strategy for Conservation of Australia's Biological Diversity* and the *National Forest Policy Statement* (Commonwealth of Australia, 1992).

As a signatory to the *International Convention on Biological Diversity*, Australia committed to establish a system of protected areas dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources. This policy objective is outlined in the *National Strategy for the Conservation of Australia's Biological Diversity*. The establishment of the National Reserve System Program under the Natural Heritage Trust in 1996/97 was a major initiative by the Australian Government to meet this objective.

The objectives of the National Reserve System Program are to:

- establish and manage new ecologically significant protected areas for addition to Australia's terrestrial National Reserve System;
- provide incentives for Indigenous people to participate in the National Reserve System through voluntary declaration of protected areas on their lands and support for greater involvement of indigenous people in the management of existing statutory protected areas;
- provide incentives for landholders (both private landholders and leaseholders) to strategically enhance the National Reserve System; and
- develop and implement best practice standards for the management of Australia's National Reserve System.

In 2001, the *Review of the National Strategy for the Conservation of Australia's Biological Diversity* indicated that while progress had been made in achieving a comprehensive, adequate and representative system of protected areas, further work was required to include marine, freshwater and grassland ecosystems.

A systematic approach to the establishment of ecologically representative networks of marine protected areas is reflected in one of the key outcome agreements of the World Sustainable Development Summit held in Johannesburg in 2002, namely "the establishment of marine protected areas consistent with international law, and based on scientific information, including representative networks by 2012" (United Nations, 2002). The Australian Government and all state and territory jurisdictions have committed to the establishment of a National Representative System of Marine Protected Areas (ANZECC Task Force on Marine Protected Areas, 1999).

With just over 10% of the land area of Australia now conserved within the National Reserve System it is considered that the National Reserve System Program has made a major contribution towards meeting key Australian Government biodiversity conservation policies and objectives. However, it is also recognized that not all bioregions are adequately represented and therefore it is essential that the National Reserve System Program be continued in order to improve protection in regard to both the extent and the representativeness of bioregions and ecosystems. South Australia continues to investigate opportunities to increase the extent of protected areas in bioregions with less than 15% protected and to give priority to increasing the representation of freshwater and grassland and grassy woodland ecosystems.

Australian, state and territory representatives have recently developed the *Directions for the National Reserve System – A Partnership Approach* (Natural Resource Management Ministerial Council, 2005). It provides a national strategic approach to progress the development and management of a comprehensive, adequate and representative protected area system for Australia to meet its international and national commitments.

2.2 South Australia

In addition to the legislative framework of the reserve system and commitments to the national and international policies outlined in the preceding section, South Australia has reinforced the importance of its reserve system through a number of key policy documents.

South Australia's Strategic Plan

South Australia's Strategic Plan (Government of South Australia, 2004b) has 84 measurable targets over a ten-year period to improve the wellbeing and prosperity of South Australia. Under Objective 3: Attaining Sustainability, there are targets to establish five biodiversity corridors linking public and private lands across the state; create 19 marine protected areas by 2010; and lose no species.

The priority actions to achieve these targets include:

- establish a comprehensive, representative and adequate reserve system, with a particular emphasis on those bioregions where less than 15% of the land area is currently protected;
- establish a comprehensive, adequate and representative marine protected area system at 19 sites that have been identified as representative examples of the range of habitats and biodiversity within South Australian waters; and
- develop *NatureLinks* biodiversity corridors to provide the foundation for a landscape approach to conservation through a comprehensive system of core protected areas buffered and linked by lands managed for conservation.

Department for Environment and Heritage Corporate Plan

The Department for Environment and Heritage (DEH) is responsible for environment policy, biodiversity conservation, heritage conservation, environmental sustainability and animal welfare, and is a custodian of information and knowledge about the State's environment. The Department also manages the State's public land – land held in the conservation reserve system and as Crown lands.

The Department's Corporate Plan (DEH, 2005) provides the high-level description of the Department and its purpose, and links its priorities to the objectives and targets in *South Australia's Strategic Plan*. Priorities under the plan include:

- improve capacity to manage our parks and reserves by establishing a system to evaluate and report on park management effectiveness, and by the provision of increased resources for on-ground management;
- develop *NatureLinks* as the underlying foundation for a landscape scale approach to conservation, land and natural resource management programs in order to maximise ecological outcomes in the face of climate change;
- develop the Healthy Parks, Healthy People initiative to promote the health benefits of visiting parks;
- develop and demonstrate capacity to manage fire in parks to protect life, property and conservation values;
- further develop Cleland Wildlife Park as a key site for promoting and interpreting the conservation of our national and cultural heritage;
- develop a Levels of Service concept to guide investment in visitor facilities in parks;
- work with indigenous communities to cooperatively manage parks, biodiversity and 'country'; and
- develop a representative marine protected area system in South Australia.

Blueprint for the South Australian Representative System of Marine Protected Areas

As part of the *Blueprint for the South Australian Representative System of Marine Protected Areas* (Government of South Australia, 2004a), 19 marine protected areas are proposed to be in place by 2010. These marine protected areas will be established to further the protection and maintenance of biological diversity and of natural and cultural resources and in many cases will complement existing coastal and island reserves established under the *National Parks and Wildlife Act 1972*.

New purpose-specific legislation is being developed for the establishment of the South Australian Representative System of Marine Protected Areas.

No Species Loss: A Biodiversity Strategy for South Australia

The South Australian Government has released for public review the *No Species Loss: A Biodiversity Strategy for South Australia 2006-2016* (Government of South Australia, 2006). In recognising that the reserve system provides an ecological core to conservation and restoration initiatives, the strategy has a core objective of creating and managing protected areas.

NatureLinks

While there are national and state targets to achieving representation of regional ecosystems in the reserve system, a landscape approach is required to protect all biodiversity. In this context, *NatureLinks* was developed in 2002 as a vision for an ecologically sustainable future for South Australia, integrating proactive biodiversity conservation with regional development and natural resource management. The goal of *NatureLinks* is to enable South Australian species and ecosystems to survive, evolve and adapt to environmental change. To achieve this, connected habitat across the State will comprise a comprehensive system of core protected areas buffered and linked by lands managed for conservation objectives.

Review of the reserve classification system

DEH is undertaking a review of the existing categories for parks and reserves under the *National Parks and Wildlife Act 1972* to identify a proposal for a new model to improve the clarity of, and address a number of issues with, the existing system.

As part of South Australia's commitment and contribution to the establishment of a National Reserve System, reserves must meet international definitions of a "protected area", and there is a broad national commitment to ensure protected area criteria are being consistently applied (*Directions for the National Reserve System – A Partnership Approach*). Therefore South Australia has prepared a new model which is aligned with national and international standards on park classification categories and management objectives, including the IUCN protected area categories. In this context, the model clearly indicates which categories of parks and reserves provide for resource utilisation, particularly exploration and mining.

The *Discussion paper on the review of the reserve classification system* (Government of South Australia, 2005) has recently undergone consultation. Progressing this review will place South Australia in an excellent position to have a modern, forward-looking reserve system.

3. SOUTH AUSTRALIAN RESERVE SYSTEM

Terrestrial protected areas

The reserve system comprises reserves constituted under the *National Parks and Wildlife Act 1972*, *Wilderness Protection Act 1992* and land dedicated as conservation reserves under the *Crown Lands Act 1929*.

Under the *National Parks and Wildlife Act 1972*, all reserves, other than co-managed parks, are under the management of the Director of National Parks and Wildlife. A co-managed park is, if there is a co-management board for the park, under the management of the board, and in any other case, under the management of the Director, subject to the provisions of the co-management agreement for the park (refer section 4.1 for discussion on co-management).

The objectives of the *National Parks and Wildlife Act 1972* are the establishment and management of reserves for public benefit and enjoyment; and conservation of wildlife in a natural environment. When managing reserves, the Director and the Minister must have regard to objectives of management relating to conservation of wildlife; protection of historic sites and places of Aboriginal significance; preservation of geographical, natural or scenic features; control of introduced plants and animals; management of fire; and encouragement of public use and enjoyment and understanding of reserves.

Under the *Wilderness Protection Act 1992*, the Director of National Parks and Wildlife is responsible for the management of wilderness protection areas. The objectives of the Act are the protection of wilderness, and restoration of land to its condition before colonisation.

Under the *Crown Lands Act 1929*, dedicated conservation reserves are under the care, control and management of the Minister and managed by the Department as part of the reserve system. While there are no specific management objectives for these reserves, they are managed under a conservation framework consistent with National Parks and Wildlife Act reserves.

Table 1: South Australian Protected Area System at 1 March 2006

Reserve type	No. of reserves	Total area (ha)	Percent of state (%)
National Parks and Wildlife Act 1972			
National Park	21	4,564,713	4.615
Conservation Park	227	5,756,535	5.843
Recreation Park	14	3,171	0.003
Game Reserve	10	25,794	0.026
Regional Reserve	7	9,719,504	9.866
Wilderness Protection Act 1992			
Wilderness Protection Area	9	694,226	0.705
Crown Lands Act 1929			
Conservation Reserve	48	252,283	0.256
Total	**336**	**20,998,267**	**21.315 ***

***** Area of South Australia: 99,515,752 hectares

Like most jurisdictions, South Australia's reserve system is diverse, addressing a range of social and economic objectives within a conservation framework. Conservation of biodiversity may be the key driver in establishing most new reserves, but existing reserves continue to provide public access for recreation and other activities.

The terrestrial reserve system has developed since 1891 in a manner that reflects different approaches to both the purpose of reserves and also conservation and land management. With the modern realisation that reserves fulfil a primary role in conserving biodiversity, much work remains to be done to meet national and international criteria for a comprehensive, representative and adequate reserve system. Table 2 outlines the current level of representation in protected areas of South Australia's 17 IBRA regions.

Table 2: Terrestrial bioregions (IBRA) in South Australia Protected Area System at 1 March 2006

IBRA region	Percent of IBRA (%)
Broken Hill Complex	0.10
Central Ranges	11.02
Channel Country	21.54
Eyre Yorke Block	13.41
Finke	0.00
Flinders Lofty Block	5.34
Gawler	12.91
Great Victoria Desert	40.61
Hampton	98.98
Kanmantoo	19.27
Murray Darling Depression	16.64
Naracoorte Coastal Plain	7.96
Nullarbor	67.25
Riverina	21.77
Simpson Strzelecki Dunefields	49.09
Stony Plains	7.67
Victorian Volcanic Plain	3.02

Marine protected areas

As noted above, South Australia is committed to the establishment of 19 representative marine protected areas by 2010; a map indicating the proposed locations for these marine protected areas is provided in Appendix 1.

There is currently one marine park in South Australia: the Great Australian Bight Marine Park, which extends into Commonwealth waters and comprises three parts declared under different Acts:

- the Great Australian Bight Marine National Park, established under the *National Parks and Wildlife Act 1972*;
- the Great Australian Bight Whale Sanctuary, established under the *Fisheries Act 1982*; and
- the Great Australian Bight Marine Park (Commonwealth Waters) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

The South Australian components of the Great Australian Bight Marine Park occupy only 2.76 per cent of South Australian waters.

There are a number of coastal or island reserves constituted under the *National Parks and Wildlife Act 1972*. Some of these areas extend below the low water mark. Others, irrespective of their marine extent, offer protection for marine species or intertidal habitats.

In South Australia, there are eight defined marine bioregions, or regions with distinctive patterns of biodiversity, that are distributed across State waters. These marine bioregions have been identified by the ANZECC *Interim Marine and Coastal Regionalisation for Australia* (IMCRA) classification system. The IMCRA mapping of bioregions identified the physical and biogeographical attributes of coastal and marine regions around the State.

Table 3: Marine bioregions in South Australia's protected area system as at 1 March 2006

Bioregion	**Location**	**Size to continental shelf** (km^2)	**MPAs % of State waters**
Eucla	Cape Adieu to Western Australian border to (extends westwards to Israelite Bay)	111 115	10.39
Murat	Cape Adieu to Point Brown	32 490	0
Eyre	Point Brown to Cape Torrens, to West Cape, to Port Neill and Cape Willoughby	70 185	0.05
Spencer Gulf	West Cape to Port Neill, Point Riley to Shoalwater Point	11 540	<0.01
Northern Spencer Gulf	Point Riley to Port Augusta to Shoalwater Point	5 210	1.76
Gulf St Vincent	Cape Torrens to West Cape, Port Elliot to Cape Willoughby	13 165	0.45
Coorong	Port Elliot to Cape Jaffa	29 830	<0.01
Otway	Cape Jaffa to Victorian border (extends eastwards to slightly north of Apollo Bay and including King Island environs)	37 330	0

4. TERMS OF REFERENCE

4.1 Term of Reference A: The values and objectives of Australia's national parks, other conservation reserves and marine protected areas

Terrestrial protected areas

The ongoing loss of biological diversity is considered to be one of the most serious environmental problems in Australia. The establishment of a representative system of protected areas is an effective mechanism for conserving biodiversity, although it is also recognized that this must be accompanied by a suite of measures that encourages and provides for off-reserve conservation actions.

In terms of effectiveness and efficiency, the National Reserve System Program should be considered as the most cost-effective program under the Natural Heritage Trust for the protection of native vegetation and the conservation of biodiversity. As outlined in *Sustaining our Natural Systems and Biodiversity* (Prime Minister's Science, Engineering and Innovation Council, 2002), and reiterated in the National Reserve System Directions Statement, it is far more cost-effective to conserve intact native ecosystems than to attempt to re-establish them after they have been cleared or significantly degraded. Introducing a conservation management regime over land within the protected area system also contributes to meeting the objectives of other Natural Heritage Trust programs aimed at land restoration and threat management.

South Australia has developed a framework for landscape-scale conservation through its *NatureLinks* program, whereby public protected areas are to be managed as core conservation areas and a range of complementary conservation and land management measures can be applied across the landscape to achieve long-term conservation outcomes in the face of ongoing threats such as fragmentation, inappropriate land uses, and climate change. The National Reserve System Program is a critical component of implementing the *NatureLinks* philosophy as it enables large protected areas to be established as core conservation areas: the 166,000 hectare Gawler Ranges National Park, the acquisition of which was funded through the National Reserve System Program, is a key example of this.

There is a growing realisation of the importance of reserve systems in establishing a network of connected lands that will provide the core refuge areas for biodiversity in the face of the predicted impacts of climate change on Australia's environment.

The value of protected areas in conserving biodiversity is immediately obvious in agricultural regions of South Australia. Most of the large remaining areas of native vegetation – from Ngarkat Conservation Park in the South East, to Hincks Wilderness Protection Area on Eyre Peninsula, to Flinders Chase National Park on Kangaroo Island – would not be as large or intact today if they had not been established as reserves between the 1920s and 1970s.

The value of the protected areas system goes beyond just biodiversity conservation as it also provides other environmental, social and economic benefits. This includes contributing towards a carbon (greenhouse) sink, ecosystem services, opportunities for tourism and recreation as well as assisting regional employment. Protected areas also provide many social and cultural benefits including areas where indigenous people are able to maintain their association with the land.

By providing natural areas that are protected from human impacts, the reserve system provides an important opportunity for science. Protected areas act as a laboratory – whether on land or in the sea – where scientists can investigate the way natural systems function and begin to better understand how we are affecting them. Educating students and the general public about ecology and conservation is very important and has a valuable benefit for conservation management in the future.

Nature-based tourism has been the fastest growing sector of the tourism industry and much of this is based on, or associated with, protected areas. In South Australia, tourism is a vital part of our economy. National Parks and reserves attract around four million visits each year, generating around $8 million directly from park entry fees, commercial tourism operator licences, and leases. This revenue is directed back into management of the parks system. Apart from direct revenue, park tourism generates considerable indirect revenue and value-added income. For example, an assessment of the economic impacts associated with the reserve system on Kangaroo Island in 2001 indicated that the attraction of Kangaroo Island as a tourism destination contributed an estimated $62 million in value-added income to South Australia in 2001, and that the experiences offered by the reserve system accounted for $22 million of the volume-added income and 360 jobs on the island.

Protected areas are thus both scientific and cultural institutions. The reserve system as a whole contributes to the development of the Australian national identity through protection of areas that either have iconic scenic or wildlife values (eg. the Coorong, Seal Bay) or are associated with important events in the nation's history (eg. the Cooper Creek in Innamincka Regional Reserve). Through management as part of a reserve system, these areas can be made accessible and interpreted, and protected in perpetuity.

South Australia has developed modern, dynamic legislation to facilitate indigenous aspirations to manage their land. Amendments to the *National Parks and Wildlife Act 1972* in 2004 enable national parks and conservation parks to be co-managed with traditional owners, and indeed, provide the legal framework for national parks or conservation parks to be established over Aboriginal-owned land. This legislation, which also enabled the hand back of the 2.1 million hectare Unnamed Conservation Park to the Maralinga Tjarutja while remaining as a Conservation Park under the *National Parks and Wildlife Act 1972*, is seen as an exciting new development in recognising indigenous aspirations and ensuring that parks are managed in a way that respects contemporary and traditional culture, knowledge and skills. Most recently, in late 2005 a co-management agreement has been entered into for the Vulkathunha-Gammon Ranges National Park in the northern Flinders Ranges, whereby a co-management board has been established, which is now responsible for managing the park.

Healthy Parks, Healthy People is an initiative aimed at improving the quality of life of South Australians by encouraging greater use of the DEH-managed parks and improving community awareness of the health benefits associated with visiting and interacting in a healthy environment. By providing opportunities for the general community to participate in recreational and environmental activities, the *Healthy Parks, Healthy People* program will promote a greater use of DEH-managed parks within South Australia.

Research has shown that access to and interaction with a healthy natural environment can have a positive effect on the physical, social, mental and spiritual health of individuals, reduce crime, enhance productivity and lead to a stronger sense of connection to the natural environment. Parks also offer a wide range of facilities and services that can assist in having a positive contribution to human health and wellbeing.

South Australia's Friends of Parks scheme has for 20 years been a national leader in engaging volunteers in parks. In addition to the scheme's value in providing people with an opportunity to contribute to the conservation of special places in our community, the economic contribution is considerable. In 2005, nearly 6,000 Friends of Parks in 136 groups across the state contributed 28,476 days of work.

Marine protected areas

The objective of the South Australian Representative System of Marine Protected Areas is to maintain the long-term ecological viability and processes of marine and estuarine ecosystems, to conserve and protect biodiversity, whilst acknowledging ecologically sustainable use. The system will represent the variability of major ecosystems and habitat types within and between each bioregion, and all bioregions will be represented. Unique and rare ecosystems, habitats, plants and animals are just as important as our common ones, so these will also be included in the representative system.

In particular, the South Australian Representative System of Marine Protected Areas will:

- conserve and protect comprehensive, adequate and representative examples of ecosystems, habitats, species and populations;
- conserve and protect areas of high conservation value, including those containing high wilderness value, high species diversity, natural refugia for flora and fauna, habitats unique to southern Australia, and habitats containing endemic species;
- conserve and protect species that are rare, threatened, depleted or have special requirements, and their associated habitats;
- provide a monitoring framework that will contribute to the understanding of South Australia's marine environment and enhance management of marine protected areas; and
- provide a framework for the integrated management of, a range of human activities, including economic, cultural, indigenous and social resource use.

Selection of marine protected areas will consider the best ecosystem representation available having regard to overlaps that may exist across Victorian, Western Australian and Commonwealth boundaries.

New purpose-specific legislation is being developed for the establishment of the South Australian Representative System of Marine Protected Areas. This legislation will include provisions for the dedication, zoning and management of marine parks and also effective mechanisms to address any displaced commercial fishing and aquaculture effort. It will complement existing legislation including the *National Parks and Wildlife Act 1972*, *Wilderness Protection Act 1992* and *Fisheries Act 1982*. Under the new legislation, South Australia's marine protected areas will be zoned for multiple use in order to protect estuarine and marine ecosystems, while also providing for continued ecologically sustainable use of suitable areas. Most activities, including recreational and commercial activities, will still be allowed within the boundary of a marine protected area. However, in order to protect representative habitats, species and ecological features, there will be particular zones where some activities will not be permitted.

As noted above, the South Australian Government has made a strong commitment to protecting marine biodiversity through developing 19 marine protected areas by 2010.

Complementary protected areas

As noted above, South Australia has developed the *NatureLinks* concept for landscape-scale conservation whereby public protected areas are to be managed as core conservation areas and a range of complementary conservation and land management measures can be applied across the landscape to achieve long-term conservation outcomes.

In highly fragmented landscapes where land is primarily held in private ownership, there are generally fewer opportunities to protect sufficiently large tracts of unmodified native vegetation in formal reserves. In such landscapes, conservation management networks operating across a range of land tenures (including private protected areas and public reserves) become the main mechanism for achieving broad biodiversity conservation objectives.

The establishment and management of a protected areas system over private lands continues to be a challenge. While private and indigenous landholders can provide a significant contribution to a comprehensive, adequate and representative protected area system, the capacity to meet standards on issues such as security of tenure for conservation purposes, ongoing management and reporting need to be addressed. The formal protected area system must remain the core of any conservation effort and National Reserve System.

South Australia has taken a lead role in supporting private land conservation through the Heritage Agreement program first established over twenty-five years ago. There are now in excess of 500,000 hectares of land under Heritage Agreements. A recent development is the Bushbank initiative, which was established in 2003 with Commonwealth and State Government support and is owned and operated by the Nature Foundation SA Inc. Through a 'revolving fund', Bushbank purchases land, places a native vegetation Heritage Agreement under the *Native Vegetation Act 1991* over the land, and then on-sells the land. In this way the Foundation is seeking to promote conservation of remnant bushland and to date has acquired and sold a number of properties.

While these areas are protected under a legal covenant and fit the criteria of protected areas for contributing to the National Reserve System most of these areas have been established without funds provided through the National Reserve System Program. The ongoing management of such areas requires a commitment from both landholders and government if it is to be sustainable.

4.2 Term of Reference B: Whether governments are providing sufficient resources to meet those objectives and their management requirements

There are two aspects to this term of reference. One relates to whether sufficient resources are being provided to fund the establishment of new reserves; and the second relates to resources to manage reserves.

The National Reserve System Program has been an important component of the growth in formal reserve systems whereby states and territories can purchase land and apply a legislative framework to the management of the land and long-term security of tenure through a formal reservation process. In South Australia, the Program has facilitated a number of important acquisitions that have filled long-standing gaps in the reserve system. Examples include the Gawler Ranges National Park on upper Eyre Peninsula; the proposed Bimbowrie Conservation Park in the Olary Ranges near Broken Hill; and the Wyndgate property on Hindmarsh Island for addition to the Coorong National Park; and the Glenshera wetlands on the Fleurieu Peninsula.

The development and adoption of the *Directions for the National Reserve System – A Partnership Approach* (Natural Resource Management Ministerial Council, 2005) is a major step forward as it provides an agreed national strategic approach to progress the development and management of a comprehensive, adequate and representative protected area system for Australia to meet its international and national commitments.

However, the *Directions* needs to be underpinned by a renewed commitment to the National Reserve System Program as a principal program of the Natural Heritage Trust and a renewed commitment to jurisdictions in developing the National Reserve System. South Australia is currently developing a Protected Areas Strategy to provide the framework for evaluating its protected area system, identify the gaps and develop targets and priorities. This strategy will complement the *Directions* and guide further development of the protected area system in South Australia.

Continued and improved funding of the National Reserve System Program is essential if all its objectives are to be met. It is also noted that the change in funding contributions by the Australian Government for acquisition of land by State/Territory Government conservation agencies from two thirds of the purchase price to one half has impacted on the ability of South Australia to maintain an effective and forward planning land acquisition program.

A strength of the National Reserve System Program is that it has an ecological basis and a systematic framework for guiding reserve establishment through the Interim Biogeographic Regionalisation for Australia (IBRA) and using protection status, comprehensiveness and level of threat to biodiversity within each bioregion to provide the priorities for protection.

However, our capacity to develop and maintain a system of protected areas is reliant on having adequate knowledge of biodiversity and management requirements. Improvements are required in the scientific information base. While IBRA regions and subregions are used as the planning framework, there is also a need to progress the delineation of regional ecosystems which are useful in setting targets and identifying priorities at a regional and state/territory level. There are also significant gaps in the knowledge of the distribution and status of species, communities and ecosystems, ecological processes, restoration of ecosystems and adaptive management. There is an opportunity for the Australian, state and territory governments to commit increased resources to improving our knowledge base that will assist in meeting the protected area system targets at a national level.

The current funding arrangements for the National Reserve System Program do not recognize the capacity, standards and information base whereby jurisdictions are best placed to maximize the investment by the program in achieving conservation outcomes through protected areas. It should be noted that while the Australian Government has made some investment in the purchase of reserves, jurisdictions fund the initial establishment costs of protected areas as well as the long-term management costs. The establishment costs alone can be significant and can achieve very important outcomes early on through priority actions such as fencing, de-commissioning infrastructure (eg. water points, internal fencing), biological surveys to better define the conservation values of the land, establishment of monitoring programs for measuring management effectiveness, and preparation of a management plan to articulate the values, threats and management directions for the land.

The South Australian Government has funded a number of initiatives in recent years which have addressed both the need for sufficient resources for managing reserves, and also the smarter use of existing resources. Initiatives have included increased funding in fire management on reserves and improved efficiency of the reserve management planning program, which is leading from 50% of reserves having a management plan in 2005 to 60% in 2006.

To develop a consistent approach to the provision of tourism and visitor facilities within reserve, DEH has also developed the Levels of Service Program to determine the most appropriate form and level of visitor infrastructure in each reserve based on tourism and recreation opportunities and the conservation values of the reserves.

With respect to marine protected areas, South Australia recognises the unique needs for managing the marine environment. In developing 19 marine protected areas by 2010, the establishment of each reserve will be accompanied by resourcing for ongoing management and monitoring requirements.

It is acknowledge that the Australian Government has in recent years has invested substantially into marine habitat mapping and other scientific research. This commitment should be maintained for the foreseeable future given the limited scientific understanding of these environments, the connectivity between various habitats and future uncertainty of climate change.

4.3 Term of Reference C: Any threats to the objectives and management of our national parks, other conservation reserves and marine protected areas

Some of the threats facing reserves are well-known and for the purposes of this submission will not be discussed in detail. These include introduced plants and animals, inappropriate fire regimes, introduced pathogens, and salinity and groundwater issues.

In considering the threats to protected areas, it is important to remember that protected areas cannot be considered in isolation from the landscape in which they sit. Many of the threats are faced equally by adjoining landholders, whether it be fire, introduced plants and animals, introduced pathogens, and changes to groundwater and rising salinity. None of the threats recognise tenure: they are not park-specific. In fact, while there may be different emphases and resilience in the face of these threats, the very threats to the productive capacity of agricultural land are often the same threats to the conservation values of reserves. This is where there are great opportunities for natural resource management programs in addressing threats.

The act of creating a reserve, as a means of conserving biodiversity, has an immediate impact on reducing threats by placing a legal conservation management framework over the land, and by removing certain existing uses such as grazing.

Many conservation programs in South Australia adopt a landscape scale approach to addressing threats to the conservation values of reserves. This recognises that most reserves are not large and pristine enough to be self-sustaining in the face of threats. But there is also an added benefit in adopting an approach that looks beyond park boundaries, for these programs can engage directly with adjoining landholders and local communities and encourage them to participate in on and off park activities. Some key examples in South Australia include the Flinders Ranges Bounceback program (which won the 2001 National Banksia Award for Land, Bush and Waterways Management); Ark on Eyre; and the Venus Bay Ecological Restoration Program.

Similarly, tourism and recreation programs are often encouraging people to see the parks as a core tourism resource, but also encourage activities outside of the reserves. This gives added economic benefit directly to local communities and also assists with managing sustainable levels of visitor numbers in parks. A good example in this regard is the highly successful partnerships in the Flinders Ranges between private tourist operators and the iconic Flinders Ranges National Park.

Two of the biggest threats to reserve values are the resilience of reserves in the face of inappropriate developments outside of reserves, and resilience in the face of climate change. Inappropriate developments outside of reserves can have direct impacts such as agricultural escapes (eg. deer, olives), or long-term debilitating impacts (such as lowering of water tables or clearance of native vegetation that provides important habitat). While reserves can protect identified species and habitats at the time of establishment, the capacity to maintain those conservation values in the long term is in large part dependent on the effect of inappropriate development and climate change. Establishing large reserves that have the capacity to withstand large variations in climate and accumulated external impacts, and a network of reserves across the landscape which connect areas of habitat to allow species movement, and adaptability in the face of changing temperatures and rainfall patterns, must be considered the key to any viable National Reserve System. This is the key to South Australia's *NatureLinks* program. In addition, a national focus on assessing the resilience of reserves should be encouraged, and renewed focus on land use planning and development assessment frameworks recognising the role of reserves.

Within reserves, a key challenge is balancing competing uses. Parks are there for people and communities and ensuring that these uses can be accommodated without impacting on conservation values is a complex task for reserve managers. Statutory reserve management plans are important in this regard as robust documents setting clear management objectives for each reserve and engaging with communities and users. In recognition of this, South Australia is accelerating its program of management planning to provide this direction to park managers and park users.

While protected areas have assisted in the conservation and maintenance of Australia's terrestrial ecosystems for over a century, the formal conservation of Australia's marine environments and their resources is relatively new. In recognition of the unique nature of our marine environment and mounting evidence of change caused through human actions, the Australian, State and Territory Governments are now committed to conserving our marine and estuarine biodiversity, while providing for the ecologically sustainable use of marine resources.

Humans are having an ever-increasing impact on natural resources, and the marine environment is no different. Fishing industries have grown and harvesting methods have become more efficient. Pollution from the land is affecting marine ecosystems and coastal development has escalated. A growing and mobile population will continue to increase competition for space and resources.

A significant percentage of Australia's population resides within the coastal margin, relying on coastal and marine ecosystems for food, income and recreation. These environments are also a method of boosting economies through fisheries, petroleum production, tourism, and seabed mining.

Within the last decade the ecological stability of the oceans has been increasingly threatened by over-fishing and resource extraction, expanding aquaculture industry, global warming, increased population and coastal development, terrestrial based discharges as well as poor management. Progress in conserving these fragile ecosystems has been slow and the integrity of these environments need to be effectively managed to ensure continuing opportunities for sustainable industry development, whilst simultaneously preserving the biological diversity for the benefit of current and future generations.

Marine protected areas are now regarded as a vital tool to conserve examples of our marine realms in an undisturbed state, to complement our terrestrial reserve system. As the South Australian system will be a multiple-use system with core areas protected as either restricted access or sanctuary zones, the challenge will be managing the uses to ensure that they are sustainable and do not have a detrimental effect on marine conservation. The importance of planning and community consultation will be critical to ensure that there is a balanced approach between conservation, commercial use, and recreation use of marine protected areas.

However, marine protected areas are not a panacea to all marine issues and are most effective when undertaken in conjunction with other management programs and legislation. Effective management of the marine environment involves the integration of a range of existing legislation and purpose-specific management arrangements, including fisheries management, infrastructure and development management, mining as well as the management of biodiversity.

4.4 Term of Reference D: The responsibilities of governments with regard to the creation and management of national parks, other conservation reserves and marine protected areas, with particular reference to long-term plans

South Australia has had a long-standing commitment to the protection of biodiversity through establishing a comprehensive system of protected areas. Belair National Park was established in 1891; Flinders Chase National Park was established in 1919 to protect the flora and fauna of the western end of Kangaroo Island. The core of the South Australian protected area system was in place with the passage of the National Parks and Wildlife Act in 1972.

Twenty-one percent of South Australia is now protected under the *National Parks and Wildlife Act 1972* and the *Wilderness Protection Act 1992*. Notwithstanding this impressive figure, there are many gaps to the protected area system which will continue to be addressed: one of the most recent purchases, the Bimbowrie Station in the Olary Ranges, is a major achievement in this regard.

There is an ongoing commitment to establishing protected areas in South Australia – both terrestrial and marine. The proven value of protected areas for conserving biodiversity, and the social and economic benefits they provide, demand a renewed commitment to funding their establishment and management.

South Australia's *NatureLinks* program is a long-term vision in which the South Australian Government has acknowledged its responsibilities and will manage core protected areas to enable species and ecosystems to survive, evolve and adapt to environmental change.

While the primary goal of the South Australian Representative System of Marine Protected Areas is the conservation of marine biodiversity, the system will cater for many different uses. One of the key outcomes will be the establishment of a framework for the integrated and sustainable management of a range of human activities, including economic, cultural, indigenous and social resource use.

As mentioned earlier, South Australia has embraced a multiple-use zoning model for its Marine Protected Areas. The proposed Marine Parks Act will establish a requirement that a management plan must be established for each marine park detailing various zones that provide varying levels of protection for biodiversity through restricting access for certain activities and uses. Accordingly, effective long-term planning is an essential to:

- conserve a comprehensive, adequate and representative system of marine biological diversity and marine habitats;
- assist in maintaining ecological processes in the marine environment;
- provide for ecologically sustainable development and use of marine environments; and
- provide opportunities for public appreciation, education, understanding and enjoyment of marine environments.

This will provide a consistent and adaptable approach to managing a broad spectrum of activities and uses within South Australia's representative system.

4.5 Term of Reference E: The record of governments with regard to the creation and management of national parks, other conservation reserves and marine protected areas

South Australia's protected area system has grown to comprise 336 protected areas over 21 million hectares. This is a significant achievement but there remains much more to be done.

South Australia is committed to reviewing its reserve classification system to provide a framework for the future that is consistent with IUCN categories, provides a consistent nomenclature that reflects the management objectives of the land, and provides clear definitions and management objectives for each category.

The development of mineral and energy resources is of great importance for economic and regional development in South Australia. In recognition of this, South Australia adopted a model in 1987 whereby a number of its protected areas are accessible for exploration and mining within a framework that allows the Environment Minister to place conditions on operations, either through the management plan or mineral or petroleum licence. The introduction of the 'regional reserve' category in 1987 doubled the area of the reserve system through managing large areas of the Outback under a conservation framework while permitting the sustainable use of resources (refer Appendix II).

As discussed earlier in this submission, South Australia has led the way in developing model co-management legislation to enable land to be managed as protected areas with traditional owners, and the Government is committed to establishing 19 representative marine protected areas by 2010 to ensure effective conservation and protection of biodiversity within State waters.

5. CONCLUSION

In conclusion, the following key points are made:

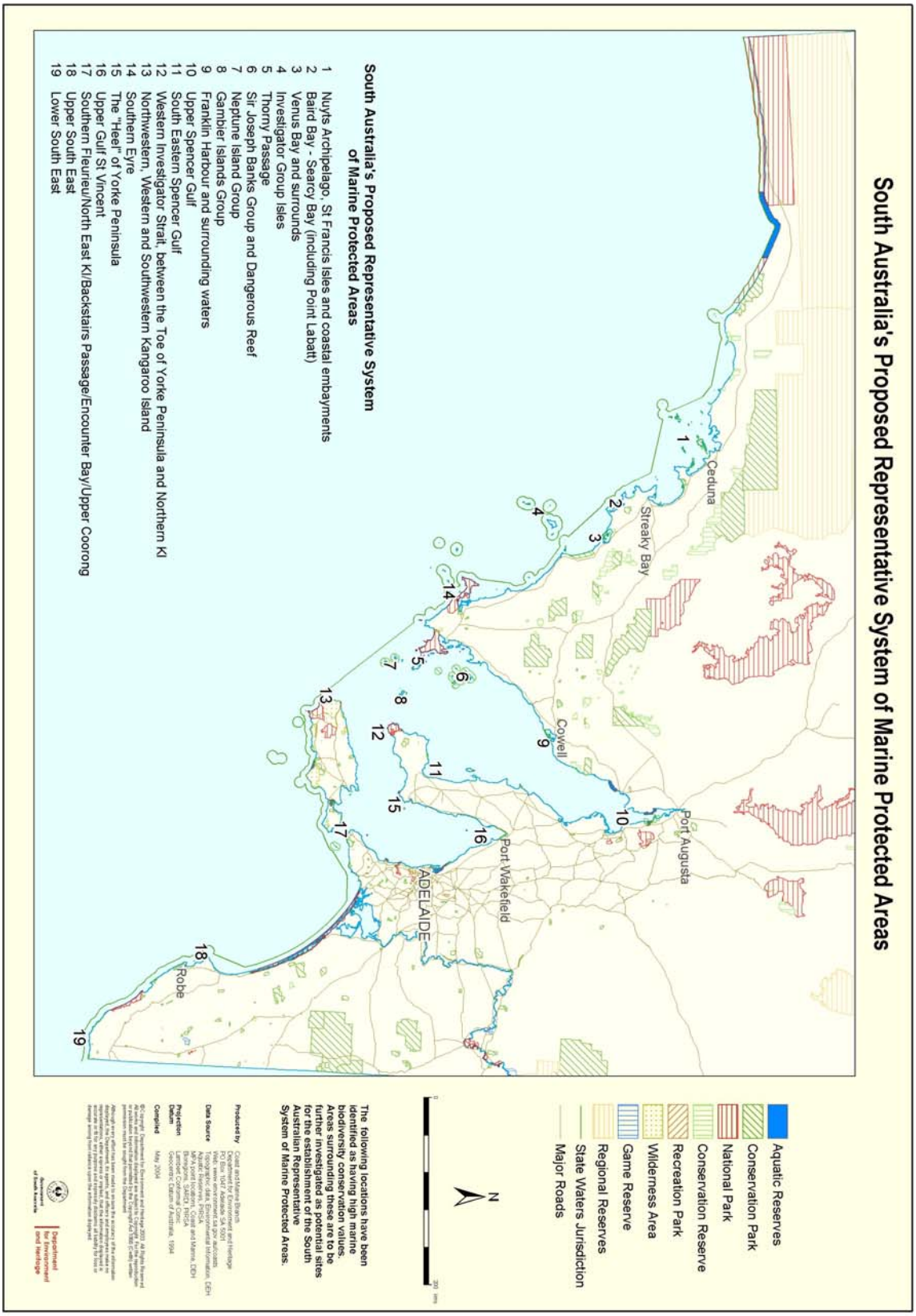
- Having a comprehensive, adequate and representative reserve system is critical for biodiversity conservation, particularly in regard to ameliorating the potential impacts of climate change.

- The value of the reserve system goes well beyond the conservation of biodiversity as it also provides other environmental, social and economic benefits to meet multiple policy objectives. This includes contributing towards a carbon (greenhouse) sink, ecosystem services, opportunities for tourism and recreation, as well as assisting regional employment opportunities. Protected areas also provide many social and cultural benefits including areas where indigenous people are able to maintain their association with the land.

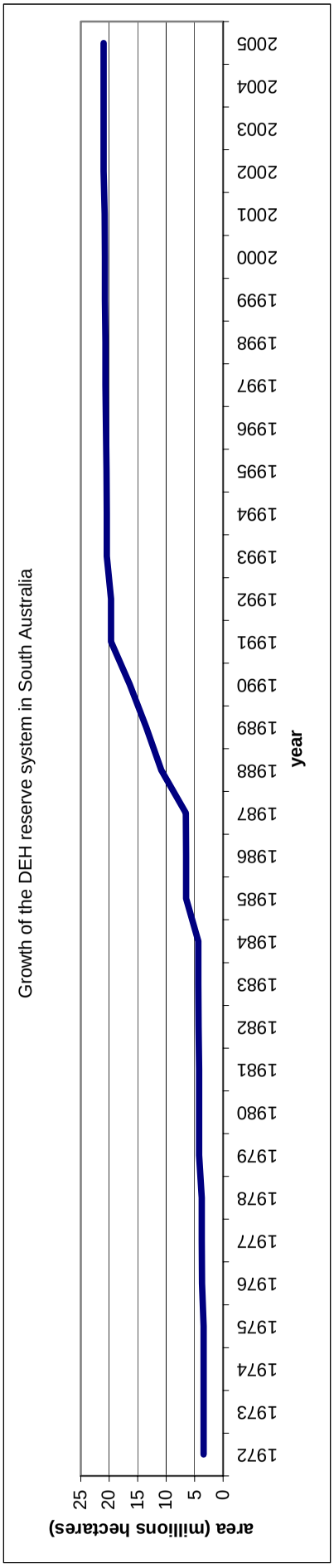
- The value of reserves cannot be replicated outside of a publicly owned and managed system – ie accountability, accessibility, long term security of tenure – although the contribution of private protected areas to biodiversity conservation is acknowledged and appreciated.

- The public protected area system is best placed to manage long term issues of climate change and ongoing fragmentation of the landscape. South Australia's *NatureLinks* program has been developed in recognition of this and is a key component of meeting Government policy objectives for biodiversity conservation.

Appendix I


South Australia's Proposed Representative System of Marine Protected Areas
Aquatic Reserves
Conservation Park
National Park
Conservation Reserve
Recreation Park
Wilderness Area
Game Reserve
Regional Reserves
State Waters Jurisdiction
Major Roads
Ceduna
Streaky Bay
Cowell
Port Augusta
Port Wakefield
ADELAIDE
Robe
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
South Australia's Proposed Representative System of Marine Protected Areas
1 Nuyts Archipelago, St Francis Isles and coastal embayments
2 Baird Bay - Searcy Bay (including Point Labatt)
3 Venus Bay and surrounds
4 Investigator Group Isles
5 Thorny Passage
6 Sir Joseph Banks Group and Dangerous Reef
7 Neptune Island Group
8 Gambier Islands Group
9 Franklin Harbour and surrounding waters
10 Upper Spencer Gulf
11 South Eastern Spencer Gulf
12 Western Investigator Strait, between the Toe of Yorke Peninsula and Northern KI
13 Northwestern, Western and Southwestern Kangaroo Island
14 Southern Eyre
15 The "Heel" of Yorke Peninsula
16 Upper Gulf St Vincent
17 Southern Fleurieu/North East KI/Backstairs Passage/Encounter Bay/Upper Coorong
18 Upper South East
19 Lower South East
N
The following locations have been identified as having high marine biodiversity conservation values. Areas surrounding these are to be further investigated as potential sites for the establishment of the South Australian Representative System of Marine Protected Areas.
Produced by
Data Source
Projection
Datum
Compiled
May 2004
Department for Environment and Heritage

Appendix II


Growth of the DEH reserve system in South Australia
area (millions hectares)
0
5
10
15
20
25
year
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005

Bibliography

ANZECC Task Force on Marine Protected Areas (1998). *Guidelines for Establishing a National Representative System of Marine Protected Areas*. Australian and New Zealand Environment and Conservation Council Task Force on Marine Protected Areas. Environment Australia, Canberra. http://www.ea.gov.au/coasts/mpa/nrsmpa/guidelines.html

ANZECC Task Force on Marine Protected Areas (1999). *Strategic Plan of Action for the National Representative System of Marine Protected Areas: A Guide for Action by Australian Governments*. Australian and New Zealand Environment and Conservation Council Task Force on Marine Protected Areas. Environment Australia, Canberra. http://www.ea.gov.au/coasts/mpa/nrsmpa/spa.html

Commonwealth of Australia (1992). *National Strategy for Ecologically Sustainable Development.* Department of the Environment and Heritage, Canberra, Australia. http://www.deh.gov.au/esd/national/nsesd/strategy/index.html

Commonwealth of Australia (1996). *National Strategy for the Conservation of Australia's Biological Diversity*. Department of the Environment, Sports and Territories, Canberra, Australia.

IUCN (1994). *Guidelines for Protected Area Management Categories*. Commission on National Parks and Protected Areas, with the assistance of the World Conservation Monitoring Centre, Gland, Switzerland.

South Australian Government (2004a). *Blueprint for the South Australian Representative System of Marine Protected Areas.* Government of South Australia. http://www.environment.sa.gov.au/coasts/pdfs/blueprint.pdf

South Australian Government (2004b). *South Australia Strategic Plan – Creating Opportunity*. Government of South Australia. http://www.stateplan.sa.gov.au/home.php

United Nations (2002). Johannesburg Summit 2002: World Summit on Sustainable Development, Johannesburg, South Africa, 26th August – 4th September, 2002. *Key Outcomes*. http://www.johannesburgsummit.org/html/documents/summit_docs/2009_keyoutcomes_commitments.pdf