

**A SUSTAINABILITY  
STRATEGY  
FOR THE  
AUSTRALIAN CONTINENT**

**ENVIRONMENT  
BUDGET STATEMENT  
2004-05**

STATEMENT BY  
THE HONOURABLE DR DAVID KEMP, MP  
MINISTER FOR THE ENVIRONMENT AND HERITAGE  
11 MAY 2004

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## **MINISTER'S FOREWORD**

Australians share a commitment to a sustainable Australian continent. The Howard Government is delivering on that commitment, by addressing the problems created by unsustainable practices in the past, and looking to the future.

The Sustainable Environment Committee of Cabinet, chaired by the Prime Minister, takes responsibility for ensuring that environmental considerations are central to decisions on economic growth and development. The whole-of-government task is being delivered through a partnership of Australian Government portfolios and agencies, by all levels of government and most importantly, by the Australian people living in remote communities, small country towns and in our largest cities.

The Howard Government's record proves that economic development need not be at the expense of environmental values or social cohesion. Through successive budgets, the Howard Government has invested more resources than ever before into environmental programmes and put in place a strategic framework to address environmental issues of national concern. This strategic framework aims to achieve integrated natural resource management across all of Australia's catchment regions (56 in all) and throughout Australia's Exclusive Economic Zone and continental seas by means of regional marine planning. The strategic approach to natural resource management is complemented by an integrated national approach to energy and greenhouse gas emissions

The Government's sustainability strategy is underpinned by powerful legislation, the *Environment Protection and Biodiversity Conservation Act 1999*, and ecosystem based planning and management for our fisheries, coral reefs, and broader marine and terrestrial resource management. Australia has become the first nation to identify terrestrial biodiversity hotspots (15 of these) and is making an unprecedented effort to identify areas representative of unique ecosystems through strategic marine planning, most dramatically in relation to the Great Barrier Reef.

One of the key features of the Government's approach is the identification of heritage protection and management as an essential tool for sustainability. This year, for the first time, we now have a national legislative regime for the protection of Australia's natural, Indigenous and historic heritage. Laws at the national level are focused closely on matters of national environment significance. We can now ensure that places nominated by Australians as being of outstanding national significance from Aboriginal rock art galleries, to the Melbourne Exhibition Building and the Sydney Opera House are protected, conserved and understood.

The Government will continue to ensure that matters of national environmental significance are given full and timely consideration in development proposals, and that industry groups using the legislation are supported to ensure that they can comply with the legislation in a practical and effective manner.

Australia has unique opportunities in the pursuit of sustainability. We are the only nation to occupy an entire continent. We have a highly flexible and adaptive market

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economy that is increasingly focused on environmental products and services and on triple bottom line reporting. Across Australia regional communities and individuals, with support from the Australian Government, are doing outstanding work to address our environmental challenges.

This year's Budget Statement shows significant new investments in sustainability both in the environment and heritage portfolio and across government with \$839.3 million over four years of new measures. The 2004-05 environment and heritage budget provides, yet again, a record level of environmental expenditure support for environmental action at \$2.4 billion.

This Budget will provide an extra \$300 million to continue the Natural Heritage Trust (the Trust), the largest and most successful environmental rescue effort ever undertaken in Australia's history, into 2007-08. This new funding will build on the unprecedented level of investment in our environment adding a twelfth year to the Trust and bringing total investment in the Trust to \$3.0 billion. Introduced by the Howard Government in 1996-97, the Trust will continue to provide the foundation for a sustainable Australia with funding for practical, strategic and results oriented actions by the Australian people and all levels of government.

This Budget builds on the unprecedented level of investment in our environment through the \$3.0 billion Natural Heritage Trust and, with the States and Territories, the \$1.4 billion National Action Plan for Salinity and Water Quality (NAP). In 2004-05, working in close partnership with State and Territory governments, regional bodies and local governments and communities, the Australian Government will invest \$310 million from the Trust and \$152.7 million from the NAP.

These investments, through careful planning and strategic interventions, are starting to produce improvements in ecosystem health and take us along the path to sustainability. The Australian Government will maintain that investment into the future, providing vital resources to address the damage of the past and harness opportunities for the future.

This budget reaffirms the landmark \$200 million for a Basin-wide strategic approach to water over-allocation in the Murray-Darling Basin agreed at COAG in August 2003, announced in the 2003-04 Additional Estimates. This \$200 million contribution is proof of the Howard Government's commitment to partnerships with the State and Territory Governments to improve the health of one of our biggest natural icons, the Murray River system. It is subject to satisfactory agreement between the partners on the introduction of the National Water Initiative. This will take the Howard Government expenditure on the Murray to \$1 billion.

This Budget contains an additional \$30.3 million for the Great Barrier Reef to support the new zoning plan for the Marine Park, and an additional \$70.3 million to support a significant strengthening and refocusing of our actions to combat the effects of climate change.

The Budget also extends the National Landcare Programme an additional two years by providing \$80 million (\$40 million in both 2006-07 and 2007-08). The Landcare

programme is central to community involvement in natural resource management and the new funding will bring the Howard Government's investment in this programme to \$159.5 million over the next four years.

Australia, with one of the longest and most diverse coastlines of any nation, and most of the Australian population concentrated along the coast, has led the world in developing an integrated and articulated Oceans Policy. Our Exclusive Economic Zone and continental seas are better protected now through regional marine plans to manage our fisheries, coral reefs, and coastlines. Our vast Southern Ocean territories are more secure against the incursions of illegal fishers.

Australia will continue to be a responsible and effective contributor to international efforts to better protect the world's natural environment and heritage. We are supporting work in our region to protect areas of high biodiversity value that are under threat. We are working with our Asia-Pacific neighbours on cooperative projects to minimise the threat of imported diseases and pests, while conserving migratory species and controlling trade in endangered species.

We are cooperating with like-minded nations in protecting the Antarctic and pursuing greater protection for the whales that migrate through our waters, especially against so-called "scientific whaling". We are contributing effectively to a range of global initiatives and agreements, from those that aim to eliminate the production, use and emission of persistent organic pollutants to those that seek to cooperate to protect and conserve the outstanding natural and cultural heritage of the world.

More Australians are making a difference, being careful with their water and energy use, reducing their reliance on plastic bags, and driving more fuel efficient and environmentally friendly cars. Together with national standard setting and the appropriate use of national environment measures and standards, these efforts are paying dividends.

The air quality of our major cities is improving while our cities grow and expand as our economy improves. Our buildings are becoming more energy efficient, our cities more sustainable, although much remains to be done. The Australian Government will continue to seek improvements in our national approach, through working towards common national standards for the sustainability of our built environment.

Governments cannot achieve a sustainable continent unless all Australians play their part. On behalf of the Howard Government, let me take this opportunity to thank all those who are involved in helping put Australia's environment and our heritage on a more sustainable basis. We will maintain our support for your efforts into the future.

DAVID KEMP

Australian Government Minister for the Environment and Heritage





# INTRODUCTION

## Scope of the 2004-05 Environment Budget Statement

This statement documents the Government's key outcomes for the environment and outlines spending on environment activities for 2004-05 and the years ahead. It is an overview of policy and expenditure for the whole of the Australian Government. It also identifies new environment measures that are managed by Australian Government portfolios.

## Outline

Chapter 1 of this statement contains an overview of the Australian Government's environmental expenditure, as well as a description of new initiatives arising from the Government's environmental strategic directions and priorities for 2004-05.

Chapter 2 contains an overview of the Government's major environment policies and programmes.

Chapter 3 describes key achievements and major strategic directions for protecting the environment, and discusses environment programmes in more detail.

Chapter 4 outlines the strategies and tools employed to achieve environmental outcomes.

Expenditure for environment activities undertaken by this Government is listed in Appendix 1.

## Structure

Activities reported in this statement are grouped thematically. The themes reflect those used in the *State of the Environment Report 2001*, and are also aligned with the reporting structure of the Environment and Heritage Portfolio. The statement can therefore be cross referenced with other budget publications, in particular the 2004-05 Portfolio Budget Statements for Environment and Heritage, and non budget publications such as the *State of the Environment Report 2001*.

The extent to which spending can be identified and ascribed to environmental purposes varies across programmes. As a result, some expenditure with environmental implications may not be recorded in this statement. In order to avoid double counting, allocations of funding to other programmes from the two major flagship programmes, the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality are identified separately in Appendix 1. The allocations are not necessarily disaggregated in the text in Chapters 1, 2 and 3.

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**Style conventions used in this document**

Amounts in this document are generally rounded to one decimal point using the standard rounding conventions. Due to rounding, the aggregation of elements within a table may not match the actual 'total.'

# **CHAPTER 1: WHOLE-OF-GOVERNMENT ENVIRONMENT EXPENDITURE AND NEW MEASURES**

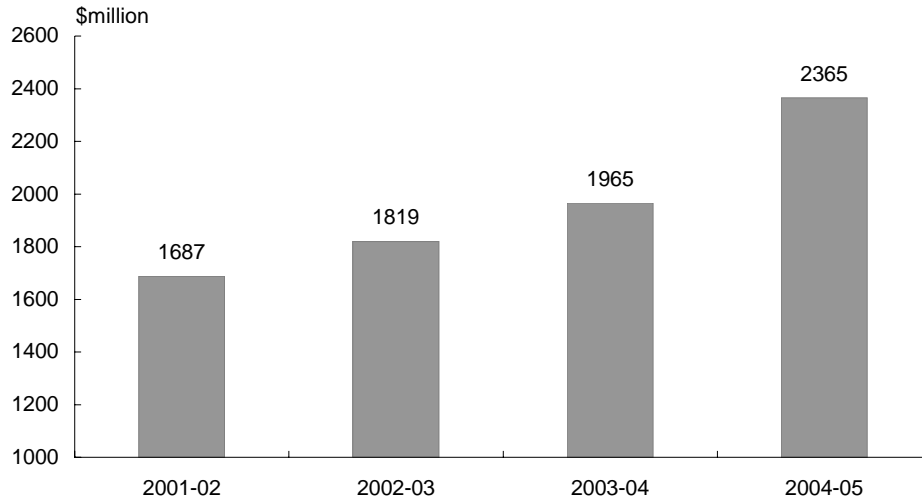
## WHOLE-OF-GOVERNMENT ENVIRONMENT EXPENDITURE

Effective environmental policies require a whole-of-government approach and the active involvement of all sectors of the community. Achieving Australia's sustainable future requires resources, backed by a concerted and coordinated approach across the Australian Government.

Following the lead of the Prime Minister in the Sustainable Environment Committee of Cabinet, the Department of the Environment and Heritage, working with other portfolios, in particular the Department of Agriculture, Fisheries and Forestry, is at the forefront of delivering the Australian Government's environment and sustainability policies. The work of other portfolios including the Departments of Education, Science and Training; Industry, Tourism and Resources; Transport and Regional Services; Defence; Foreign Affairs and Trade; Family and Community Services; the Treasury and Attorney General's is essential to meeting our national priorities, one of which is a sustainable Australia.

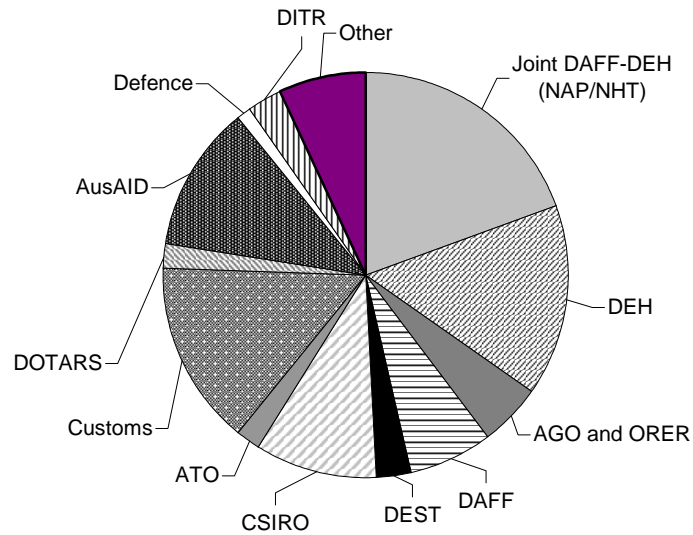
This whole of government approach has lifted environmental spending to record levels – see Chart 1.1 and Table 1.1.

**Chart 1.1 Whole-of-Government environment-related estimated expenditure**



The Australian Government's environmental spending supports a broad range of initiatives, from on-ground environmental protection and repair, research and development, collation and provision of data, to taxation concessions and incentives, and overseas development assistance.

**Chart 1.2 Major portfolio contributions to environment expenditure, 2004-05**



Australian Government environment and natural resource management agencies are at the forefront of cooperative approaches. Two key agencies, the Australian Greenhouse Office and the National Oceans Office, report to more than one portfolio Minister, which helps to ensure that their work encompasses interests and actions across the sustainability agenda.

The Government's flagship natural resource management programmes – the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality – are delivered jointly by the Department of the Environment and Heritage and the Department of Agriculture, Fisheries and Forestry – see Table 1.1. This reflects the Government's view that environmental protection, sustainable agricultural production and natural resource management are complementary, rather than conflicting goals. Chart 1.3 illustrates the significant contribution made by these two portfolios and the overall growth in their total environment expenditure since 1996.

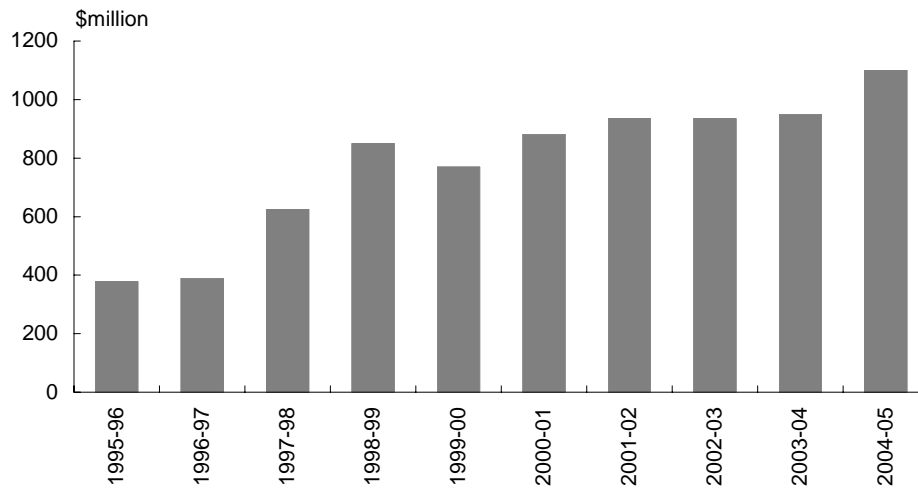
**Table 1.1 Major portfolio contributions to environmental expenditure, 2003-04 to 2007-08**

Department/Agency	2003-04 \$m	2004-05 \$m	2005-06 \$m	2006-07 \$m	2007-08 \$m
DAFF	168.8	158.3	136.8	132.5	122.6
DEH	320.7	360.4	353.7	351.1	330.7
AGO and ORER	99.0	119.1	122.0	115.3	107.2
Joint DAFF/DEH (NAP/NHT)	363.6	462.7	459.1	419.3	371.6
<b>Subtotal DAFF/DEH</b>	<b>952.1</b>	<b>1100.5</b>	<b>1071.6</b>	<b>1018.2</b>	<b>932.1</b>
AusAID	267.0	280.0	na	na	na
ATO	35.3	43.9	47.0	54.0	57.0
CSIRO	131.0	231.9	-	-	-
Customs (a)	267.6	351.6	38.9	-	-
Defence	24.7	25.6	25.6	25.6	25.6
DEST	61.3	62.5	50.6	34.4	29.1
DITR	36.5	65.8	28.5	28.6	26.9
DoTaRS	37.0	40.9	12.6	12.1	6.5
Other (Departments/Agencies not separately listed)	152.3	162.7	155.1	150.1	140.3
<b>Total</b>	<b>1964.8</b>	<b>2365.4</b>	<b>1429.9</b>	<b>1323.0</b>	<b>1217.5</b>

(a) The Australian Customs Service estimate comprises funding for the total output within Customs that provides environmental services as part of the activities associated with civil maritime surveillance.

NB: Care needs to be exercised when comparing the estimates in 2004-05 and estimates for the forward years, as not all departments are able to provide estimates of future environmental funding.

**Chart 1.3 Agriculture, Fisheries, Forestry and Environment and Heritage portfolios, environment funding, 1995-96 to 2004-05**



#### NEW MEASURES

The Table 1.2 below describes new Budget measures and outlines actual resourcing applied to each measure. The Government's total environment-related expenditure in these activities exceeds the amounts shown in the table below.

**Table 1.2: Howard Government environment-related new measures, 2004-05 to 2007-08**

Title of Initiative	2004-05 \$m	2005-06 \$m	2006-07 \$m	2007-08 \$m	4 Year total
<b>Environment and Heritage Portfolio</b>					
Extension of the Natural Heritage Trust	-	-	-	300.0	<b>300.0</b>
Great Barrier Reef Representative Areas Programme	8.6	1.6	-	-	<b>10.2</b>
Water Quality Monitoring Programme for the Great Barrier Reef	2.0	2.0	2.0	-	<b>6.0</b>
Assistance to Tourism Operators to Implement a Control Programme to Address Crown of Thorns Starfish Outbreaks in the GBR	0.3	0.3	0.3	-	<b>0.9</b>
Education About the New Zoning Plan for the GBR	2.2	1.9	0.3	-	<b>4.4</b>
Enforcement and Compliance Activities Within Boundaries of the 'No-Take' Zones Flowing from the Representative Areas Programme	2.9	2.9	3.0	-	<b>8.8</b>
Restoration of St Paul's (Melb) and St George's (Perth) Cathedrals (a)	-	-	-	-	<b>0.0</b>
Our Climate (AGO & ORER) (b)	57.0	60.6	70.9	71.5	<b>260.0</b>
<b>Total for E&amp;H</b>	<b>73.0</b>	<b>69.3</b>	<b>76.5</b>	<b>371.5</b>	<b>590.3</b>
<b>Agriculture, Fisheries and Forestry</b>					
Extension of the National Landcare Programme (c)	-	-	40.0	40.0	<b>80.0</b>
Marine Pests	1.4	1.3	1.0	-	<b>3.7</b>
Extension of Artesian Basin Rehabilitation	8.2	8.4	8.5	8.7	<b>33.8</b>
Murray Darling Basin Commission Contribution (d)	5.9	9.6	9.5	8.5	<b>33.5</b>
Avian Influenza - protecting our birds and wildlife	6.2	na	na	na	<b>6.2</b>
<b>Industry, Tourism and Resources</b>					
National Biotechnology Strategy (e)	1.0	0.5	0.5	0.5	<b>2.5</b>
<b>Customs/DAFF</b>					
Surveillance and Enforcement Programme - to provide for the protection of Australia's Southern Ocean Waters	47.9	41.4	-	-	<b>89.3</b>
<b>Total for all</b>	<b>143.6</b>	<b>130.5</b>	<b>136.0</b>	<b>429.2</b>	<b>839.3</b>

(a) The Australian Government will provide \$5.5 million in the 2003-04 Supplementary Additional Estimates for the restoration of the Cathedrals in 2003-04.

(b) This comprises funding for new measures of \$248.3 million plus existing \$11.7 million for the associated measures.

(c) The details of existing funding for NLP in 2004-05 and 2005-06 are shown at Appendix 1.

(d) The figures shown here account for 50% of the Government's contribution. The other 50% is included in the total NHT.

(e) The amounts shown here are the allocations to the Department of the Environment and Heritage from the total funding of \$20 million provided through the Budget to the Department of Industry, Tourism and Resources

**NB:** This budget reaffirms the landmark \$200 million for a Basin-wide strategic approach to water over-allocation in the Murray-Darling Basin agreed at COAG in August 2003, and announced in the 2003-04 Additional Estimates. There is also a new measure to protect **biodiversity** in Australia which is not shown in Table 1.2.

### **Natural Heritage Trust extended**

This Budget will provide an extra \$300 million to continue the Natural Heritage Trust (the Trust), the largest and most successful environmental rescue effort ever undertaken in Australia's history, into 2007-08. This new funding will build on the unprecedented level of investment in our environment adding a twelfth year to the Trust and bringing total investment in the Trust to \$3.0 billion. Introduced by the Howard Government in 1996-97, the Trust will continue to provide the foundation for a sustainable Australia with funding for practical, strategic and results oriented actions by the Australian people and all levels of government.

Investment through the Trust will exceed \$1.2 billion over the next four years as a result of this year's Budget initiative.

The Trust funds Australians to tackle our key environmental challenges and deliver improved water quality, more sustainable agricultural practices, cleaner beaches, cleaner air and better protection for threatened ecosystems.

Overseen jointly by the Minister for the Environment and Heritage and the Minister for Agriculture, Fisheries and Forestry, the Natural Heritage Trust aims to harness the knowledge and enthusiasm of individuals and communities and assist them to meet the challenges facing a sustainable Australia.

### **National Landcare Programme extended**

With over 4000 Landcare groups including about 120,000 volunteers across Australia, the Landcare programme is a model for community involvement in natural resource management. It is estimated that 75 per cent of all farmers have benefited from Landcare information.

This Budget extends the National Landcare Programme by two years by providing an additional \$80 million (\$40 million in both 2006-07 and 2007-08). This brings the Howard Government's total investment in this programme to \$159.5 million over the next four years.

### **The Great Barrier Reef – protecting the Reef for future generations**

The Australian Government will commit \$30.3 million over the next three years towards the protection and rehabilitation of the Great Barrier Reef through its new Zoning Plan, creating the largest network of protected marine areas in the world. This includes the \$176.4 million that the Government will invest for the protection of the Great Barrier Reef over the next four years.

Coming into effect on 1 July 2004, the new Zoning Plan will significantly increase the area of the Great Barrier Reef Marine Park included as Green Zones, where extractive activity is banned, from 4.5 per cent to 33.3 per cent, a seven-fold increase. Protection of 70 bioregions will help marine species recover and lead to an increase in both the number and size of marine species, ensuring the long-term future of the Reef.



The rezoning includes a structural adjustment package for affected commercial fishers and their communities that may be adversely impacted by the implementation of the new zones. The 2004-05 Budget allocates \$10.2 million for this package over the next two years. Communities along the coast will be informed about the newly protected areas of the Reef through public and industry education programmes.

Additional resources will be provided to ensure enforcement and compliance, a water quality monitoring programme (as part of the Reef Water Quality Protection Plan) and assistance to tourism operators to continue their efforts to mitigate Crown of Thorns Starfish outbreaks.

### **The Living Murray**

This budget reaffirms the landmark \$200 million for a Basin-wide strategic approach to water over-allocation in the Murray-Darling Basin agreed at COAG in August 2003, announced in the 2003-04 Additional Estimates.

This \$200 million contribution is proof of the Howard Government's commitment to partnerships with the State and Territory Governments to improve the health of one of our biggest natural icons, the Murray River system. It is subject to satisfactory agreement between the partners on the introduction of the National Water Initiative.

The investment will deliver extra water to six key environmental areas in the Basin and begin to turn around the problems of poor water quality, loss of native plants, animals, fish, forests and wetlands, and to address the increase in pests such as carp. The Living Murray Initiative will assist our irrigation and rural industries, our native plants and animals, and our communities.

In 2004-05 the Howard Government investment in the Basin will reach close to \$1 billion, including funding from the Trust, NAP and financial support for the Murray-Darling Basin Commission.

The Government will provide an additional \$67.0 million over four years to the Murray-Darling Basin Commission to fund capital works administration and education activities and to establish a "renewals annuity" for capital replacement and major cyclical maintenance.

### **Climate**

The 2004-05 Budget delivers a climate change strategy to keep Australia at the forefront of the global response to climate change. Climate change is an important global challenge that requires long-term effective action at the domestic and international level. In this Budget, the Australian Government undertakes a significant strengthening of its actions to respond to climate change by allocating \$463.6 million over four years including \$260.0 million for 11 new measures, refocussing and refining Australia's strategy to reduce greenhouse gas emissions, while maintaining a strong and competitive economy. This increases the Australian Government's investment in climate change by \$70.3 million in new funding. The total commitment by the Australian Government to this issue exceeds \$1 billion.

### **Biodiversity Hotspots**

This Budget contains a new measure to protect biodiversity hotspots in Australia. Biodiversity hotspots are areas rich in species diversity and also facing immediate threat. Taking action in these areas, we will be able to save more species for every dollar we spend. Details of the new measure will be announced after the Budget.

### **Southern Oceans**

In this Budget, the Government will provide \$89.3 million over two years to the Australian Customs Service and the Department of Agriculture, Fisheries and Forestry to enhance Australia's patrol capability in the Southern Ocean. The waters of the Southern Ocean surrounding Antarctica are a treasure-house of biodiversity and essential to our national fishing industry, security and sovereignty. Australia is responsible for the environmental protection of our sub-Antarctic islands. Illegal fishing in Australia's Fishing Zone at Heard Island and McDonald Islands threatens the sustainability of fisheries in the area, a prime target being the endangered but highly valuable Patagonian Toothfish.

Increased surveillance and enforcement activities in Australia's Fishing Zone at Heard Island and McDonald Islands have already resulted in the apprehension of vessels fishing illegally in Australia's sovereign waters.

### **Biotechnology**

The \$20.0 million National Biotechnology Strategy, administered by the Department of Industry, Tourism and Resources, ensures communities, industries and the environment will benefit from biotechnology.

The 2004-05 Budget provides \$2.5 million over the next four years to the Department of the Environment and Heritage to implement a nationally consistent approach to the access and use of genetic resources and undertake environmental risk studies. Identification and careful management of environmental risks will be essential for advice to the Gene Technology Regulator under the *Gene Technology Act 2000*.

### **Keeping our coasts free from marine pests**

The 2004-05 Budget provides \$3.7 million over three years to the Department of Agriculture, Fisheries and Forestry to implement a national system to manage introduced marine pests, a serious threat to our fishing and aquaculture industries and the marine environment. For example, the Northern Pacific Seastar has significant impacts on native marine communities and commercial shellfish farming operations. The Seastar is believed to have come from Japan 20 years ago and is a voracious predator.

The Australian Government and State and Territory governments will develop a coordinated response to deal with this serious and growing problem under the National System for the Prevention and Management of Marine Pest Incursions.

Some parts of the National System, including international ballast-water management arrangements, are in place. The 2004 Budget will ensure the development of the rest, such as best management practices for aquaculture, and aquarium trade regulations.

### **Rehabilitating the Artesian Basin**

The Great Artesian Basin is one of the largest artesian groundwater basins in the world. It underlies approximately one-fifth of Australia and extends beneath arid and semi-arid regions of Queensland, New South Wales, South Australia and the Northern Territory.

Since 1998 the Government has provided \$32.0 million to the Department of Agriculture, Fisheries and Forestry to restore artesian pressure in the Basin by capping old, free-flowing bores and replacing earth bores with pipes. About 300 priority bores have been rehabilitated, leaving another 850 to be treated.

The 2004-05 Budget provides \$42.7 million over five years to extend this initiative. This year's Budget allocation includes \$1.4 million to the Department of Agriculture, Fisheries and Forestry to complete work on the Carnarvon Artesian Basin in Western Australia.

### **Protecting birds and wild life**

Avian influenza viruses can infect a wide variety of birds including domestic poultry and wild birds. The 2004-05 Budget provides \$6.2 million to the Australian Quarantine and Inspection Service (AQIS) for 2004-05 to enhance border protection at airports and seaports and to strengthen protection against a viral epidemic such as avian influenza.

The funding will be injected into a number of measures, including the employment of additional staff and a targeted awareness campaign. AQIS will also implement an awareness campaign to alert travellers to the risks of bringing in avian influenza through poultry products, feathers and eggs.

### **Protecting our built heritage**

The Australian Government continues its investment in restoring cultural heritage places. The Government in this Budget will provide \$5.5 million in 2003-04 for the restoration of St George's Cathedral in Perth and St Paul's Cathedral in Melbourne. This funding will support efforts to repair and preserve these heritage buildings. Funding for St Paul's Cathedral is in addition to funding of \$2.5 million provided in 2001-02.

## CHAPTER 2: ENVIRONMENT BUDGET STATEMENT OVERVIEW

Since 1996 the Australian Government has been building a national strategic framework to place Australia on an environmentally sustainable footing for future generations.

Our approach recognises the significant environmental, economic and social value of our natural and cultural resources. It recognises the prohibitive costs for future generations if we do not work cooperatively, strategically and with a sense of focused urgency to protect and maintain our natural and cultural heritage.

Today, we know far more about the wide range of benefits we receive from our environment. For example, every year:

- plant life in catchment areas produces clean water which would otherwise require millions of dollars of costly water treatment works;
- within the Great Barrier Reef catchment, tourism contributes over \$4.3 billion every year;
- Australia's food industry sales earn the country around \$75 billion at the retail level; and
- the value of pollination to agriculture is estimated as \$1.2 billion.

Our unique land, plants, animals and heritage buildings contribute significantly to our national identity and sense of social well-being.

We can pay a very high price for not protecting our environment. For example, land and water degradation, excluding the costs of weeds and pests, has been estimated to cost Australia up to \$3.5 billion a year.

Our national strategic framework is based on a carefully considered approach to identifying where the Australian Government can most effectively make a difference. This entails leadership at the national level, integration across Australian Government portfolios and partnerships with other levels of government, industry and the community.

Our national strategic framework operates from a strong legislative base. In particular, the *Environment Protection and Biodiversity Conservation Act 1999*, that provides opportunities for economic development while protecting our environment, focuses on matters of national environmental significance. Under this Act, all issues that may have a significant bearing on a matter of national environmental importance need to be assessed by the Environment Minister before the Minister grants approval. During

2003, that legislative focus has broadened to provide, for the first time, protection for places of national heritage significance.

## **Our Land and Water**

Our approach to land and water management is built on partnerships across Australian governments and with regional communities. Our land management programmes have a regional focus. New partnerships are coming together at the regional level to direct investments strategically towards long-term outcomes for the environment and agriculture. The Howard Government has led the development of major national policies such as the Living Murray Initiative and the National Vegetation Framework to address critical environmental issues.

Major initiatives such as the newly extended \$3.0 billion Natural Heritage Trust (the Trust), the \$1.4 billion National Action Plan for Salinity and Water Quality (the NAP) and the \$500 million Living Murray Initiative provide record amounts of resources to underpin the strategy.

This Budget will provide an extra \$300 million to continue the Natural Heritage Trust (the Trust), the largest and most successful environmental rescue effort ever undertaken in Australia's history into 2007-08. This new funding will build on the unprecedented level of investment in our environment adding a twelfth year to the Trust and bringing total investment in the Trust to \$3.0 billion. Introduced by the Howard Government in 1996-97, the Trust will continue to provide the foundation for a sustainable Australia with funding for practical, strategic and results oriented actions by the Australian people and all levels of government.

The 2004-05 Budget allocation is \$152.7 million for the NAP and \$310 million for the Trust, up from \$113.8 million and \$250 million in 2003-04, respectively. In 2004-05, over \$300 million will be invested through regional natural resource management organisations from these two programmes.

Australia's landscapes and waterways face serious threats which, if not tackled urgently, have implications for our capacity as a major agricultural producer and exporter and our ability to conserve our native species and ecological communities. The regionally focussed approach to improving the sustainability of Australia's primary production, while maintaining environmental action, is already yielding benefits as good farm management is aligned with better management of our soil, water and forests.

With over 4000 Landcare groups including about 120,000 volunteers across Australia, the Landcare programme is a model for community involvement in natural resource management. It is estimated that 75 per cent of all farmers have benefited from Landcare information.

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This Budget extends the National Landcare Programme by two years by providing an additional \$80 million (\$40 million in both 2006-07 and 2007-08). This brings the Howard Government's total investment in this programme to \$159.5 million over the next four years.

Australia is the driest continent on Earth (after Antarctica) with only one per cent of the world's water. Each year, on average, every Australian uses more than one million litres of freshwater, leading to a national consumption of more than 24,000 gigalitres of water. The recent drought has highlighted the need for urgent action to ensure more sustainable use of our water resources.

The Murray-Darling Basin extends from north of Roma in Queensland to Goolwa in South Australia, and includes three quarters of New South Wales and half of Victoria. The Basin is the heartland and the economic powerhouse of rural Australia. It extends across one-seventh of the continent and has a population of nearly two million people. Another million people outside the region depend heavily upon its resources.

Management of this system's water is a national environmental and economic imperative. This budget reaffirms the landmark \$200 million for a Basin-wide strategic approach to water over-allocation in the Murray-Darling Basin agreed at COAG in August 2003, announced in the 2003-04 Additional Estimates. This \$200 million contribution is proof of the Howard Government's commitment to partnerships with the State and Territory Governments to improve the health of one of our biggest natural icons, the Murray River system. It is subject to satisfactory agreement between the partners on the introduction of the National Water Initiative.

In 2004-05 the Howard Government investment in the Basin will reach close to \$1 billion including funding from the Trust, NAP and financial support for the Murray-Darling Basin Commission.

The Murray-Darling Basin Ministerial Council, chaired by the Hon Warren Truss, the Minister for Agriculture, Fisheries and Forestry, guides the Living Murray Initiative across all levels of government and the community. The Ministerial Council includes the Australian Government and State Ministers responsible for land, water and environmental resources in the Basin in a collaborative partnership.

The Government will provide an additional \$67.0 million over four years to the Murray-Darling Basin Commission (MDBC) to fund capital works, administration and education activities, and to establish a "renewals annuity" for capital replacement and major cyclical maintenance.

This funding is in addition to \$19.5 million over four years allocated to the MDBC and already included in the forward estimates.

The Commission is responsible for managing assets such as dams and weirs, overseeing salinity mitigation works, and providing strategic direction and support for natural resource management initiatives in the Murray-Darling Basin.

Efforts will be concentrated on maintaining momentum with salinity management, restoration of healthy floodplain forests and wetlands, expanding the geographic range of native fish and improving the habitat for migratory water birds.

The Living Murray implementation program is delivering results. Arrangements for watering stressed River Redgums on the Chowilla floodplain and operation of the new fish ladders on the River Murray are underway. The dredging program at the Murray Mouth has provided sufficient tidal surge to replenish the water at the Coorong.

### **Our Biodiversity**

Australia's biodiversity is essential to our economic prosperity, our cultural identity and our future as a sustainable continent. This Budget contains a new measure to protect biodiversity hotspots in Australia. Biodiversity hotspots are areas rich in species diversity and also facing immediate threat. Taking action in these areas, we will be able to save more species for every dollar we spend. Details of the new measure will be announced after the Budget.

This new measure complements the commitment to address the needs of biodiversity hotspots in the Pacific and South East Asia through the existing \$10.0 million programme over three years commencing in 2003-04 to protect and manage critically endangered places in the Pacific and South East Asia.

### **Our Coasts and Reefs**

Our island continent requires a strategic focus on ecologically sensitive areas of our coasts and reefs. With 85 per cent of Australia's population living on or near the coast the natural heritage values of these areas are increasingly threatened by land-based activities.

The 2004-05 Budget provides an additional \$30.3 million over three years for new initiatives to support the rezoning of the Great Barrier Reef. From 1 July 2004 the visionary Representative Areas Programme for the Great Barrier Reef will ensure the protection of the Reef, the world's largest world heritage area, for future generations. The Howard Government will invest \$176.4 million for the protection of the Great Barrier Reef over the next four years.

A seven-fold increase in protected zones and marine sanctuaries within the Great Barrier Reef Marine Park - from 4.5 to 33.3 per cent - will create the largest network of protected marine areas in the world. The plan is based on one of the most extensive and comprehensive community consultations in Australia's history - including 31,000

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public submissions – and on the best advice from the Australian and international scientific community.

Each of the 70 bioregions in the Marine Park is now represented in a highly protected zone (or Green Zone) where extractive activities are prohibited. The integrity of the Reef for future generations and the livelihoods of the many Australians who depend on the Reef for income or recreation will be maintained. Protection for these bioregions will help marine species recover and will lead to an increase in both the number and size of fish and other marine species.

Any programme of this scale will have unavoidable economic impacts on commercial users of the Reef, including the fishing industry and their communities. Recognising that policy interventions should balance environmental, economic and social goals, the Australian Government has agreed to a structural adjustment package for those who may be adversely impacted by the implementation of the Plan. The 2004-05 Budget allocates \$10.2 million over two years for this package.

This new zoning plan is just one of the Australian Government's environmental initiatives to ensure the future protection of the Reef. The Crown of Thorns Starfish Control Programme is in its third year, with \$0.9 million over three years being provided to support continuing efforts to mitigate these outbreaks.

In December 2003 the Reef Water Quality Protection Plan to protect the Reef from land-based pollution was announced. The Great Barrier Reef Coastal Wetland Protection Programme complements this effort.

The Australian Government is also funding water improvement projects to reduce pollutants entering identified coastal water quality 'hotspots'. With State and Territory Ministers, the Australian Government endorsed a *Framework for a National Cooperative Approach to Integrated Coastal Zone Management* in October 2003.

### **Our Oceans**

Since the launch of Australia's Oceans Policy in 1998, and as the country with the world's greatest area of ocean territory, Australia has been regarded as a world leader in oceans planning and management. In 2004 the Australian Government will launch the world's first-ever regional marine plan covering some two million square kilometres of Australia's southeast oceans. This plan provides the framework for the sustainable development of the area, which employs over 75,000 Australians, has industries worth over \$19 billion per year and a rich abundance of biodiversity including some 600 distinct species of fish, 85 per cent of which are endemic.

In this year's Budget, \$9.3 million is being provided in 2004-05 to support this plan and to develop two more plans for northern and southwest Australia.



Building on a 25 year tradition initiated by the Coalition Government under Prime Minister Fraser, the Australian Government will continue to support whale sanctuaries and will boost the fight to stop the slaughter of whales for commercial use, including under the guise of so-called "scientific-whaling". In 2004 the Australian Government was presented with a Gift to the Earth by the World Wide Fund for Nature for its contribution to this globally significant campaign.

## **Our Climate**

Climate change is an important global challenge that requires long-term effective action at the domestic and international level. The impacts of climate change on Australia are almost certainly being felt already in changes to rainfall and storm patterns, water temperatures, sea levels and other natural phenomena which influence our environment and the industries which depend on it, such as agriculture and tourism. In this Budget the Australian Government undertakes a significant strengthening of its actions to respond to climate change through a thorough revision of greenhouse programmes. This year's Budget delivers a \$70.3 million funding boost for greenhouse strategies to support the climate change strategy.

The additional \$70.3 million allocated to the climate change strategy will build on our existing commitments, providing a total of \$463.6 million over four years. This includes \$260.0 million over four years for eleven new measures that will limit Australia's greenhouse gas emissions while maintaining a strong and competitive economy.

In 2004-05, \$116.6 million will be invested through the Australian Greenhouse Office in action on climate change. In addition, \$2.5 million will be provided in 2004-05 to the Office of the Renewable Energy Regulator for the continued administration of the Mandatory Renewable Energy Target.

These new and continuing measures will strengthen the Howard Government's response to climate change with international action at multilateral, regional and bilateral levels. We are also on track domestically to meet our internationally agreed target in partnership with industry, business, government, land managers and the community. Our climate change policy will continue to be underpinned by sound science and emissions measurement capacity and we will introduce innovative work to identify and assess climate change impacts and devise adaptation measures to reduce their environmental, economic and social consequences.

## **Our Cities**

The Year of the Built Environment was initiated in 2004 to encourage the development of a sustainable, energy efficient, safe, and healthy built environment. All State and Territory governments, peak building and construction industry organisations, professional bodies and a wide range of interest groups and individuals in the

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community have endorsed the Australian Government initiative and are developing their own programmes of activity.

In 2004-05, the Australian Government will continue to develop policies, partnerships and programmes to improve our built environment. Our strategic focus will be on the development of common national standards for the sustainability of our built environment. This will include introduction of legislation for a national water efficiency labelling and standards scheme; scoping of additional standards for toxic air pollutants; reviewing existing national sulphur dioxide and ground-level ozone standards; and investigating the strengthening of the environmental aspects of national building codes and standards.

More than 17 million Australians live in our cities, posing ongoing challenges for those working to achieve the right balance between urban development and environmental protection. In 2004-05 the Australian Government will commit \$6.5 million, an increase of \$1 million on 2003-04, on practical projects to make urban life more sustainable, through the Sustainable Cities Programme. Initiatives will include investment in cycling facilities, water efficiency labelling, and national standards of air pollution and fuel quality, as well as ensuring that community members and decision-makers have access to national information on the state of our urban environment.

Nearly all of Australia's 20 million people are taking action to improve our environment.

For example, 2003 figures from the Australian Bureau of Statistics show that about 95 per cent of Australian households now recycle waste, up 12 per cent from 1996, and the number of households reusing waste, such as plastics and glass, has more than doubled, rising a staggering 45 per cent since 1996 to 83 per cent of households in 2003.

On the roads people are using more environmentally friendly fuels. With leaded petrol now phased out, and the introduction of new technologies, the use of unleaded petrol is up from 54 per cent in 1996 to 83 per cent in 2003, helping to make Australia's air amongst the cleanest in the world.

Levels of carbon monoxide, sulphur dioxide and nitrogen dioxide have also declined since 1991, with levels in our capital cities now well below the national standards for these pollutants. This has led to a direct improvement in the quality of the air in our capital cities, a reduction in indirect health costs, and an improvement in the quality of life for Australian families.

Water use remains a critical issue with overall water use trends on the rise. However, we are changing our attitudes towards water, introducing more efficient appliances into our homes and responding to new pricing and metering systems. Latest data show that per capita water consumption has also been significantly reduced by 21 per cent in major urban centres in Australia over the past 25 years.

## Our Heritage

National heritage defines the critical moments in our development as a nation. Our distinctive natural and cultural places help give Australia its national identity.

For the first time in Australia's history, we now have national legislation that provides the framework for the recognition and protection of our greatest national treasures. The Australian Government has provided funding of more than \$52 million over four years, for *Distinctively Australian* to identify and protect Australia's places of outstanding national heritage significance. The programme commenced in 2003-04.

In 2004-2005, \$15.4 million will be allocated to assist the nomination process and engage all Australians in helping to protect our national heritage. Amendments to the *Environment Protection and Biodiversity Conservation Act 1999*, which came into effect on 1 January 2004, have established a National Heritage List that will ensure the management, protection and appreciation of Australia's outstanding heritage places.

In launching the *Distinctively Australian* programme, the Prime Minister invited all Australians to nominate places they would like to have included in the National and Commonwealth Heritage Lists. Places already nominated include the Royal Exhibition Building, Recherche Bay, Point Nepean, and the dinosaur tracks of Lark Quarry.

The Howard Government continues its investment in restoring cultural heritage places. The Government in this Budget will provide \$5.5 million in 2003-04 for the restoration of St George's Cathedral in Perth and St Paul's Cathedral in Melbourne. This funding will support efforts to repair and preserve these heritage buildings. Funding for St Paul's Cathedral is in addition to funding of \$2.5 million provided in 2001-02.

## Our Antarctic Territories

Australia is committed to protecting the Antarctic environment through its work in Antarctica and its role in the Antarctic Treaty System which includes the Convention on the Conservation of Antarctic Marine Living Resources. In 2004-2005, Australia will commit \$88.6 million to the Antarctic.

Australia is the first nation in Antarctica to harness wind power as a renewable energy source and as an alternative to diesel. The installation of two wind turbines at Mawson Station has reduced diesel fuel consumption from 600,000 litres to approximately 440,000 litres in the 12 months to March 2004. Environmental impacts have been reduced, as less fuel needs to be transported and stored at Mawson. This project represents a major step forward in Australia's environmental care of Antarctica.

Waste materials remaining in Antarctica from previous human activities are a major issue facing nations with Antarctic operations. Australia is committed to reducing our Antarctic waste and is leading Antarctic nations in clean up efforts. Over 1000 tonnes of waste were removed from the old Thala Valley tip site at Casey station in 2003-04.

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This clean up involved innovative remediation techniques and comprehensive environmental monitoring to ensure that the best possible results for the environment were achieved.

Illegal, Unreported and Unregulated (IUU) fishing for Patagonian Toothfish threatens fish stocks and biodiversity on the high seas. Australia is taking strong measures to combat IUU fishing and Australia continues to play a lead role in the Commission for the Conservation of the Antarctic Living Marine Resources by working with other key Commission members towards implementing a centralised Vessel Monitoring System. Australia is also continuing to seek improvements to the Catch Documentation Scheme to ensure fishers comply with the requirements of the Commission in relation to the catch of toothfish. In this Budget the Government will provide \$89.3 million over two years to enhance Australia's patrol capacity in the Southern Ocean.

### **Our Whole-of-Government Approach**

The Australian Government recognises that the sustainability of our continent cannot be achieved by treating environment and heritage issues in isolation. From the leadership of the Prime Minister and the Sustainable Environment Committee of Cabinet, to the joint management and delivery arrangements of the Trust and the NAP, we have an integrated, whole of government approach.

Policy development, decision-making, programme delivery and design, regional planning and on the ground implementation are based on collaboration and partnership. This also applies to the contributions of portfolios which have recognised the need for sustainability in their own programmes and practices, and offer valuable contributions to our shared goal of a sustainable Australia. A range of portfolios contribute to this record whole-of-government investment in 2004-05 including:

- Australian Taxation Office: \$43.9 million
- AusAID: \$280.0 million
- Australian Customs Service: \$351.6 million
- Department of Education, Science and Training: \$62.5 million
- Department of Industry, Tourism and Resources: \$65.8 million
- Department of Transport and Regional Services: \$39.7 million
- Department of Defence \$25.6 million

As another example of this whole-of-government approach, the CSIRO is allocating \$231.9 million in 2004-05 to the search for a sustainable Australia through research. The Australian Government ensures that the best of Australian research capacity informs

the development of a sustainable continent. An environmentally sustainable Australia was one of four national research priorities announced by the Prime Minister in late 2002.

In *Backing Australia's Ability* the Australian Government has initiated a strategic approach to ensure sustainability is built into a range of research initiatives. The CSIRO National Research Flagships initiative aims to deliver scientific solutions to advance national objectives such as clean, cost-efficient energy; more productive and sustainable use of water; sustainable wealth from our oceans; and growth and prosperity for regional Australia.

### Our Community

This Budget will continue to support community efforts by providing funds, establishing networks and building the foundations on which we all can lend a hand to putting Australia on a more sustainable path.

At the heart of the Howard Government's approach to the environment are the households, businesses, local community groups and volunteers that are at the front line of environmental action. It is only when the community is aware of environmental issues and takes action that we will reach our goal of a sustainable Australia.

Community empowerment is central to the newly extended \$3.0 billion Natural Heritage Trust. Hundreds of Australian Government facilitators are working with local governments and community groups. At the local level, the Australian Government Envirofund has supported over 3314 projects since its inception in 2002-2003. In 2001, 220,000 people were members of catchment management or Landcare groups, and an additional 380,000 people were inspired to volunteer and lend a hand to work on land management projects from our oceans and coasts, cities and towns to the arid lands in the centre of our continent under the banner of the Natural Heritage Trust.

About 750 facilitators are funded by the Trust and the National Action Plan to operate at local, regional and statewide/national levels. They perform a vital role in assisting local communities to organise environmental action that achieves their priorities.

The national network includes 13 Indigenous Land Management Facilitators to assist Indigenous involvement in regional planning and ensure that the 17 per cent of Australia under Indigenous ownership is managed more sustainably.

## CHAPTER 3: KEY ACHIEVEMENTS AND STRATEGIC OBJECTIVES

### OUR LAND

#### Biodiversity

Australia is a unique continent and our biodiversity is an important part of our national heritage. Australia is one of 17 mega-biodiverse countries, with many species found only on our continent and in our marine areas. Australia has national and international obligations to conserve our biodiversity.

Biodiversity is essential for a wide range of goods and services. Goods like food, fuel and genetic resources for medicines; services such as clean air and water, natural soil fertilisation for crop growth, climate regulation, plant pollination and pest control – all depend on our biodiversity.

When biodiversity is lost or depleted, the cost of providing alternatives is high. For example, plant life in catchment areas produces clean water which otherwise requires costly and less effective treatment.

The economic value of Australia's biodiversity is significant. Commercial fishing, which largely harvests wild species, is worth about \$2.5 billion a year, making it our fourth most valuable 'food based' primary industry. Australian wildflower exports generated \$30 million in 1997 and the bushfood industry was worth an estimated \$100 million in 2000.

Approximately 60 per cent of Australia's land area is used for agriculture or extensive area grazing. Agriculture is the dominant economic activity in most of rural and regional Australia. The challenge for agriculture is to obtain the greatest possible social, economic and environmental benefits from our natural resource base, including our biodiversity.

Salinity, soil degradation and poor water quality threaten Australia's biodiversity, agriculture, regional communities and the viability of roads and buildings. Environmental degradation costs Australia up to \$3.5 billion a year.

## Natural resource management programmes

The Government is addressing this challenge with cost-effective, strategic and durable measures for a sustainable Australia. Innovative natural resource management programmes such as the recently extended Natural Heritage Trust (the Trust), the National Action Plan for Salinity and Water Quality (the NAP), the Biodiversity Hotspots Initiative and the biodiversity conservation provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) are an integral part of this strategic framework.

This strategic framework of national programmes, legislation and policies is the largest financial commitment to the environment in Australia's history, helping to realise our shared vision of a sustainable Australia.

Bilateral agreements between the Australian Government and State and Territory governments set out the roles and responsibilities of each level of government in delivering the Trust and the National Action Plan.

Under these arrangements, the Australian Government is an investor in activities that will deliver environmental outcomes such as measurable reductions in salinity, improvements in water quality and increased protection of remnant vegetation.

## Natural Heritage Trust

Introduced by the Howard Government in 1996-97, the Trust will continue to provide the foundation for a sustainable Australia with funding for practical, strategic and results oriented actions by the Australian people and all levels of government. Overseen jointly by the Minister for the Environment and Heritage and the Minister for Agriculture, Fisheries and Forestry, the Natural Heritage Trust aims to harness the knowledge and enthusiasm of individuals and communities and assist them to meet the challenges facing a sustainable Australia.

In 2001, the Natural Heritage Trust was extended for five years to 2006-2007 and the States and Territories agreed to match the Australian Government's investment at the regional level.

This Budget will provide an extra \$300 million to continue the Natural Heritage Trust, the largest and most successful environmental rescue effort ever undertaken in Australia's history into 2007-08. This new funding will build on the unprecedented level of investment in our environment adding a twelfth year to the Trust and bringing total investment in the Trust to \$3.0 billion. Investment through the Trust will exceed \$1.2 billion over the next four years as a result of this year's Budget initiative.

This national, state and territory investment is directed to regional natural resource management plans. The plans combine the best available science with community

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knowledge and experience to set ambitious but achievable targets for change. The Australian Government accredits plans that demonstrate clear targets and appropriate monitoring to ensure the best natural resource management outcomes.

They are a community-driven guide to the actions and priorities required to address the region's most important issues. Regional plans provide the basis for investment strategies for government support of regional plans.

Coordinated regional activity, linked across Australia, is our best chance of improving the management of our natural resources. The Trust's three objectives - biodiversity conservation, sustainable use of natural resources, and community capacity-building and institutional change - help focus volunteer networks and community contributions to rescuing the environment and achieving agricultural sustainability.

The Trust has four overarching themes:

- Landcare - reversing land degradation and promoting sustainable agriculture.
- Bushcare - conserving and restoring habitat for our unique native flora and fauna, which underpins the health of our landscapes.
- Rivercare - improving the water quality and environmental condition in our river systems and wetlands.
- Coastcare - protecting our coastal catchments, ecosystems and the marine environment.

Trust investment is helping Australians deliver eight key results in communities across Australia:

1. cleaner beaches and cleaner waterways
2. reduced erosion and healthier land
3. less air pollution
4. more productive agricultural land and effective farm planning
5. protection of our threatened species
6. protection of native vegetation
7. effective weed and feral pest management
8. effective fisheries and forestry management practices.



Funding from the Natural Heritage Trust is being provided to implement the agreement between the Prime Minister and the Queensland Premier to protect the Great Barrier Reef through the Reef Water Quality Protection Plan (estimated to cost approximately \$12 million over the next two years) and the 15 national biodiversity hotspots.

Governments have already approved 32 regional plans and the majority of corresponding investment strategies in New South Wales, Victoria and South Australia. Trust and National Action Plan expenditure is beginning to flow. The end of 2004 will see the completion of all regional plans and investment strategies, with the exception of the Western Australian rangelands region plan which will be completed in June 2005.

### **Local investment**

Australian community groups have enthusiastically engaged in environment projects at the local level, through the Australian Government Envirofund. Since its inception in 2002-2003, the Envirofund has supported 3314 projects at the local level. Projects worth \$49.9 million have been funded, including \$10 million for a special Drought Recovery Round of the Envirofund in 2003 -04. The Government has allocated up to \$20 million in 2004-05.

### **National Action Plan for Salinity and Water Quality**

On 3 November 2000, the Council of Australian Governments endorsed the National Action Plan for Salinity and Water Quality to take action in some of Australia's worst affected areas. The National Action Plan tackles two of Australia's most serious environmental threats, salinity and water quality. At least 2.5 million hectares (five per cent of cultivated land) is currently affected by dryland salinity. This could rise to 12 million hectares (22 per cent of cultivated land) by 2050 if the Australian Government and the community do not act.

The National Action Plan supports communities taking action to prevent, stabilise and reverse trends in salinity, particularly dryland salinity that impacts on the land's productivity and can endanger biological diversity, and improve water quality and secure reliable supplies for home uses and industry uses while protecting the environment.

The National Action Plan is a joint commitment of \$1.4 billion over eight years between the Australian Government and the state and territories governments, supporting communities and land managers in priority regions across Australia.

These priority regions, in some cases incorporating sub-regions, are developing plans for investment by governments:

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### New South Wales

- Murray, Murrumbidgee, Lower Murray Darling, Lachlan, Central West, Namoi, Gwydir, Border Rivers Western (Balonne Maranoa)

### Victoria

- Goulburn Broken, Glenelg-Hopkins, Corangamite, Mallee, Wimmera, North Central

### Queensland

- Fitzroy sub-region, Burdekin sub-region, Burnett Mary sub-region, Lockyer/Bremer/Upper Brisbane sub-region, Border River region, Balonne/Maranoa sub-region, Condamine sub-region

### South Australia

- Mount Lofty, SA Murray Darling Basin, South East, Northern Yorke and Agricultural Districts, Kangaroo Island

### Western Australia

- South West, South Coast, Northern Agricultural Region, Avon, Ord Bonaparte region

### Tasmania

- Tasmanian NAP region

### Northern Territory

- Mary River sub-region, Daly sub-region

Australian Government leadership and investment is critically important, as are the partnerships with state and local governments, catchment management authorities and the efforts of tens of thousands of volunteers. All levels of government, community groups, individual land managers and local businesses are working together to tackle salinity and improve water quality.

Through their plans, regional groups identify long-term targets for improvement in salinity and water quality. For example, in September 2003, the Australian and Victorian Governments jointly approved the Glenelg Hopkins Regional Catchment Investment Plan involving investments of \$5.3 million. In the Glenelg Hopkins investment plan, activities costing \$2.5 million address issues for rivers and wetlands. Some specific targets are:

- in the Hopkins Basin the total stream length in 'good to excellent condition' will increase from 0 to 10 per cent; and
- within a 10-year period the frequency of algal blooms will be reduced by half.

### Monitoring and Evaluation

The National Monitoring and Evaluation Framework forges a national reporting system linking regional reporting, including reporting against agreed matters for targets addressed in regional plans and state systems. The National Monitoring and Evaluation Framework enables governments to assess progress on the policy reforms and institutional changes agreed in the bilateral agreements.

### National Landcare Programme

Farmers and land managers are crucial to achieving the Australian Government's primary industry and natural resource management goals. Productive, sustainable farming will shape the future of our continent, and maintain economic growth in regional Australia.

Landcare is a uniquely Australian approach to engaging community and volunteer action, with around 4000 groups and 40 per cent of farmers involved.

The National Landcare Programme encourages adoption of improved management practices by farmers and the community and is a vital contributor to improved management of natural resources, complementing the regional planning and investment strategies of the Natural Heritage Trust and the National Action Plan.

The Programme focuses on on-ground actions by community groups and land managers that are sustainable, while promoting community, industry and government partnerships in natural resource management. Landcare's principal goal is increased profitability, competitiveness and sustainability of Australian primary industries.

In 2004-05 the Australian Government will spend \$39.3 million on the National Landcare Programme.

The Budget also extends the National Landcare Programme by two years by providing an additional \$80 million (\$40 million in both 2006-07 and 2007-08). The Landcare programme is central to community involvement in natural resource management and the new funding will bring the Howard Government's investment in this programme to \$159.5 million over the next four years.

## **Empowering the community**

The active engagement of the community is a critical element in regional planning and plan accreditation. To assist community engagement, the Government is funding a network of natural resource management facilitators, announced in April 2003.

This network, including Australian Government staff and people engaged directly by regional communities, is now in place across the country. The network assists regions and communities in planning and implementing activities, ensuring that the Australian Government's natural resource management priorities are addressed and outcomes achieved.

At the present time, about 750 facilitators funded by the Trust and the National Action Plan are operating at local, regional and statewide/national levels. This includes an additional 35 facilitators for Coastcare, Rivercare and Bushcare activities announced in October 2003 and 13 Indigenous Land Management Facilitators. The Network was established in 1998 under the Natural Heritage Trust to promote participation of Aboriginal and Torres Strait Islander communities in regional planning.

An additional 70 Landcare facilitators to support local community and Landcare groups were announced in August 2003. These are funded through the recently extended National Landcare Programme.

Green Corps also values community involvement by giving young people aged 17 - 20 years the opportunity to volunteer to conserve, preserve and restore Australia's natural environment and cultural heritage

Since 1997, more than 11,000 Australians have participated in over 1,100 Green Corps projects, 11 million trees have been planted, 4,700 kilometres of fencing built, 36,000 hectares of weeds removed, 7,700 kilograms of native seeds collected and more than 4,000 kilometres of walking track constructed or maintained.

## **Biodiversity hotspots**

Biodiversity hotspots are areas rich in biodiversity but under immediate threat. The Minister for Environment and Heritage announced the national biodiversity hotspots initiative in October 2003, which would be supported through the Natural Heritage Trust with priority given to hotspot conservation activities. The Australian Government has adopted 15 biodiversity hotspots identified by the Threatened Species Scientific Committee and Australian biodiversity experts. These areas include the southwest of Western Australia, one of the world's richest areas of endemic plants and mammals such as the western quoll and numbat, South Australia's Mt Lofty Ranges and Kangaroo Island, habitat for declining populations of birds like the southern emu-wren, and Victoria's Volcanic Plain, home to endemic plant and animal species.

Hotspot conservation activities supported through the Trust include surveys and mapping, information and support, fencing, weed control, habitat rehabilitation and protection and conservation incentive schemes. Research and management of

threatening processes, such as feral species, dieback and changes in fire regimes are also being supported.

Australia's biodiversity is essential to our economic prosperity, our cultural identity and our future as a sustainable continent. This Budget contains a new measure to protect biodiversity hotspots in Australia. Taking action in these areas, we will be able to save more species for every dollar we spend. Details of the new measure will be announced after the Budget. It will focus on protecting biodiversity values in areas currently under threat.

### **Biodiversity protection under the Environment Protection and Biodiversity Conservation Act**

Through the EPBC Act the Government is identifying, protecting and conserving biodiversity. Activities include listing threatened species, developing and implementing recovery plans, conserving migratory waterbirds, protecting cetaceans and regulating international wildlife trade.

#### **Protecting threatened species**

Since 1997, the Government has invested over \$37 million from the Natural Heritage Trust in threatened species recovery.

The Threatened Species Scientific Committee, operating under the EPBC Act, advises the Australian Government on the listing of threatened species, ecological communities and key threatening processes. Once a listing is made under the Act, recovery and threat abatement plans are developed. Over 700 threatened species and ecological communities have recovery plans in place or in preparation.

Projects have protected species such as the Orange-bellied Parrot, Swift Parrot, Regent Honeyeater, Tammar Wallaby, Northern Hairy-nosed Wombat, and stream frogs of southeast Queensland. Conservation activities include protecting and expanding habitat through fencing and revegetation, captive breeding programmes, weed and feral pest control, and community education.

The implementation of recovery plans includes assessment of feral animal impacts on nesting marine turtles and national approaches to strandings of cetaceans (whales and dolphins).

Strategic approaches to threatened species recovery and threat abatement will be expanded in 2004-05. The development of plans that address the recovery of species in a natural resource management region was initiated in South Australia and Western Australia in 2003-04. Further pilots will commence in 2004-05. The Government will also trial methods for providing early advice on actions to abate threats and recover threatened species and ecological communities.

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Information continues to enhance community understanding of listed species and ecological communities, including explaining why a species has been listed. *Administrative Guidelines on Significance for the Grey-headed Flying-fox and Spectacled Flying-fox* informs fruitgrowers how to assess the impacts of their activities on listed species.

Funding will continue in 2004-05 for the Threatened Species Network, a community programme of the Natural Heritage Trust and the World Wide Fund for Nature (WWF) Australia, which increases public awareness of and involvement in protecting threatened species. The Network also manages the Threatened Species Community Grants Programme that funds rural and urban community groups to undertake recovery and awareness raising activities for threatened species and ecological communities. The malleefowl in Western Australia, southern bell frogs in South Australia, the brush-tailed rock-wallaby in New South Wales and the Western (Basalt) Plains Grasslands in Victoria have benefited from the grants programme.

### **Combating weeds and pests**

Feral predators introduced over the past 200 years are among the greatest threats to our biodiversity. They have resulted in native plants and animals becoming extinct or endangered and have had devastating economic effects. Weeds cost the Australian economy around \$4 billion a year.

Native wildlife helps control pests. A flock of Ibis, for example, can eat almost a quarter of a million insects in one day from pastures, including grasshoppers, locusts, larvae, crickets and caterpillars. Expensive pesticide applications are increased when native insect and rodent-eating bird populations decrease.

With a \$28.5 million investment under the first phase of the Natural Heritage Trust, the Government has focused on key world heritage areas and national parks and there has been considerable success in eliminating and controlling a range of invasive pests and weeds.

The Government continues implementation of the six threat abatement plans adopted under the EPBC Act. Activities include work on abating fox impacts, such as further research into the development of an immunocontraceptive vaccine and development of a cat specific toxin and bait, and the development of codes for the humane capture, handling and destruction of feral animals.

Plans for beak and feather disease, feral pigs, infection of amphibians with chytrid fungus, and tramp ants (including fire ants) are being developed. Research continues into the development of biological control agents for cane toads and weeds such as bitou bush, *Mimosa pigra*, and cabomba.

The Natural Heritage Trust funds the development of eradication techniques that use best practice control. Impressive results are being achieved through development and

release of biological control agents for many nationally significant weeds such as rubber vine, bridal creeper, and cabomba. Blackberry is one of the worst weeds in southern Australia. Trust funds are supporting the establishment of experimental sites in New South Wales where a new strain of blackberry leaf rust fungus will be released.

Australia's biosecurity policy enhances the competitiveness of agriculture, fisheries and food industries by developing a risk assessment process to permit safe trade. This protects Australia's plant, animal and human health as well as environment. Significant achievements include development of 40 import risk analyses for various plant and animals. The Government will spend \$12.5 million on these activities in 2004-05.

Since the *Gene Technology Act 2000* came into force, applications for the release of genetically modified organisms have been subjected to an evaluation process that includes a risk assessment and management plan. Developed with public and key stakeholder consultation, including advice from the Minister for Environment and Heritage, the plan forms the basis of the Gene Technology Regulator's decision whether to issue a licence.

#### **Protecting wildlife through regulating trade**

The Government ensures wildlife industries are ecologically sustainable and humane through assessment of wild harvests, approval of breeding and propagation programmes, and regulating exports and imports of wildlife under the EPBC Act. These activities are being improved by encouraging best practice animal welfare and sustainable management practices. Wildlife trade provisions have been integrated with other environmental impact assessment procedures to ensure potential environmental impacts of wildlife trade proposals are considered.

Australia provides leadership and assistance to members of the Convention on International Trade in Endangered Species (CITES) in the South Pacific region in meeting their obligations.

#### **Conserving migratory waterbirds**

The Australian Government leads the conservation of migratory waterbirds in the East Asian - Australasian Flyway.

The Government facilitates the migratory waterbird partnership initiative under the World Summit on Sustainable Development and is near completion of the bilateral agreement on migratory bird conservation with the Republic of Korea.

The Wildlife Conservation Plan for Migratory Shorebirds will be released for public comment in 2004-05. The Plan will outline national implementation of the Action Plan for the Conservation of Migratory Shorebirds in the East Asian-Australasian Flyway.

### **Protecting biodiversity from the impacts of climate change**

The Australian Government, with the state and territories, is finalising the National Biodiversity and Climate Change Action Plan. The Plan is Australia's first framework document to protect biodiversity from climate change.

### **Reversing the decline in the extent and quality of native vegetation**

The Australian Government has achieved significant milestones towards a national approach to sustainable management of native vegetation.

In 2001 the Australian Government and the State and Territory governments agreed to the National Framework for the Management and Monitoring of Australia's Native Vegetation.

In 2001 governments agreed, through the Framework for the Extension of the Natural Heritage Trust, to prevent clearing of endangered and vulnerable vegetation communities and critical habitat for threatened species, and limit clearing to those instances where biodiversity objectives are not compromised.

In April 2001 land clearing was listed as a key threatening process under the EPBC Act.

In July 2003, under their Natural Heritage Trust bilateral agreement, the Australian and Tasmania Governments announced historic changes to management in Tasmania to protect rare, vulnerable and endangered forest and non-forest vegetation communities and maintain at least 95 per cent of the 1996 native forest estate on public land.

In October 2003 the Australian Government and the New South Wales Government announced landmark reforms to end broadscale land clearing and clearing of protected regrowth vegetation to implement the National Action Plan and Natural Heritage Trust bilateral agreements.

In February 2004 the Queensland Government announced its commitment to protect all vulnerable vegetation communities and phase out clearing of remnant vegetation by 2006. The Australian and Queensland Governments are now finalising their Natural Heritage Trust bilateral agreement to include the Queensland vegetation reforms. These reforms have enabled Queensland to meet one of the key policy objectives of the Trust extension.

### **Protecting and sustainably managing our forests**

Australia is a world leader in the protection and sustainable management of forests.

The aim of the regional forest agreement process was to strike a balance between protection of a comprehensive, forest reserve system and a sustainable forest industry. The Australian Government has worked with scientists, conservationists, industry,



community groups and state and local governments, to introduce 10 Regional Forest Agreements across four states.

The \$30 million Tasmanian Private Forest Reserve Programme under the Tasmanian Regional Forest Agreement aims to secure priority forest areas for conservation. Of the \$20 million provided under the first phase of the Natural Heritage Trust, \$11.9 million had been approved by early 2004 for over 39,826 hectares of forest.

The Private Forestry for Sustainable Production and Environmental Services builds on the success of the Farm Forestry Programme under the Natural Heritage Trust through commercial tree growing on cleared agricultural lands. Eighteen Private Forestry Development Committees have been funded to work in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory with local and regional stakeholders, industry and governments.

### **Harnessing the market**

The Government is committed to using innovative financial arrangements to encourage better land and water management.

Market-based instruments (such as cap and trading schemes, stewardship payments and revolving funds) play a key role in providing an effective, equitable and sustainable response to environmental challenges. They can achieve policy outcomes efficiently compared with instruments such as regulation or funding programmes and can provide flexibility in natural resource management, using trade mechanisms, auctions and price signals to change behaviour and encourage environmental stewardship.

Eleven pilot projects were funded under the \$5 million first round of the National Market-Based Instruments Pilot Programme. This Programme investigates ways to use innovative financial arrangements for better land and water management and to reduce salinity in irrigation-based and dryland agriculture. The projects will trial a range of market-based instruments over two years in several of the National Action Plan regions.

### **Environment Management Systems**

The Government's Environment Management Systems (EMS) Programmes for primary producers aim to encourage the adoption of profitable and sustainable farming practices, provide improved natural resource management and environmental outcomes and enable primary producers to demonstrate environmental stewardship to domestic and international markets. In November 2003, the Government announced additional programmes to encourage EMS development in Australia's primary industries. The Government's investment in EMS programmes will be \$21.7 million over the next four years.

### Managing protected areas

The Australian Government manages twenty protected areas in the Northern Territory, the external territories and Australian waters. Two of the larger protected areas, Kakadu and Uluru-Kata Tjuta National Parks are on the World Heritage List.

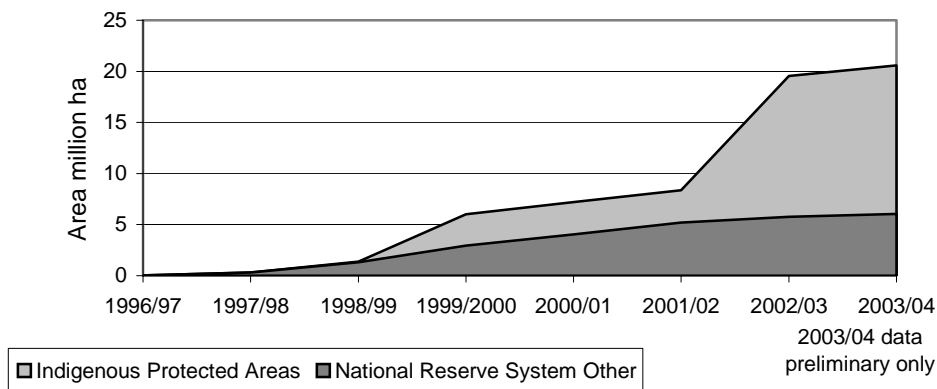
On Christmas Island rehabilitation of mine-sites is re-establishing rainforest on degraded land, assisting the recovery of seabird species. The programme to control yellow crazy ants, reducing their impact on the Island's ecosystems, has been recognised with several national awards.

### Increasing protection through the National Reserve System Programme

The National Reserve System Programme, part of the Natural Heritage Trust, provides financial assistance to state and local government agencies, non-government organisations, and Indigenous people to establish protected areas as part of a National Reserve System.

Since 1996 over 20 million hectares have been added to the National Reserve System through the Programme, some six million of which are property purchases or covenanted lands added to the System with the co-operation of States and Territories. The area added since 1996 represents three per cent of Australia's landmass.

**Chart 3.1 Area of land protected and managed through the National Reserve System programme**



All properties approved for inclusion contain ecosystems that are poorly represented or not represented at all in the National Reserve System. Many properties have rare or threatened species, communities and ecosystems listed under state or Commonwealth endangered species legislation. The Programme favours species with specialised habitat requirements, migratory species and species, which depend on reservation for their survival.

Nineteen Indigenous Protected Areas covering over 13.8 million hectares have been added to the National Reserve System. Indigenous ownership of land across Australia, including Indigenous Protected Areas, now stands at 17 per cent of the continent and its islands. Through this process, the Government is supporting Indigenous landholders to manage their lands for conservation using both contemporary and traditional knowledge and practices such as patch burning. This programme supports Indigenous Australians to exercise a duty of care for their country and to pass on both traditional and other knowledge about achieving sustainability and maintaining biodiversity for present and future generations.

Since the introduction of a private protected area component of the National Reserve System in 1998, over \$15 million has been provided by the Government to local governments and non-government organisations to own and manage 788,000 hectares of protected areas

The Programme will continue to build and enhance the National Reserve System and ensure effective management arrangements are in place for reserves under the Programme.

#### **Practical reconciliation – Indigenous engagement in conservation**

The Government is addressing the aspirations and interests of Australia's Indigenous people through symbolic and practical reconciliation. The Government is a world leader in integrating Indigenous land ownership, knowledge and conservation with World Heritage property management responsibilities.

The Australian Government jointly manages three national parks with their Aboriginal traditional owners: Kakadu and Uluru-Kata Tjuta National Parks in the Northern Territory and Booderee National Park in the Jervis Bay Territory.

Kakadu and Uluru-Kata Tjuta National Parks, two of Australia's best known natural and cultural icons, continue to set international best practice for working with Indigenous owners. The Management Plan for Uluru-Kata Tjuta National Park is regarded around the world as the model for cultural landscape management planning. Uluru, as one of the world's most recognised tourist destinations, has a major multiplier effect on the Northern Territory economy. Entry fees make an increasing contribution to park management costs and provide significant income for traditional owners.

Joint management is an excellent example of the Government's commitment to practical reconciliation. Recent achievements include:

- the revised lease for Booderee National Park greatly assists in delivering and improving the joint management arrangements between the Director of National Parks and the Wreck Bay Aboriginal Community Council. The lease provides impetus for the programme of progressive contracting out of park services to the local Wreck Bay Aboriginal Community, building local

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indigenous employment and the community's capacity to eventually assume sole management of the park;

- improved training for Indigenous members of Boards of Management is assisting them to take a more active role in high-level park management;
- growing involvement of Aboriginal people in park operations, with Aboriginal employment now around 45 per cent of the total workforce - up from 35 per cent in the mid-1990s - and a growing proportion of park services delivered through contracting of Aboriginal enterprises;
- a more positive engagement between traditional owners and the tourism industry - aimed at expanding opportunities for Indigenous tourism and greater control by traditional owners of their economic future;
- at Uluru-Kata Tjuta National Park, an independent review of the effectiveness of joint management arrangements in 2002 has led to clearer and more robust working relationships between the Board of Management, the Central Land Council, the Park's traditional owners, the resident Mutitjulu community and Parks Australia;
- the progressive integration of traditional knowledge and skills into park management. In Kakadu this means a return to the 'mosaic' fire regime which benefits biodiversity and bush foods, and the maintenance of cultural values through 'action learning' and the inter-generational transfer of knowledge, for example, through the involvement of family groups in planning and undertaking seasonal burning. At Uluru cultural heritage planning and management is virtually entirely under the direct control of traditional owners and Indigenous staff.

The Australian Government is a partner with the Queensland Government and the Torres Straits Regional Authority allowing direct involvement of Torres Strait Indigenous fishermen in the sustainable management of Torres Strait fisheries and the environment.

#### **Furthering our knowledge base**

The Australian Biological Resources Study (ABRS) is ensuring Australia remains a world leader in taxonomy - the naming and classification of plants and animals - and in managing biodiversity information necessary for the conservation of Australia's biological resources. The Budget provides \$4.7 million for the ABRS in 2004-05.

ABRS's activities include supporting research and publishing taxonomic and biogeographical information. Flora of Australia online, launched in April 2004, is the world's first national online interactive taxonomic data resource for unique plant species. It enables farmers, landcare groups, scientists and students to customise

questions and provides information about species names, habitat, and distribution maps.

ABRS will host the Australian node for the Global Biodiversity Information Facility, providing a portal to link Australian contributors to the network and enhancing national and international access to Australia's biodiversity data.

The Australian National Botanic Gardens and the Centre for Plant Biodiversity Research (a joint venture with CSIRO) provide world class botanical and bio-informatics data and tools for research and management.

Australia's Virtual Herbarium is a pioneering collaboration between the Australian Government, State and Territory governments and the private sector to unlock two centuries of botanical information held in Australia's herbaria.

## OUR WATER

### National water reform

Water is a scarce resource in Australia, the driest inhabited continent on earth with only one per cent of the world's water. Each year, on average, Australians use more than one million litres per person. The efficient use of water resources is a high priority for the Australian Government.

Australia's environment and economy rely on the health of our inland waterways. They provide habitat for biodiversity, ensure survival of terrestrial species and irrigate agriculture. Human water usage, land clearing, soil erosion, exotic species and pollutants have damaged inland waterways.

The 1994 Council of Australian Governments' (COAG) Water Reform Framework was a fundamental step towards ensuring the sustainable management of our water resources. The Framework includes provisions for water entitlements and trading, institutional reform, public consultation and education, water pricing and research. It requires governments to clarify water property rights and provide water for the environment. Future water resource developments may proceed only where they are economically viable and environmentally sustainable.

In 1995, the Water Reform Framework was tied to the National Competition Policy Agreement. Under this Agreement, states and territories are required to meet COAG water reforms to receive their share of competition payments. A major focus of the National Competition Council's 2004 assessment will be environmental water allocations.

In August 2003 COAG endorsed the Australian Government's proposal to develop a National Water Initiative to progress water reforms beyond the 1994 Framework.

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COAG will consider an intergovernmental agreement on the National Water Initiative at its meeting in June 2004.

Key features of the National Water Initiative will include:

- a nationally compatible system of water access entitlements;
- efficient water markets and removal of trade barriers;
- open processes to returning over-allocated and over-used surface and groundwater systems to environmentally sustainable levels of extraction;
- arrangements to recover water for the environment,
- best practice water pricing, and a robust, transparent regulatory water accounting framework; and,
- increased water use efficiency in the urban sector.

Resolution of community concerns over water access rights, water trading and environmental water issues is critical if Australia is to maximise the benefits from water reform.

The Australian Government also progresses the reform agenda through the Natural Heritage Trust, the National Action Plan for Salinity and Water Quality and the National Water Quality Management Strategy.

#### **Restoring our rivers**

The Murray-Darling Basin accounts for more than 40 per cent of Australia's gross value of agricultural production but has less than six per cent of the country's water. River and groundwater systems in the Basin have deteriorated and are crucial issues for Basin governments.

This budget reaffirms the landmark \$200 million for a Basin-wide strategic approach to water over-allocation in the Murray-Darling Basin agreed at COAG in August 2003, announced in the 2003-04 Additional Estimates. This \$200 million contribution is proof of the Howard Government's commitment to partnerships with the State and Territory Governments to improve the health of one of our biggest natural icons, the Murray River system. It is subject to satisfactory agreement between the partners on the introduction of the National Water Initiative.

The First Step focuses on six key ecological assets - Barmah-Millewa forest; Gunbower-Pericoota-Koondrook forests; Hattah Lakes; Chowilla Floodplain (including Lindsay-Wallpolla); the Murray Mouth; Coorong and Lower Lakes and the Murray River channel.

By better managing water to sites significant benefits can be achieved. Engineering works, river flow management, on-farm water efficiency savings and some water purchases will provide the necessary water.

The Living Murray initiative is delivering results. Arrangements for watering stressed River Redgums on the Chowilla floodplain and operation of the new fish ladders on the River Murray are underway. As part of the Native Fish Strategy, the first fishway has opened on the River Murray near the South Australian border. This is part of a programme to provide 2,300 kilometres of fish passage from the sea to Hume Dam over five years at a cost of \$25 million. Scientists counted more than 1,500 fish moving up the Lock 8 fish ladder during its first week of operation in December 2003. The dredging programme at the Murray Mouth has provided sufficient tidal surge to replenish the water at the Coorong.

These are early and encouraging steps towards ecological objectives identified in the First Step for the Living Murray. These objectives include floodplain forests and wetlands restoration, expanding the geographic range of native fish and improving migratory water birds habitat.

Environmental flows are being increased to the Murray and Snowy Rivers, aiming to restore their environmental health, through the Joint Government Enterprise, an initiative of the Victorian, New South Wales and Australian governments, established in December 2003.

The Government will provide an additional \$67.0 million over four years to the Murray-Darling Basin Commission (MDBC) to fund capital works, administration and education activities, and to establish a "renewals annuity" for capital replacement and major cyclical maintenance.

This funding is in addition to \$19.5 million over four years allocated to the MDBC and already included in the forward estimates.

The Australian Government will provide \$75 million over ten years for Murray River flows, while New South Wales and Victoria will provide \$150 million each over ten years for Snowy River flows, for a total funding of \$375 million.

Several water saving projects have been identified, undertaken, or completed by the Victorian Government and the Joint Government Enterprise will negotiate to purchase the water savings.

### **Rehabilitating the Great Artesian Basin**

The Great Artesian Basin, one of the largest groundwater systems in the world, is the main source of water for a major portion of Australia's arid zone. Of environmental concern is the natural discharge of springs in the Basin as a result of unsustainable use. Springs are listed under the EPBC Act as endangered ecological communities.

Since 1998 the Government has provided \$32 million to the Department of Agriculture, Fisheries and Forestry to restore artesian pressure in the Basin and save water by

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capping old, free-flowing bores and replacing earth bores with pipes. About 300 priority bores have been rehabilitated, leaving another 850 to be treated.

The 2004-05 Budget provides \$42.7 million over five years to extend this initiative. This year's Budget allocation includes \$1.4 million to the Department of Agriculture, Fisheries and Forestry to complete work on the Carnarvon Artesian Basin in Western Australia.

### **River health initiatives**

The Government has embarked on a programme of research into Australia's northern tropical rivers, providing the knowledge to manage these rivers sustainably as they come under increasing development pressure.

Approaches to enhanced management of rivers of high conservation value are also being examined to minimise future investment in restoration and rehabilitation.

### **Conserving wetlands**

Australia is working to conserve internationally and nationally important wetlands by meeting Australia's obligations under the Convention on Wetlands (the Ramsar Convention), including supporting the Oceania region, and the Ramsar provisions of the EPBC Act.

The Australian Government continues to implement the Convention in partnership with State and Territory governments, a wide range of non-government organisations and private landholders.

On World Wetlands Day, 2 February 2004, the Australian Government committed \$350,000 from the Natural Heritage Trust, for 2004-05. This funding continues the Government's support for wetlands conservation, will provide guidance to wetland managers across Australia and improve our understanding of our nationally and internationally significant wetlands.

The Australian Government engages in a wide range of activities relating to the protection of wetlands. Activities include: the preparation of Ramsar nomination documents, distribution of a CD to assist the facilitators' network to integrate wetlands into regional planning processes, providing advice on referrals and assessments under the EPBC Act, and reviewing Ramsar Management Plans for consistency with the Australian Ramsar Management Principles (regulations to the Act).

Nationally important wetlands are being conserved and restored through funding from the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality. For example, all states and territories have been encouraged to prepare management plans for Ramsar sites through the Trust bilateral agreements. Funding



will prepare or review management plans for Bool and Hacks Lagoons, Banrock Station Wetland Complex and the Riverland Ramsar sites.

### Improving water quality

The National Water Quality Management Strategy provides policies, processes and guidelines for water quality management. Nineteen guidelines have been released covering drinking water quality, monitoring, groundwater, rural land uses and water quality, stormwater, sewerage systems and effluent management for industry.

## OUR CITIES

More than 17 million Australians live and work in cities and towns. Urban sustainability challenges include issues such as ozone protection, air quality, waste, chemicals, housing, roads and airport noise. Addressing these issues involves cooperation among governments, industry and the community.

The Environment Protection and Heritage Council, a national council of government ministers, has achieved an encouraging level of shared responsibility among the Australian Government and State and Territory governments on nationally significant environment protection and heritage issues. Air quality, chemicals policy, waste management and national heritage policy are areas the Government will achieve major outcomes through the Council in 2004-05. The Council's activities include the Air Toxics National Environment Protection Measure, a water efficiency labelling scheme and improved chemicals management.

The Australian Government promotes sustainability in local government through funding and support for the International Council for Local Environmental Initiatives, Cities for Climate Protection™ and Water Campaigns, and local government natural resource management facilitators.

### Extending ozone protection

Stratospheric ozone depletion is a major global environmental challenge. For Australians, it also has serious health implications through increased exposure to UV rays and the resultant increased rates of skin cancer and eye cataracts.

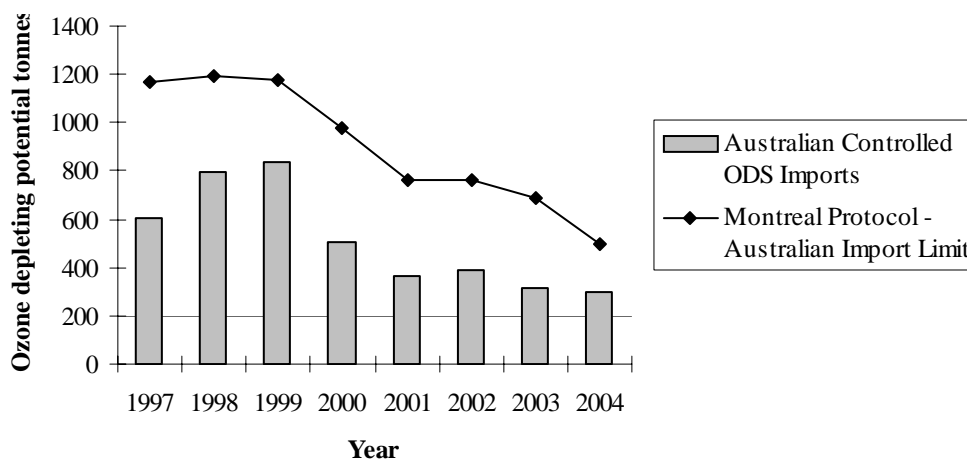
The Government has continued Australia's commitment to working with the international community to repair and preserve the ozone layer by amending the *Ozone Protection Act 1989* to the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*. The amendments control the end-use of ozone-depleting substances, and extend the existing system governing the import, export and manufacture of ozone depleting substances to synthetic greenhouse gases where they are used as alternatives to ozone depleting substances. It is projected they will further

reduce Australia's greenhouse gas emissions by the equivalent of six million tonnes of carbon dioxide in 2010.

The Government will continue to work closely with industry to develop consistent national standards for the safe and responsible handling of these substances, replacing the existing State and Territories systems.

Australia is also working to address ozone protection issue in the multilateral arena through the implementation of our commitments under the Montreal Protocol on Substances that Deplete the Ozone Layer, which Australia ratified in 1989.

**Chart 3.2 Volume of controlled ozone depleting substances (ODS) imported into Australia compared to Montreal Protocol obligations.**



### Improving air quality

With more than two million Australians suffering from asthma and hundreds of thousands of others affected by other respiratory disorders, poor air quality can have a major impact on the economy, our quality of life and the visual appeal of city skies.

The Australian Government has led national standards setting for air quality to provide protection against air pollution. The *State of the Environment Report 2001* found that air quality had markedly improved for most pollutants in our capital cities since 1996.

An important step in the continuing development of national standards is the Air Toxics National Environment Protection Measure (NEPM), which was agreed by the Environment Protection and Heritage Council at its April 2004 meeting. The NEPM will set monitoring investigation levels for five hazardous air pollutants and facilitate the data collection for the development of air quality standards for these pollutants at their review in 2011.

The Government is also participating in a review of sulphur dioxide standards, and preparatory work for a review of ozone standards, under the Ambient Air Quality NEPM.

Work continues to target two of the main contributors to urban air pollution - motor vehicles and wood heaters.

A package of stringent vehicle emissions standards for cars, buses and trucks is being introduced from 2002 to 2006. These standards will lead to much lower levels of smog forming pollutants and particulate emissions from new vehicles.

National standards for petrol and diesel came into effect on 1 January 2002 under the *Fuel Quality Standards Act 2000*. In 2003-04 the petrol standard was tightened further to limit the content of smog-forming olefins; and ban the groundwater pollutant methyl tertiary-butyl ether (MTBE). Standards were developed for biodiesel and LPG. Ethanol in petrol was capped at 10 per cent and a labelling requirement for fuels containing ethanol was introduced.

Future work includes a review of existing vehicle emissions and fuel standards with a view to the development of next generation fuel standards beyond 2006, and consideration of the need for standards for alternative fuels such as Compressed Natural Gas, diesohol and ethanol.

The Diesel NEPM reduces pollution from diesel vehicles by encouraging the maintenance of diesel engine performance against emission standards. The Government has supported this NEPM through funding, including over \$6 million to New South Wales and approximately \$1 million to Brisbane City Council, to improve diesel vehicles' emissions performance. By December 2003, over 4000 tests had been performed on more than 2000 vehicles in NSW and Victoria, with 200 vehicles repaired and re-tested. Of the high emitting vehicles that were repaired, particulate emissions improved by an average of more than 30 per cent. Negotiations with South Australia for a vehicle testing facility are close to finalisation. Agreements with Western Australia, Tasmania and Victoria are planned for 2004-05.

In July 2003 the Government announced its intention to provide a capped amount of \$37.6 million to fund one-off capital grants for projects that provide new or expanded biofuels production capacity. The programme aims to increase the availability of biofuels for the domestic transport market. Feedstocks must be from renewable sources or biomass waste products.

An Internet based Green Vehicle Guide, expected to be on-line by the end of May 2004, will inform consumers about the greenhouse and air pollution performance of new models and give an overall star rating.

The Government is also encouraging alternative means of transport where practical. Cycling just 10 kilometres each way to work instead of driving saves about \$770 in

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transport costs and 1.3 tonnes of greenhouse gas emissions each year. The Government has provided \$2.4 million over two years for the installation of secure bicycle lockers at railway and bus stations. With the likely installation of over 3000 lockers, the new CycleConnect Programme, launched in February 2004, will encourage the use of bicycles in place of a proportion of motor vehicle trips.

Grants under the Launceston Woodheater Replacement Programme have resulted in more than 2,000 woodheaters being replaced with cleaner forms of heating. These efforts, coupled with other initiatives and milder weather conditions, resulted in only 18 days when the national air quality standard was exceeded as a result of woodheater emissions in 2003 - a 36 per cent reduction from 2001.

The National Woodheater Audit Programme has identified that the majority of the woodheater models tested failed to comply with the Australian standard on woodheater emissions. A national action plan is being developed with industry to deal with the issue before the 2004 winter and a follow up audit of all woodheater models, jointly funded by government and industry, is planned over the next two years.

### **Sustainable cities**

The design, planning, construction and operation of the built environment is fundamental to the productivity and competitiveness of Australia's economy, the quality of life of Australia's people and the sustainability of the continent.

To encourage greater community participation in planning our cities, suburbs, towns and regions, the Australian Government has proclaimed 2004 as the Year of the Built Environment. A focus of the year is to encourage a built environment that is sustainable, energy efficient, safe, healthy and comfortable.

In 2003-04 the Government introduced the Sustainable Cities Programme to complement the Year of the Built Environment. The \$40 million, five-year programme is designed to ensure understanding of, and action for, sustainable Australian cities. In 2004-05 the Government will provide:

- \$4.1 million for the environment protection programme to continue the development of national standards and increase compliance and enforcement activities in areas such as air quality, fuel quality, the management and control of chemicals, pollutants, hazardous waste and ozone depleting substances; and
- \$2.4 million for the urban environment programme, giving priority to national initiatives to address water quality, environmental information and education, air quality, renewable energy, chemicals, and waste management.

In September 2003 the Government approved the development of a water efficiency labelling scheme for all the major domestic water-using appliances, including toilets, showerheads, washing machines and dishwashers, based on the successful five star

energy-label scheme. The 2003-04 Budget provided \$2 million over five years, as part of the Sustainable Cities commitment.

The Australian Government is also working with governments, industry, research bodies and the community to promote environmental and economic opportunities in the re-use of wastewater and storm water.

### **Partnerships with industry**

Industry has risen to the challenge of meeting the triple bottom line - sustainable economic, social and environmental development - by entering into partnerships with the Government to reduce greenhouse gases and other emissions, to cut waste and to save money through more efficient use of resources.

The Government is working in partnership with over thirty industry associations to develop and promote eco-efficiency tools to their members. Through these Eco-Efficiency Agreements, the Government is helping businesses develop more environmentally and economically efficient business practices: in short, by 'doing more with less'. Activities under these agreements will continue to enhance the sustainability of Australian industry.

The Government continues to build partnerships with the finance and industry sectors to raise awareness of long-term environmental factors and risks in investment decision-making. An online library of Australian corporate sustainability reports and a survey of companies' triple bottom line reporting will help inform investors who are interested in long-term company performance and risk. These programmes reinforce the business case for sustainability and build capacity for companies to manage, measure and report on their environmental performance.

In April 2004 the Government finalised the National Australian Built Environment Rating System. This enables building owners, users and tenants to rate the environmental performance of existing buildings and promotes investment in sustainable buildings. In consultation with industry and a range of stakeholders (including the Australian Building Codes Board and Standards Australia), the Government is assessing the feasibility of incorporating sustainability considerations into national building codes and standards, and determining the reforms required to 'green' such codes and standards.

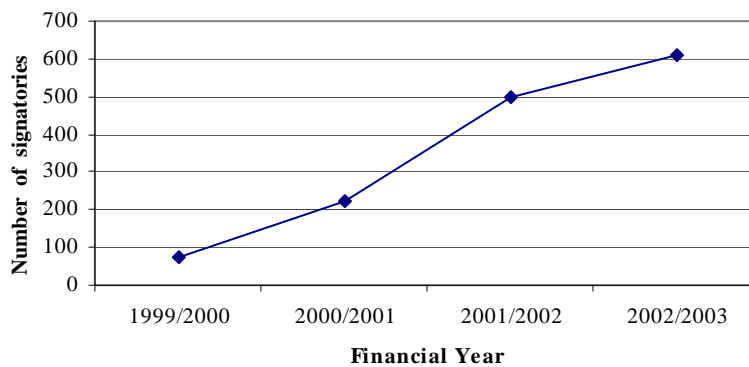
### **Reducing and re-using waste**

Every year in Australia, over 20 million tonnes of waste is sent to landfill. The Australian Government works through the Environment Protection and Heritage Council to reduce the environmental impact of nationally significant wastes, such as consumer packaging and paper, plastic bags, electrical and electronic waste and used tyres.

Under product stewardship approaches, responsibility for wastes is shared with industries which are expected to be more active in avoiding problems and designing solutions. Australian industry has been quick to learn that cutting waste can lead to big savings through reduced resource usage and lower waste management costs.

The National Packaging Covenant, one of the first stewardship agreements, is nearing the end of its five-year term. The Covenant has attracted an unprecedented number of industry and government signatories – 630 over four years – and has generally taken a cooperative life-cycle approach to managing packaging waste. The Covenant was recently extended on an interim basis to April 2005 to allow for broad consultation between all stakeholders on future approaches to packaging waste.

**Chart 3.3 Total number of companies signatory to the National Packaging Covenant**



The community uses 6.9 billion plastic bags each year. In October 2003, the Environment Protection and Heritage Council agreed to measures to reduce the impact of plastic bags, including a voluntary industry Code of Practice. The Australian Retailers Association and major supermarket chains such as Coles and Woolworths have committed to reduce the use of plastic bags by 50 per cent by the end of 2005 and to increase recycling by between 15 to 30 per cent. Environment Ministers have called for lightweight HDPE bags to be phased out by 2008.

An awareness raising campaign will educate the public about the environmental hazards of the inappropriate disposal of used oil, inform oil users about the Product Stewardship Arrangements for Waste Oil Programme, and encourage the use of new collection facilities. The Programme provides incentives to increase the uptake, recycling and reuse of used oil. The amount of used oil collected has increased by 33 per cent since the Programme commenced in January 2001. This is an estimated 81 per cent of total recoverable used oil. Almost \$10 million has been distributed in grants to local governments and state-based agencies to establish collection facilities throughout Australia. Over seven hundred facilities will be established by the completion of the Programme.

## Responsible chemicals management

ChemCollect was a three-year national programme, which addressed the improper disposal and management of agricultural and veterinary chemicals - a risk to the environment, human health and Australia's rural export industry. The programme was very successful, collecting approximately 2000 tonnes of unwanted or unregistered chemicals, significantly more than the original target of 1200 tonnes. Governments funded ChemCollect on the basis that industry would ensure that no further funding was required.

ChemClear, a joint initiative involving Avcare (the National Association for Crop Protection and Animal Health), the Veterinary Manufacturers and Distributors Association and the National Farmers' Federation, will build on ChemCollect's success. ChemClear will provide farmers with a disposal service for unwanted registered agricultural and veterinary chemicals. Trials began in early 2004.

The National Medicines Disposal Programme uses the national community pharmacy network to collect expired and unwanted medicines from consumers. Disposal by high-temperature incineration avoids the significant environmental health hazards of disposal through the sewerage system and landfill. From July 2002 to June 2003 an average of 30 tonnes per month of returned medicines was collected - a 27 per cent increase over the previous year.

The Government has in place a national framework to ensure that the environmental risks of industrial, agricultural and veterinary chemicals are reduced. The National Industrial Chemicals Notification and Assessment Scheme and the Australian Pesticides and Veterinary Medicines Authority assess new and existing chemicals to identify the potential risks of their exposure to the environment, providing governments, industry and the community with the right tools to reduce and manage those risks.

## Housing and infrastructure

The Community Housing and Infrastructure Programme contributes to improving the environmental health of Aboriginal and Torres Strait Islander communities by providing housing, infrastructure and municipal services.

Since 1995 the National Aboriginal Health Strategy has provided approximately \$800 million for large-scale environmental health infrastructure projects.

All Australian Government funded road projects on National Highways and Roads of National Importance have environmental assessments at the planning stage. In addition, all Australian Government funded road projects have environmental management plans to limit, mitigate, or counterbalance their environmental impacts.

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The Government is addressing aircraft noise issues through a range of initiatives. The Adelaide and Sydney Airports Noise Amelioration Programmes fund insulation of eligible residences and public buildings in areas of high aircraft noise.

### **Environmentally responsible government**

The Government leads by example when it comes to environmentally responsible actions. Australian Government activities are largely office-based, but can impact on land, air, water and biodiversity. The Government is also a major landholder and a significant purchaser of goods and services worth \$16 billion each year.

The Government continues to promote the adoption of environmentally sustainable practices by its own agencies. At least 28 departments and agencies had an Environmental Management System in place at the end of December 2003, with another 19 under development. Five have certified Environment Management Systems, with at least 14 planning to seek certification for at least one major site.

Activities undertaken by government agencies include energy efficiency and waste minimisation measures. A wide range of material, including paper, cardboard, glass, printer cartridges, and fluorescent tubes, is recycled.

The Department of Family and Community Services released its first Triple Bottom Line Report in 2003. Other agencies, including the Department of the Environment and Heritage, are developing reports on their environmental, social and financial performance.

The Government is investigating and implementing measures to save and re-use water in its operations. The Department of Defence released its Sustainable Water Management Strategy in February 2004. Initiatives to improve Defence's water management include water audits, and water conservation measures, such as using water efficient appliances and investigating the potential for re-using greywater.

As a manager of extensive training sites, the Defence Department also contributes to biodiversity conservation through the management of endangered species, feral, weed and overabundant species and native flora and fauna. Defence also aims to comply with environment legislation and policies which apply to its operations in marine areas and to minimise adverse impacts as far as practicable. Key considerations include the potential impacts of naval activities in the marine environment, including on cetaceans, pollution control, and management of biofouling and introduced marine species.

### **OUR COASTS AND OCEANS**

Australia is responsible for a marine area of 14 million square kilometres - almost twice the size of our mainland.



This area is home to some of the world's most diverse ecosystems with more than 80 per cent of marine species unique to these oceans. These ecosystems are also rich in resources, with marine industries generating more than \$30 billion annually.

Our marine areas are in relatively good condition, but are under increasing pressure both from marine industries and the impacts of activities in coastal areas.

### **Safeguarding the Great Barrier Reef**

The Great Barrier Reef World Heritage Area is a nationally and internationally significant area with outstanding environmental, social and economic values. Within the Great Barrier Reef catchment, tourism contributes an estimated \$4.3 billion dollars every year and recreational fishing and boating contribute \$240 million every year.

The Government continues to address the critical issues affecting the Great Barrier Reef Marine Park with \$261.2 million spent since 1996.

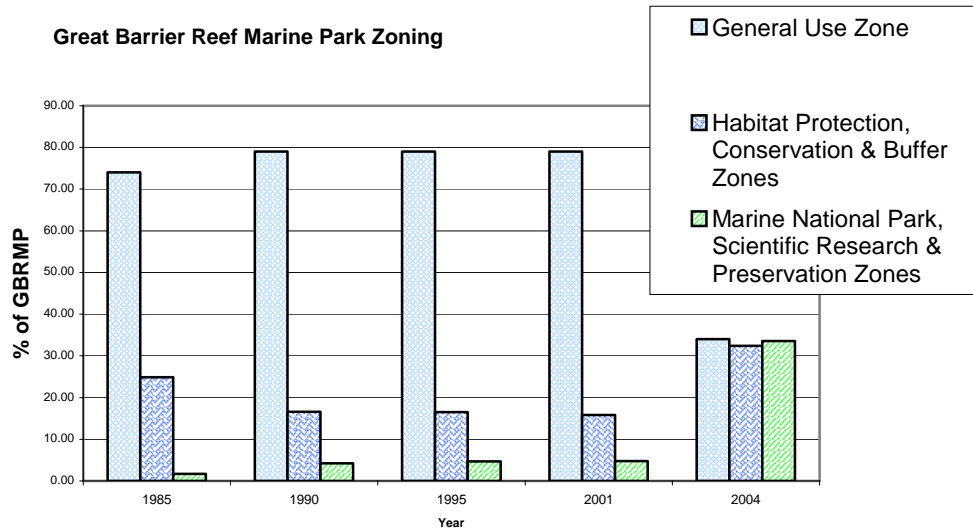
The 2004-05 Budget provides an additional \$30.3 million for initiatives relating to the Great Barrier Reef.

The new Zoning Plan for the Great Barrier Reef, which comes into effect from 1 July 2004, will ensure the protection of the Reef for future generations. A seven-fold increase in protected zones and marine sanctuaries - from 4.5 to 33.3 per cent - within the Great Barrier Reef Marine Park will create the largest network of marine protected areas in the world.

Recognising that a programme of this scale will have unavoidable impacts, the Australian Government has developed a structural adjustment package for commercial fishers and others who may be adversely impacted by the implementation of the Plan. The 2004-05 Budget allocates \$10.2 million over two years for this package.

The package includes funds for education and provision of information to the public, tourists and industry on the newly protected areas of the Reef, additional resources for enforcement and compliance activities, a water quality monitoring programme associated with the Reef Water Quality Protection Plan and assistance to tourism operators to implement a programme to control Crown of Thorns Starfish outbreaks.

**Chart 3.4: Variation in Zoning of the Great Barrier Reef Marine Park**



### Protecting Reef water quality

Over the last 150 years the land catchment areas adjacent to the Reef have been changed by urban development, agriculture, tourism and mining. Sediments, nutrients and other pollutants from land-based sources are affecting the inner reefs and seagrass areas of the Reef. Although the vast majority of the 2900 reefs that make up the Great Barrier Reef are in good condition, some of the 450 inshore reefs are showing impacts consistent with a decline in water quality.

The Reef Water Quality Protection Plan, announced by the Australian and Queensland Governments in December 2003, aims to minimise pollutants and reduce their entry into the Reef.

The Australian Government is also working closely with the Queensland Government to develop and implement the Great Barrier Reef Coastal Wetlands Protection Programme. Funding was announced in the 2003-04 Budget.

The draft Natural Heritage Trust Bilateral Agreement between the Australian and Queensland Governments recognises the importance of conserving and restoring wetlands throughout Queensland. The programme is being developed in parallel with the Great Barrier Reef Coastal Wetlands Protection Programme.

### A national approach to coastal issues

The Australian Government has led State and Territory governments to identify coastal issues that would benefit from national cooperation. These include the

sustainable use of coastal resources, the impacts of climate change and threats from introduced marine pests.

Australian, State and Territory government Ministers endorsed a *Framework for a National Cooperative Approach to Integrated Coastal Zone Management* in October 2003 and are now developing a Coastal Implementation Plan. Consultations with key stakeholders such as coastal communities and local governments will be held over the next few months. The Plan is due for completion in October 2004.

### **Improving coastal water quality**

Water quality hotspots are areas where pollution has caused serious environmental decline. Most hotspots are in or near urban areas but some are in regions such as the Great Barrier Reef and the Gippsland Lakes. The Coastal Catchments Initiative aims to reduce pollutant discharges to identified coastal water quality hotspots.

Water Quality Improvement Plans are prepared for these hotspots for accreditation by the Australian Government, incorporation into regional plans and funding through investment strategies.

Financial assistance agreements are in place to develop plans, and in some instances to undertake interim water quality projects, for the Peel Inlet – Harvey Estuary System in Western Australia, Adelaide's Port Waterways in South Australia, the Derwent Estuary in Tasmania and waterways in the Douglas Shire in Queensland. Further financial agreements, plans and water quality projects are anticipated.

### **Regional marine planning**

Australia's first regional marine plan, which covers the southeast of Australia's marine region, will be launched in 2004. This is a world first initiative that integrates the conservation and sustainable use needs of an area of over two million square kilometres, an area with unique biodiversity and ecosystems which also supports vitally important marine industries.

Work is progressing on the northern regional marine plan and initial steps have been taken towards the development of a marine plan in the southwest of Australia.

Regional marine planning is underpinned by an extensive scientific programme which supports an ecosystem-based approach to the management of Australia's marine resources.

### **A national approach to integrated oceans management**

The Australian Government is leading State and Territory governments to enhance cooperation across jurisdictions and increase Australia's ability to develop our marine resources in an ecologically sustainable manner.

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Australian, State and Territories natural resource ministers released a Joint Statement on Integrated Oceans Management in October 2003. A broad based committee has been established to make recommendations on national principles to guide intergovernmental decision-making and cooperation. The Natural Resource Management Ministerial Council is expected to consider these recommendations in October 2004.

### High seas biodiversity conservation

Australia continues to pursue improved high seas biodiversity conservation and sustainable management through various international fora. The Government hosted a major international meeting on governance of the high seas in mid 2003 and is developing a range of policy options to address sustainable management of the ocean 'commons'.

Australia continues to work closely with Pacific Island countries on their oceans policy and with APEC members on a number of oceans issues, in particular, introduced marine pests and integrated management.

### Sustainable fisheries

The Government will provide \$47.9 million in 2004-05 and \$41.4 million in 2005-06 to the Australian Customs Service and the Department of Agriculture, Fisheries and Forestry to strengthen Australia's patrol capability in the Southern Ocean. Increased surveillance and enforcement in Australia's Fishing Zone at Heard Island and McDonald Islands will assist in ensuring the long-term sustainability of Patagonian Toothfish stocks and dependent and associated species. Between August 2003 and February 2004 two vessels fishing illegally for the Patagonian Toothfish in Australia's sovereign waters were successfully pursued and apprehended.

The Government continues to make substantial progress in completing the strategic assessment of fisheries under the EPBC Act. The assessment of these fisheries is changing management practices across Australia's commercial fisheries with a shift from species management to an ecosystem-based fisheries management approach. Approved management plans provide certainty for fishery operators, processors and exporters.

Australia is committed to the sustainable management of global tuna stocks. Australia continues to participate strongly at meetings of regional fisheries management organisations to ensure sustainable conservation and management processes for tuna and tuna-like species.

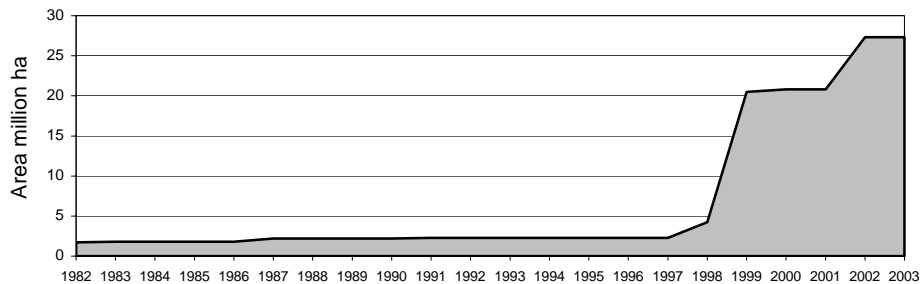
In 2003 the Commission for the Conservation of Southern Bluefin Tuna agreed to national allocations for the first time since 1998. This is a major step towards the sustainable management of the global southern bluefin tuna stock. Australia pressed strongly for the establishment of a Scientific Research Programme under the control of

the Commission. The Programme will develop a management procedure to underpin future decisions, including total allowable catch setting. The procedure is expected to be in place in late 2004.

### Marine protected areas

An extensive network of Commonwealth marine protected areas contributes to the national representative system of marine protected areas and the protection and sustainable use of Australia's coasts and oceans. Since 1996, 25 million hectares of Commonwealth marine protected areas have been added to the national system.

**Chart 3.5 Commonwealth Marine Protected Areas 1982 - 2003 (Total area managed under EPBC Act)**



New reserves declared include the Great Australian Bight Marine Park, Tasmanian Seamounts Marine Reserve, Macquarie Island Marine Park, Lord Howe Island Marine Park, Cartier Island Marine Reserve, and Heard Island and McDonald Islands Marine Reserve. The six new marine reserves represent over a ten-fold increase from pre-1996 levels.

The regional marine plan process will result in the declaration of a comprehensive set of new marine protected areas in the southeast marine region. A reporting strategy will demonstrate their contribution to biodiversity conservation.

### Protecting marine species

Australia promotes international action to protect cetaceans (whales, dolphins and porpoises) by pursuing a permanent international ban on commercial whaling, an end to "scientific" whaling and the creation and retention of whale sanctuaries.

Australia is active in the International Whaling Commission, the primary forum in which whale protection is pursued. At the Commission's annual meeting in July 2004 Australia will aim to ensure that a global moratorium on commercial whaling is

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maintained, and the Southern Ocean Sanctuary is retained. Australia will again pursue the establishment of a South Pacific Whale Sanctuary.

Australia is working in the South Pacific to encourage domestic and regional protection for cetaceans. Australia encourages South Pacific countries to establish whale sanctuaries in their Exclusive Economic Zones and to coordinate cetacean conservation measures at a regional level.

Australia was instrumental in organising the second workshop on a regional arrangement to conserve marine mammals under the Convention on Migratory Species, held in Samoa in March 2004. The outcomes of the meeting included a proposal to develop a memorandum of understanding to identify key actions to restore the conservation status of marine mammals in the region.

Australia has also pursued domestic and international initiatives for the conservation of albatrosses and petrels. Conservation of these highly migratory species cannot be achieved by one country acting independently of other nations that share the same species populations. Australia encourages other countries to take actions on an international level to complement policy and actions taken nationally.

Australia played a leading role in the development of the Agreement for the Conservation of Albatrosses and Petrels which entered into force on 1 February 2004. There is now strong international commitment to protect albatrosses and petrels. Australia will host the first Meeting of Parties in 2004-05.

The recovery of 23 species (21 albatross and two giant petrels) listed under the EPBC Act was supported through a recovery plan, and the mitigation of bycatch in longline fisheries, a key threatening process for seabirds.

### **Preventing and managing introduced marine pest incursions**

In the marine environment, about one in six of the up to 300 introduced marine species in Australian coastal waters is likely to become a pest. The potential cost to the nation is enormous, impacting on fisheries and aquaculture production, human health, shipping and ports, tourism, coastal amenity, and species and ecosystem health and diversity.

An intergovernmental agreement on legislative and funding responsibilities under the National System for the Prevention and Management of Introduced Marine Pest Incursions is expected to be concluded in mid 2004.

In 2004-05 the development of a management regime to help stop marine pests entering Australian waters through ships' ballast water and fouled hulls will continue. Over the four years to 2005-06, \$4.6 million is being spent on this task.

In 2004-05 a system for managing coastal ballast water, linked to the existing system for managing international ballast water, will be ready for implementation.

## OUR CLIMATE

The Australian Government recognises climate change as a real and serious global challenge – the evidence is overwhelming. Australia is already experiencing the impacts of climate change, although it is difficult to discern these precisely in a climate that is subject to extreme variability. They are almost certainly showing in changes to rainfall patterns and storm intensity, water temperature, sea levels and other natural phenomena. Features of our environment on which economic activity depends, such as vegetation and reefs, are vulnerable to these impacts. Our agriculture and tourism industries could be adversely affected.

Australia needs and continues to work for an effective global response to climate change in which Australia intends to play a full part. This Government has responded strongly to the challenge – investing in measures across the economy to reduce our domestic greenhouse gas emissions, and engaging internationally to build an effective, inclusive global response to this complex issue.

Australia's domestic greenhouse programmes are pioneering in their approach, and are projected to achieve major reductions in greenhouse gas emissions of 67 million tonnes a year by 2008-12.

This action has Australia on track to meet its internationally agreed target of 108 per cent of 1990 emissions by 2008-12.

This Government is interested in practical environmental outcomes – not symbolic international gestures that would disadvantage Australia.

Internationally, the Government is pursuing a multi-pronged strategy including action at the multilateral, regional and bilateral levels. Our approach is both influencing the broader global policy agenda, and supporting practical action to address climate change.

Our knowledge of climate change has evolved greatly since the Government's first climate change package *Safeguarding the Future* which was released in 1997 (followed by *Measures for a Better Environment* in 1999). Through the 2004-05 Budget, the Australian Government is delivering a strategy that will build on this strong foundation – supporting new abatement opportunities and technologies, better focusing climate change programmes, and investing in measures to help Australia identify, assess and adapt to the unavoidable consequences of climate change. Recent exploratory work provides good reason for believing that adapting established

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practices, such as sowing cycles and water management, have the potential to substantially reduce costs resulting from the impacts of climate change.

This Budget ensures the Australian Government will continue to play a leading and responsible role in the global response to climate change. Australia will participate actively and creatively in international forums as well as investing domestically in measures that will reduce Australia's greenhouse gas emissions while maintaining a strong and competitive economy. The Government will allocate \$463.6 million over four years for climate change initiatives including \$260.0 million for eleven new measures. This increases the Australian Government investment by \$70.3 million taking the total commitment to more than \$1 billion to enable work in the following areas.

### **International engagement**

The international community accepts the need for a long-term response to climate. The Australian Government will continue to work towards a global response that is environmentally effective and economically efficient and equitable; involves all major emitters, including the United States and developing countries; and takes into account different national circumstances.

In 2004-05, the Government is committing \$22.6 million over four years to underpin Australian climate change action at the international level. This funding will support multilateral climate change negotiations and processes; help build the capacity of developing countries to take effective climate change action and expand bilateral partnerships with key strategic countries such as the United States, China, New Zealand, Japan and the European Union.

### **Emissions management**

Energy efficiency is currently the most cost effective approach to abatement and delivers real economic benefits. Through the Action on Energy Efficiency measure, the Government is committing \$27.4 million over four years to work with industry, business, the community and all levels of government to increase the uptake of cost-effective energy efficiency opportunities that will reduce greenhouse emissions, reduce energy demand, and improve Australia's competitiveness.

The energy intensive nature of Australia's economy means that we must seek out cost-effective ways to improve the efficiency of existing generation technologies while also enabling new low emission technologies to be part of the longer-term solution to climate change. The Government is committing \$26.9 million over four years to encourage technologies that reduce energy demand and emission intensity of supply at a local community level as well as in business and the electricity sector.

The Australian Government is continuing to work in partnership with industry to reduce our national greenhouse gas emissions. Through the 2004-05 Budget, the



Government is committing \$31.6 million over four years to build on the success of the Greenhouse Challenge and deliver an expanded industry partnership programme that integrates greenhouse issues into business decision making, will reduce greenhouse emissions, and accelerate the uptake of energy efficiency measures.

There are seven million households in Australia that collectively produce one-fifth of Australia's total greenhouse emissions. Through the Local Greenhouse Action measure the Government is committing \$13.8 million over four years to support local government, communities and individual households to reduce their emissions, particularly in the areas of energy use, transport and waste.

Agricultural and other land based sectors make a substantial contribution to Australia's emissions – around one-third of Australia's total. They are also vulnerable to the potential impacts of climate change. The Government is committing \$20.5 million over four years to work with rural communities to reduce emission from land based sectors by helping land managers to measure and report on their greenhouse emissions and encouraging new abatement technologies. In addition to greenhouse benefits, the activities are likely to result in additional environmental and productivity benefits for land managers such as reducing salinity and improving natural resource management.

Greenhouse technology projects will continue to be supported through existing renewable energy programmes, including the Mandatory Renewable Energy Target and the Remote Renewable Power Generation Programme, and the broader based Greenhouse Gas Abatement Programme with commitments of \$203.6 million over the next 4 years for the Australian Greenhouse Office, and new funding of \$10.6 million over four years for the Office of the Renewable Energy Regulator.

#### **Climate science, adaptation and policy**

Australia has developed world-class expertise in climate science and has contributed significantly to international understanding of the causes, nature, timing and consequences of climate change.

In 2004-05, the Government is committing \$30.7 million over four years to continue to build our understanding of the science of climate change and to inform government and industry decision making. Initiatives will enhance our understanding of the key drivers of climate change in Australia; improve modelling of climate variability and climate change; develop regional climate change projections; and foster collaboration in international climate change research.

Early and effective adaptation to potential climate change impacts can help minimise risks, generate economic benefits, and reduce the costs associated with the effects of climate change that are already occurring. The Australian Government is committing \$14.2 million over four years through the 2004-05 Budget for its new National Climate Change Adaptation measure. Detailed assessments of the economic and social

implications of climate change will be undertaken in the following six areas: water use and water infrastructure development; agriculture practices; settlements and the coastal zone; tourism; infrastructure (including buildings, major transport links and electricity distribution); and biodiversity. Each assessment will identify and evaluate adaptation options for vulnerable industry and regional communities, leading to recommendations for specific actions.

Australia's ability to report domestically and internationally on emissions levels and trends is underpinned by robust emissions measurement and analysis. The Government is committing \$33.1 million over four years to continue to fulfil our international reporting commitments through the National Greenhouse Gas Inventory, greenhouse projections and emissions analysis and world class National Carbon Accounting System.

The Australian Government is also committing \$28.5 million over four years for the continued provision of whole-of-government advice on domestic greenhouse policy issues, and to provide information and education programmes to promote awareness of climate change.

## OUR HERITAGE

### National and World Heritage

On 1 January 2004 the Australian Government commenced implementing groundbreaking heritage laws to protect places Australians regard as part of their national identity.

A programme called *Distinctively Australian* will underpin this new heritage system. *Distinctively Australian* engages the community in identifying and protecting nationally significant heritage places and experiencing Australia's origins, history and values. The Government will invest more than \$52 million over four years in the new initiative.

Under *Distinctively Australian*, the Government is also committed to improving the way it identifies and protects the heritage places it owns or manages. The Government has established a Commonwealth Heritage List of places managed or owned by the Australian Government. A National Heritage List of places of outstanding significance to the nation will also be established. For the first time, Indigenous, natural and historic places of national heritage significance will be protected to the full extent of the Commonwealth's powers.

A newly established independent expert advisory body, the Australian Heritage Council, is the principal adviser to the Minister for the Environment and Heritage on heritage matters.

Proper heritage management is vital for protecting the values of heritage places. Under *Distinctively Australian*, management plans for national and Commonwealth listed places will be prepared.

Economic benefits are anticipated for regional communities through increased tourism to nationally significant places.

The Howard Government continues its investment in restoring cultural heritage places. The Government in this Budget will provide \$5.5 million in 2003-04 for the restoration of St George's Cathedral in Perth and St Paul's Cathedral in Melbourne. This funding will support efforts to repair and preserve these heritage buildings. Funding for St Paul's Cathedral is in addition to the funding of \$2.5 million provided in 2001-02.

The Government also continues its commitment to identifying, protecting and conserving Australia's 15 World Heritage places. These places play a central part in informing our national identity. World Heritage places also benefit our national economy and regional economies through tourism.

In 2003, the international World Heritage Committee inscribed Purnululu National Park in Western Australia's Kimberley region on the World Heritage List for its unrivalled natural values. Purnululu is renowned for its extraordinary banded beehive structures, sandstone cliffs and the towers of the Bungle Bungle Range, and its rich Indigenous cultural heritage.

The World Heritage Committee will assess Australia's nomination of the Royal Exhibition Building and Carlton Gardens in Melbourne for inscription in 2004. The Government is also undertaking consultations for the development of future possible nominations including a series of Indigenous rock art sites, convict sites, the Sydney Opera House, Ningaloo in Western Australia and Cooloola in Queensland.

The Government will continue to promote better management of Australia's World Heritage places in partnership with the State and Territories, and work with the states to create opportunities for greater involvement of Aboriginal people in managing World Heritage properties.

### **Regional heritage**

The Australian Government recently established the Regional Natural Heritage Programme to help conserve the biodiversity of the South-East Asia-Pacific region. In cooperation with regional governments, the Programme will assist with identifying, protecting and managing areas in South-East Asia and the Pacific region recognised as global biodiversity hotspots or major wilderness areas. The Programme has a budget of \$10 million over three years.

The Government also provides regional leadership in the management of World Heritage places through a range of activities.

### **Cultural heritage**

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* provides Indigenous people with an avenue, after state and territory processes are exhausted, to protect and prevent the desecration of areas and objects of particular significance according to Aboriginal tradition. The Government is continuing to consult stakeholders about the revised legislation, the Aboriginal and Torres Strait Islander Heritage Protection Bill, in preparation for its passage through parliament.

The *Historic Shipwrecks Act 1976* provides for the protection of declared historic shipwrecks and relics in waters under Commonwealth responsibility. In 2003-04 the Australian Government provided \$391,000 to the States and Territories under the Historic Shipwrecks Programme for the protection and preservation of historic shipwrecks, research projects and community information.

As part of its commitment to ensure that Australia's most important movable cultural heritage is not lost to the nation, the Government provides annual funding up to \$500,000 for the National Cultural Heritage Account. Established under the *Protection of Movable Cultural Heritage Act 1986*, the Account assists with the acquisition and care of, and access to, nationally significant heritage objects.

The Cultural Heritage Projects Programme provides assistance to community groups, private owners and local governments to identify and conserve their heritage places. In 2003-04, a fourth round of the Programme was advertised, attracting 289 applications. On 20 April 2004, the Minister for the Environment and Heritage announced 72 approved grants for this round valued at \$3.5 million. Funding in 2004-05 for cultural heritage projects will help to preserve significant historic and Aboriginal places including churches, homesteads and former missions, convict sites and important remnants of our industrial heritage.

In 2003-04, 178 projects to restore historic hotels in rural and regional areas were completed under the Rural and Regional Historic Hotels Programme.

During 2002-03 about 80 projects were funded under the Preservation and Promotion of Indigenous Heritage and Environment Programme. This involved about 5250 Indigenous people in making decisions about their heritage and environment.

Projects related to the protection and preservation of Dreaming sites, art sites and a stone-axe quarry; maintenance of historic cemeteries; support and promotion of women's lore and culture; protection of historic traditional art works on cave walls and protection of heritage values through the development of management plans for feral animal and plant control, community education and visitor management.

During 2004-05 funding will continue for regional, multi-regional and national heritage and environment projects.

Funding also supports the repatriation of Aboriginal and Torres Strait Islander ancestral remains and objects. During 2004-05 Indigenous human remains in some British and Swedish museums are expected to be repatriated. Secret/sacred objects in public museums in Sweden will be identified as a first step towards returning these objects to Australia in 2006.

### **The Sydney Harbour Federation Trust – creating a significant conservation asset**

The Sydney Harbour Federation Trust is responsible for planning, managing, conserving, enhancing and making accessible certain former Defence and other sites around Sydney Harbour. In 2004-05 \$25.1 million will be spent on this work.

Following a period of public exhibition, the Trust's comprehensive Plan was approved by the Minister for the Environment and Heritage in September 2003. The Plan sets out proposals for the Trust to rehabilitate, remediate, develop, enhance and manage the lands and maximise public access. By 2011 the rehabilitation of all of the lands and buildings is expected to be completed and the Trust sites are expected to be financially self-sustaining.

## **OUR ANTARCTIC TERRITORIES**

### **Protecting the Antarctic environment**

Australia is one of 12 original parties to the Antarctic Treaty, which came into force in 1961. Today there are 45 nations as part of this Treaty. Australia claims 42 per cent of Antarctica and has established four permanent stations: Casey, Davis and Mawson on the Antarctic continent (located in eastern Antarctica) and Macquarie Station in the sub-Antarctic.

The Australian Antarctic Division (AAD) is responsible for all scientific research in Australia's region of Antarctica. Not all research is undertaken by the AAD as there is significant collaboration between the AAD and research institutes from around Australia and the world. Up to 300 personnel travel south with the Australian Antarctic Division for the summer season from September to March. This includes scientists and support personnel. This number reduces to around 80 scientists and support personnel over winter

As a signatory to the Antarctic Treaty and its Protocol on Environmental Protection, and the Convention on the Conservation of Antarctic Marine Living Resources, Australia is committed to protecting the Antarctic environment, both in the activities it

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undertakes and in international fora. In 2004-05 the Government will spend \$88.6 million on the Antarctic.

Australia strives to achieve this goal through a range of activities, including developing ways to minimise environmental impacts, remediating past work sites, undertaking research to ensure that environmental and fisheries management is based on sound scientific principles, and by pursuing environmental protection measures in international fora.

Australia is leading Antarctic nations in efforts to clean up Antarctic waste disposal sites and abandoned work sites. In the 2003-2004 summer season over 1000 tonnes of waste were removed from the old Thala Valley tip site at Casey station. Innovative remediation technologies for cold regions were developed and applied to ensure the clean-up operation did not cause additional environmental impacts. Comprehensive environmental monitoring was used to confirm that no additional adverse environmental impacts occurred.

An Environmental Management System to ISO 14001 standard was implemented in 2003. Improvements made since then have drawn attention to the growing risk of introduction of alien species to the Antarctic and Heard Island Territories, and have led to tighter quarantine procedures.

Australia is making its Antarctic operations more environmentally friendly through the introduction of cost-effective renewable energy sources. The installation of wind turbines at Mawson Station is the first serious attempt by any nation to obtain a significant electricity supply via wind generation in Antarctica. The first two wind turbines were installed at Mawson Station in March 2003. Fuel savings of approximately 27 per cent have been achieved over their first year of operation – a total saving of around 159 000 litres of fuel, which would have a purchase price of around \$97,000. Wind turbines have enabled a significant reduction in the use of a fossil fuel and in environmental impacts arising from transporting and storing the fuel at Mawson.

In February 2004 additional electric heating capacity was installed at Mawson, which with sophisticated control software, will provide additional reliability for the system. The Australian Antarctic Division conducted an expedition to the Heard Island and McDonald Islands region in 2003-2004, which will yield information essential to the development of an effective management plan for the Commonwealth marine reserve.

Building on recent efforts, further conservation works on Mawson's Huts at Cape Denison, the site of the historic Australasian Antarctic Expedition, are being planned for 2004-2005.

### **Enhancing Australia's influence in the Antarctic Treaty System**

Australia takes a lead role in the Antarctic Treaty System.

Australia is pursuing an improved international management framework for tourism and other non-government activities in Antarctica to ensure that such activities occur in a manner consistent with the protection of the environment and in harmony with scientific research activities.

Australia is continuing to work with parties to the Protocol on Environmental Protection to the Antarctic Treaty (the Madrid Protocol) to develop rules on liability for environmental damage in Antarctica linked to an agreed system of response action in the case of environmental emergencies.

Australia and New Zealand are leading work within the Antarctic Treaty's Committee on Environmental Protection to develop a State of the Antarctic Environment Reporting mechanism.

### **Combating illegal, unreported and unregulated fishing**

Australia is taking strong measures, domestically and internationally, to combat illegal fishing for Patagonian Toothfish. Australia continues to play a leading role in the Commission for the Conservation of the Antarctic Marine Living Resources, and to influence decisions to protect Antarctic marine living resources by developing initiatives for consideration at Commission meetings, by complying with the requirements of the Commission and by cooperating with other countries.

These efforts focus on initiatives to combat illegal fishing and protect high seas biodiversity in the Southern Ocean. Australia is working with other key Commission Members to ensure the success of a centralised Vessel Monitoring System trial and will seek full implementation of the system at the next Commission meeting in 2004.

Australia is continuing to seek improvements to the Catch Documentation Scheme, including developing standard verification and validation procedures and an electronic based system, as well as greater implementation of the Scheme by other nations that are not parties to the Convention on the Conservation of Antarctic Marine Living Resources.

### **The Antarctic airlink**

Australia is continuing to develop a low-impact Antarctic air transport system to support our Antarctic Programme. Successful trial preparations were carried out for a snow capped ice runway near Casey Station during the summers of 2002-2003 and 2003-2004, and two ski-equipped CASA-212 aircraft will operate intra-continental services from October 2004.

### **Undertaking scientific work of environmental and economic significance**

Antarctic research is producing information of significance in many areas, including the environment and the global climate system. Australia is also investigating the

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interaction of natural variability of the Southern Ocean with the ocean's biota, to improve understanding of commercially important marine species and their sustainable harvesting, and climate change.

Research into how pollutants from abandoned Antarctic tip sites interact with local marine flora and fauna has led to new ways to contain and treat leaching materials. Such technology and research is now being shared with other nations interested in cold-climate site remediation.

Studies at Davis station show that the middle atmosphere, the coldest region of the Earth's atmosphere, is cooling significantly. Research into causes suggests that greenhouse gases play a major part.

#### **Understanding the role of Antarctica in the global climate system**

Antarctica plays an important role in the global climate system because of its low temperatures, circumpolar ocean and immense size. The dynamic interactions between the water, ice, and atmosphere in the region drive many of the world's ocean currents and climate systems, including Australia's weather. Australia is conducting research into these interactions to obtain a better understanding of the role of the Antarctic in global climate systems and to aid in climate prediction.

A significant initiative was the establishment in Hobart of the Antarctic Climate and Ecosystems Cooperative Research Centre in July 2003 with funding of \$23.5 million over seven years, including \$4.3 million in 2004-05, supplemented by the cash and in-kind contributions of the Centre's partner organisations. Of these, the Australian Antarctic Division is the largest contributor to the Centre. The focus of the Centre's work is to understand natural variability in the Southern Ocean and estimate the influence of variability of the ocean's biota. Other key areas of research include investigation of the role of the high latitude oceans in future sea-level rise, and the capacity of the Southern Ocean to act as a sink for carbon dioxide.

#### **METEOROLOGY**

The Bureau of Meteorology contributes to Australia's social, economic, cultural and environmental goals by providing essential weather, climate, hydrological and oceanographic services and by undertaking research into environment-related issues such as global climate change, stratospheric ozone depletion, air quality and water resources management. The Bureau of Meteorology will spend \$9.3 million on environment focussed project activities in the year 2004-05.



### **The ocean forecasting system**

An ocean forecasting capability is being developed to generate sustainable economic wealth, boost defence environmental intelligence, extend climate prediction and monitoring, and enhance environmental protection and safety at sea. A collaboration between the Bureau of Meteorology, CSIRO and the Royal Australian Navy, known as the BLUElink project, will generate the first routine Australian 4-6 day ocean forecasts, starting around 2005.

The project will provide information on coastal and ocean currents and eddies, as well as the changes in the ocean on and below the surface that impact maritime and defence operations and the life cycles of marine creatures as well as regional and global climate. Forecasts of surface and sub-surface ocean conditions for the Australian region will be generated by computer simulation, based on observations from an expanding global and local network of satellites, robotic instruments, moored and drifting buoys, research vessels, commercial shipping, and coastal tide gauges.

### **Air quality prediction system**

With support from the Natural Heritage Trust, collaboration between the Bureau, CSIRO and state environment protection agencies led to the implementation of an air-quality prediction system for Sydney and Melbourne, based on the Bureau's weather prediction model. The system was developed for the Sydney Olympics and designed to be extended to other major national airsheds. As a step towards the extension, the weather prediction component of the Melbourne model will be extended to include Tasmania and a new model will be implemented to cover the Brisbane area. Over the last year, the emissions inventory model has been significantly improved and research has continued on the representation of aerosols in the model.

### **Bushfire Cooperative Research Centre**

The Bureau contributes to the recently established Bushfire Cooperative Research Centre through the conduct of meteorological research and the provision of operational support. The Centre has a detailed, user-focussed research programme and among its objectives are:

- improved seasonal fire weather outlooks and fire weather warnings;
- contribution to public awareness and disaster planning;
- maintenance of biodiversity, improved prescribed burning and smoke management;
- prevention and suppression strategies and fuel reduction environment management; and
- enhanced community self-sufficiency in the rural/urban interface.

### **Doppler radar**

The first of six Doppler radars, which form part of the Government's five-year, \$62 million commitment to upgrade the Bureau of Meteorology's vital weather radar network, is planned to commence operation in Brisbane in 2005. Further installations in Adelaide, Sydney, Tamworth, Yarrawonga and Melbourne will follow over the next four years. Doppler radars, now standard in most developed countries, will improve the Bureau's ability to detect and predict the development of severe weather events including large hailstorms, damaging wind squalls, tornadoes and heavy rain.

## CHAPTER 4: STRATEGIES AND TOOLS

### ENVIRONMENT ASSESSMENT AND APPROVALS

The Australian Government, through the *Environment Protection and Biodiversity Conservation Act 1999*, continues to protect matters of national environmental significance: nationally threatened species and ecological communities, internationally important wetlands, migratory species, World Heritage properties, National Heritage places, the Commonwealth marine environment, and protecting the environment from nuclear actions.

The Act's streamlined and efficient environmental assessment and approvals process is world's best practice and provides a very effective means for the Government to achieve environmental outcomes of national importance.

The first external performance review of the administration of the Act, conducted by the Australian National Audit Office in 2003, concluded that the Act's administration is sound and effective. The Productivity Commission, in the course of inquiring into the impact of native vegetation regulation in late 2003, made a draft finding that the Act met more of the criteria for good regulation than legislation in other jurisdictions, particularly by setting out time limits for consideration of applications and taking economic and social factors into account in the approvals process.

The inclusion of National Heritage places as a matter of national environmental significance has strengthened the Act. The Act has also been made more effective through provisions which deal with staged developments and which enforce decisions that a development can be undertaken without approval provided that the development is undertaken in a particular manner to avoid significant impacts on matters protected by the Act.

Potential users have been provided with increased guidance on the operation of the Act. Targeted awareness raising activities have given some proponents practical assistance on the operation of the Act.

The Act continues to encourage development interests to communicate with the Department of the Environment and Heritage early in the project design phase. This helps ensure that effective environment protection measures are incorporated in project designs prior to making a referral. This, in turn, means that the project may not need to be assessed and approved under the Act.

Several developments will enhance environmental outcomes under the Act during 2004-05. More industry sector guidelines will provide improved guidance on what

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actions are likely to have a significant impact on the matters protected by the Act. Landholders will be assisted through the use of conservation agreements to carry out biodiversity conservation initiatives. The Department's monitoring and audit effort will be enhanced to ensure compliance with approval and 'particular manner' conditions.

### SCIENCE SUPPORTING POLICY DEVELOPMENT

Science, innovation and technology can contribute significantly to the sustainability of our continent. This supports the Government's National Research Priorities, specifically, responding to Climate Change and Variability (An Environmentally Sustainable Australia), as we continue to integrate evidence-based science and sound policy development.

In 2004-05, the Government will continue to support its investments in environmental and natural resource management through:

- marine scientific research including analysis of global trends, international action and challenges on the mitigation of marine wildlife bycatch, sustainable fish stocks, predicting climate impacts upon marine ecosystems, conservation of marine biodiversity, water quality of the Great Barrier Reef World Heritage Area, sustainable development of tropical marine resources, and deriving benefits from marine biotechnologies;
- the Cooperative Research Centres which facilitate strategic and collaborative research between industry, research organisations, and universities. Cooperative Research Centres address a broad range of national environmental issues, including managing invasive species, dryland salinity, water quality, sustainable fisheries, greenhouse accounting, sustainable tourism, Antarctic and Southern Ocean sustainability, and bushfire management, prevention and education;
- scientific research into climate variability and forecasting, groundwater and surface water management, waste management, sustainable natural resource management and sustainable cities, and air quality;
- research and application of nuclear related technologies in areas such as global climate change, weather and climate prediction models, atmospheric pollution and water resource management strategies, and mitigation of potential climate change impacts;
- geo-scientific research into the development of a national risk assessment framework to support the Disaster Mitigation Australia Package, that will help to redress the adverse impacts of natural disasters in Australia;

- Australia's Antarctic Science Programme; and
- review and monitoring of environmental management practices to improve the sustainability of government activities and operations through environmental management systems, and environmental monitoring programmes for technical development.

## ENVIRONMENTAL EDUCATION

The Government has continued to work with the National Environmental Education Council to promote a better understanding of the environment and what needs to be done to sustain it. Activity has focused on education initiatives for business and industry, community, further and higher education and formal schooling.

Achievements include an increased profile for environmental education through the establishment and activities of the National Environmental Education Council; improved coordination and use of resources for environmental education nationally through the National Environmental Education Network; a more informed approach to new environmental education initiatives through an applied research programme with Macquarie University; and an enhanced approach to environmental education in schools. Up to 300 schools are participating in the trial of the Sustainable Schools Programme. This has seen some schools cut their waste to landfill by up to 90 per cent, achieve savings in water costs of up to \$3000 per year, and substantially increase the biodiversity of their grounds.

## INTERNATIONAL LEADERSHIP AND ASSISTANCE

Australia continues to be an influential and constructive player in the international environment, making tangible contributions to sustainable development both globally and regionally.

Following agreement at the World Summit on Sustainable Development (WSSD), the Commission on Sustainable Development (CSD) agreed on water sanitation and human settlement themes for 2004-05 cycles of CSD discussions. Australia has helped shape the issues for negotiations in 2005, with a particular emphasis on water management, sound governance, and water trading. Australia is also supporting the Johannesburg Plan of Implementation negotiated at WSSD, which covers issues relating to sustainable cities, including poverty, education and sustainable consumption and production.

Managing and preventing environmental degradation is integral to the Government's international development cooperation objectives of reducing poverty and ensuring

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sustainable development in developing countries. Australia contributes significantly to international environmental development cooperation through bilateral, regional and multilateral action. In 2004-05, Australia will provide an estimated \$280 million for activities that address environmental problems in developing countries.

The Government continues to assist Indonesia, Papua New Guinea, and the South Pacific region to improve their environmental governance and natural resource management capacities. Support for multilateral activities includes the Global Environment Facility, the United Nations Environment Programme and the Montreal Protocol Multilateral Fund to assist with global efforts to repair the ozone layer.

In 2004-05, Australia will continue to participate in negotiations on trade and environment issues. Australia will participate in the World Trade Organization Committee on Trade and the Environment and negotiations in its Special Session. There were also negotiations on environment issues in the free trade agreement with the United States.

The Government continues to support international environmental health issues through annual contributions to the World Health Organization and the International Programme on Chemical Safety. These contributions assist countries to achieve safe, sustainable and health-enhancing human environments.

Through its participation in the Australia/United States Climate Action Partnership, Australia also developed proposals with US contacts to enhance seasonal climate prediction capacity in Pacific Island countries aimed at reducing impacts on agriculture and other sectors of the economy through improved planning.

As a part of Australia's international development cooperation programme, the Government funds agricultural research activities aimed at delivering benefits to developing countries. In 2004-05, the Government will invest \$1.2 million on research projects aimed at reducing and/or remediating environmental damage from agricultural practices, managing natural resources such as forests, soils, water supplies and marine fisheries, and developing measures to control threats from invasive species.

### TAX CONCESSIONS & INCENTIVES

The Government provides a range of environmental taxation concessions and incentives. They include:

- the opportunity for a donor, who has donated a gift of \$5,000 or more to an environmental organisation or the National Trust, to claim the donation against their tax returns over a five-year period;

- tax deductible donations to environmental organisations with deductible gift recipient status through the Register of Environmental Organisations. In 2002-03 tax deductible donations to organisations listed on the Register were over \$55 million, an increase from \$12 million over the term of the Howard Government;
- concessional capital gains tax or income tax deductions for landowners who enter into conservation covenants with eligible organisations;
- a tax offset for primary producers and users of rural land for capital expenditure on soil conservation, prevention of land degradation, and related measures;
- tax deductions for primary producers and users of rural land for water conservation and amelioration of degraded lands;
- tax deductions for expenditure incurred on environmental impact statements and remediation; and
- funding of incentive payments to eligible organizations that re-use or recycle waste oil through the imposition of a levy on lubricating oils and similar products under the Product Stewardship Arrangements for Waste Oil Programme.

# APPENDIX 1: ENVIRONMENT EXPENDITURE

**Table A1: Environment Activities – programme and tax expenditure estimates**

Division/ Agency	Description	2003-04 \$m	2004-05 \$m	2005-06 \$m	2006-07 \$m	2007-08 \$m
DAFF/DEH- NRMPD	National Action Plan for Salinity and Water Quality	113.8	152.7	149.1	119.3	71.6
	<b>Natural Heritage Trust</b>					
DAFF/DEH	Bushcare	84.5	105.4	105.4	102.0	102.0
	Coastcare	32.3	40.3	40.3	39.0	39.0
	Landcare	64.6	80.6	80.6	78.0	78.0
	Rivercare	67.1	83.7	83.7	81.0	81.0
	Air & Waste	1.3	-	-	-	-
	<b>Total</b>	<b>363.6</b>	<b>462.7</b>	<b>459.1</b>	<b>419.3</b>	<b>371.6</b>
	<b>ATMOSPHERE</b>					
ACA	Implementation of EMR exposure arrangements and awareness	0.4	0.4	0.2	na	na
ARPANSA	Environmental Radioactivity Monitoring	2.0	2.7	2.5	2.0	2.0
ARPANSA	Measurement of the Solar Ultraviolet Radiation Environment	0.3	0.3	0.3	0.3	0.3
Defence	Atmosphere Programmes	2.1	0.3	0.3	0.3	0.3
DEH - PCEPD	Fuel Quality and Vehicle Emissions	10.0	7.7	6.6	8.0	-
DEH - PCEPD	Ozone Protection	4.8	6.0	6.2	6.1	4.9
DEH - PCEPD	Air Quality Management	1.9	1.9	2.5	2.5	2.3
DITR	Biofuels Capital Grants Program	-	37.6	-	-	-
DITR	Geological Sequestration of CO2	2.8	2.9	3.0	2.9	2.9
DOTARS/DEH	Review of Vehicle Emissions and Fuel Standards	na	1.2	0.4	na	na
DOTARS/DEH	Green Vehicle Guide	na	1.1	0.2	0.1	0.1
DOTARS	Renewable Energy Windfarm - Cocos Keeling Islands	0.4	0.4	-	-	-
	<b>Greenhouse - meeting the challenge of climate change</b>					
ABARE	Impacts of Climate Change Response Policies	1.2	1.2	1.2	1.2	1.2
AGO	Greenhouse Gas Abatement Program	12.0	17.9	28.0	22.1	15.0
AGO	Alternative Fuels Conversion Program	8.2	3.2	3.3	2.0	1.0
AGO	Photovoltaic Rebate Program	4.0	5.8	0.0	0.0	0.0
AGO	Renewable Remote Power Generation Program	16.7	26.7	26.4	18.8	19.1
AGO	Renewable Energy Commercialisation Program	9.1	4.8	1.7	0.0	0.0
AGO	Renewable Energy Equity Fund	3.8	3.3	1.5	1.1	0.3
AGO	Influencing International Climate Change Policy		5.0	4.8	6.4	6.4
AGO	Action on Energy Efficiency		6.3	6.7	7.2	7.2
AGO	Challenge Plus - Industry Partnerships		6.9	6.9	8.8	8.8



Environmental Expenditure

Division/ Agency	Description	2003-04 \$m	2004-05 \$m	2005-06 \$m	2006-07 \$m	2007-08 \$m
AGO	Low Emission Technology and Abatement		3.2	5.7	9.0	9.0
AGO	Local Greenhouse Action		3.2	3.2	3.6	3.8
AGO	Greenhouse Action to Enhance Sustainability in Regional Australia		4.8	4.9	5.4	5.4
AGO	National Climate Change Adaptation Programme		2.3	3.6	4.0	4.2
AGO	Emissions Measurement and Analysis		8.7	8.1	8.1	8.2
AGO	Climate Change Science Programme		6.6	6.8	8.6	8.7
AGO	Strategic National Response		7.3	7.2	7.0	7.0
AGO	Administrative items yet to be attributed		0.4	0.4	0.4	0.4
AGO	Climate change programmes (a)	43.4	-	-	-	-
ORER	Funding to continue operation	1.9	2.5	2.7	2.8	2.6
Australia Post	Greenhouse Challenge	0.3	0.3	0.3	0.3	0.3
CSIRO	Understanding and Responding to Climate Change and Variability	33.7	35.8	na	na	na
DITR	Climate Change Response Activities	2.1	na	na	na	na
	<b>Total</b>	<b>161.0</b>	<b>218.8</b>	<b>145.7</b>	<b>139.0</b>	<b>121.4</b>
	<b>BIODIVERSITY*</b>					
ATO	Tax Treatment of Conservation Measures	20.0	25.0	25.0	30.0	30.0
CSIRO	Knowing, Protecting, and Benefiting from Ecosystems	43.0	46.8	na	na	na
DAFF	Quarantine activities	11.0	20.8	-	-	-
DAFF	Plants and Pests Programmes	22.6	9.2	4.7	3.0	3.0
DAFF	Agriculture Policy and Programmes	30.0	16.0	18.0	18.0	17.8
Defence	Biodiversity Programmes	3.6	4.5	4.5	4.5	4.5
DEH-AWD	Wildlife Protection and Trade	12.7	12.3	13.3	12.4	12.4
DEH-LWCD	Biodiversity	3.8	3.5	3.5	3.9	3.7
DITR	National Biotechnology Strategy Environment Component	-	1.0	0.5	0.5	0.5
DITR	Tourism in Protected Areas	-	1.1	1.9	1.7	-
DOTARS	National Aerial Firefighting Strategy	5.5	5.5	5.5	5.5	-
Health - OGTR	Gene Technology Regulation	8.1	8.4	na	na	na
	<b>Total</b>	<b>160.3</b>	<b>154.1</b>	<b>76.9</b>	<b>79.5</b>	<b>71.9</b>
	<b>COASTS &amp; OCEANS *</b>					
CSIRO	Sustainable Marine Fisheries	24.3	27.0	na	na	na
CSIRO	Healthy coastal rivers, estuaries and coastal zone	na	8.4	na	na	na
Customs	Civil maritime surveillance and response (b)	257.4	306.2	-	-	-
Customs	Surveillance & enforcement program - protection of Australia's Southern Ocean water and resources	10.2	45.4	38.9	-	-
DAFF	Fishery Policy & Programs	32.4	34.3	31.3	31.6	32.2
DAFF	Marine Policy	1.4	1.4	1.3	1.0	-
DAFF	Protection of Australia's Southern Ocean Water and Resources	1.8	2.5	2.5	-	-
Defence	Coasts and Oceans Programmes	1.2	1.0	1.0	1.0	1.0
DEH - LWCD	Coastal, marine and estuarine environment	2.8	6.0	6.2	6.6	5.4

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<b>Division/ Agency</b>	<b>Description</b>	<b>2003-04 \$m</b>	<b>2004-05 \$m</b>	<b>2005-06 \$m</b>	<b>2006-07 \$m</b>	<b>2007-08 \$m</b>
DEH- LWCD	Sewerage Schemes for Boat Harbour and Sisters Beach, Tasmania	1.0	1.0	-	-	-
DITR	Coastal zone & estuary mapping, estuaries and wetlands research, & sea surface temperature monitoring	2.4	2.5	2.5	2.6	2.6
DOTARS	Australian Maritime Safety Authority National Plan	4.9	5.1	4.8	4.8	4.9
DOTARS	Australian Transport Safety Bureau Marine Confidential Reporting System	0.2	0.2	0.2	0.2	-
GBRMPA	Care and Development of the Great Barrier Reef Marine Park	31.9	38.6	38.5	37.2	31.8
DEH-PCEPD	Representative Areas - Structural Adjustment Package	-	8.6	1.6	-	-
NOO	Implementation of Oceans Policy	9.1	9.3	-	-	-
TSRA	Sustainable fisheries activities and research	0.2	0.2	0.2	0.2	0.2
	<b>Total</b>	<b>381.2</b>	<b>497.7</b>	<b>129.0</b>	<b>85.2</b>	<b>78.1</b>
	<b>ASSESSMENTS AND APPROVALS*</b>					
Defence	Environment Assessment and Approvals	1.4	1.6	1.6	1.6	1.6
DEH-AWD	Environment Assessment and Approvals	12.7	12.5	13.6	12.6	12.6
DITR	Strategic EIA of Offshore Petroleum Exploration and Review of the <i>Petroleum (Submerged Lands) (Management of Environment) Regulations 1999</i>	0.6	0.6	0.6	0.6	0.6
DOFA	Remediation of the Former Defence Land at Ettamogah	0.1	-	-	-	-
DOFA	Environment Assessment of the Property Portfolio	0.1	-	-	-	-
	<b>Total</b>	<b>14.9</b>	<b>14.7</b>	<b>15.8</b>	<b>14.8</b>	<b>14.8</b>
	<b>HUMAN SETTLEMENTS*</b>					
ATO	Environmental Impact Statements and Remediation	3.0	3.0	3.0	3.0	3.0
ATO	Product Stewardship Arrangements for Waste Oil	12.3	15.9	19.0	21.0	24.0
ATSIS	Community Housing and Infrastructure	0.3	na	na	na	na
CSIRO	Sustainable Cities	30.0	34.0	na	na	na
Defence	Human Settlements programmes	4.4	3.0	3.0	3.0	3.0
DEH-PCEPD	Chemicals Management	5.7	4.7	4.3	4.3	4.2
DEH-PCEPD	Control of Hazardous Waste	1.7	1.8	2.4	2.3	1.9
DEH-PCEPD	Gene Technology Assessment	1.0	1.1	-	-	-
DEH-PCEPD	Industry Partnerships	1.6	1.5	-	-	-
DEH-PCEPD	National Environment Protection Council	1.7	1.7	2.0	1.8	2.4
DEH-PCEPD	Measures for a Better Environment - Sustainable Cities	0.9	2.2	5.5	6.5	6.8
DEH-PCEPD	National Pollutant Inventory	1.5	1.5	1.3	1.3	1.4
DEH-PCEPD	Product Stewardship Arrangements for Waste Oil	7.8	6.9	6.8	5.8	-
DEH-SSD	Uranium mining supervision and research	7.2	7.3	7.0	7.4	7.4
DEST	National Radioactive Waste Repository and Store	9.7	5.5	0.4	0.4	-
DIMIA	Community Housing and Infrastructure	na	0.3	0.3	0.3	0.3

Environmental Expenditure

Division/ Agency	Description	2003-04 \$m	2004-05 \$m	2005-06 \$m	2006-07 \$m	2007-08 \$m
DIMIA	Environmental information for new arrivals	na	na	na	na	na
DITR	Environment Industries Action Agenda and EMS	0.4	na	na	na	na
DoFA	Remediation of Snapper Island	-	1.2	-	-	-
DoFA	Management of ANZAC Rifle Range	-	0.7	-	-	-
DOTARS	Local Government Financial Assistance Grants	na	na	na	na	na
DOTARS	Australian Bicycle Council	na	na	na	na	na
DOTARS	Transport Programmes (Roads)	na	na	na	na	na
DOTARS	Software and discussion paper on noise at airports	na	na	na	na	na
DOTARS	Adelaide Airport Noise Amelioration Programme	16.3	13.6	-	-	-
DOTARS	Sydney Airport Noise Amelioration Programme	8.2	9.2	-	-	-
Health	National Return and Disposal of Unwanted Medicines	1.3	1.3	-	-	-
Health	National Industrial Chemicals Notification and Assessment Scheme	-	-	-	-	-
	<b>Total</b>	<b>115.0</b>	<b>116.4</b>	<b>55.0</b>	<b>57.1</b>	<b>54.4</b>
	<b>ENVIRONMENTALLY RESPONSIBLE GOVERNMENT</b>					
Defence	Environment Management System	4.1	3.6	3.6	3.6	3.6
DEWR	Environment Management System	0.3	0.1	0.1	0.1	0.1
DVA	Environmental Management System	-	0.4	0.4	0.4	0.4
MRT	Environmental Management System	-	0.1	-	0.1	-
NLA	Environmental Management System	0.6	1.3	1.3	1.6	0.6
RRT	Environmental Management System	-	0.2	-	0.1	-
SBS	Energy Efficiency and Waste Management	..	..	..	..	..
	<b>Total</b>	<b>5.0</b>	<b>5.7</b>	<b>5.4</b>	<b>5.9</b>	<b>4.7</b>
	<b>INLAND WATERS*</b>					
CSIRO	Inland Waters	na	34.0	na	na	na
DAFF	Water Policy	15.5	21.3	25.3	25.4	16.1
DAFF	Living Murray (c)	-	-	-	-	-
Defence	Inland Waters	1.2	0.8	0.8	0.8	0.8
DEH-LWCD	Inland Waters	4.3	4.1	4.2	4.5	4.4
DEH-SSD	Protection of Tropical Wetlands	0.8	0.8	0.8	0.8	0.8
DEST	International Centre of Excellence in Water Resource Management	1.5	3.0	2.2	-	-
DITR	Joint Government Enterprise	15.0	7.5	7.5	7.5	7.5
DITR	Regional Minerals Programme - water supply and management studies	..	-	-	-	-
	<b>Total</b>	<b>38.3</b>	<b>71.5</b>	<b>40.8</b>	<b>39.0</b>	<b>29.6</b>
	<b>LAND MANAGEMENT*</b>					
CSIRO	Sustainable Natural Resource Management	na	45.9	na	na	na
DAFF	Forest management	1.5	-	-	-	-
DAFF	National Landcare programme	39.1	39.3	40.2	40.0	40.0
DAFF	Scientific advice for the sustainable natural resource management policy	13.5	13.5	13.5	13.5	13.5

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<b>Division/ Agency</b>	<b>Description</b>	<b>2003-04 \$m</b>	<b>2004-05 \$m</b>	<b>2005-06 \$m</b>	<b>2006-07 \$m</b>	<b>2007-08 \$m</b>
Defence	Land management	3.0	6.7	6.7	6.7	6.7
DEH - LWCD	Land management	1.8	1.6	1.5	1.9	1.9
FACS	Green Corps	23.5	23.9	na	na	na
	<b>Total</b>	<b>82.4</b>	<b>130.9</b>	<b>61.9</b>	<b>62.1</b>	<b>62.1</b>
	<b>PARKS AND RESERVES*</b>					
DEH - Parks	Australian Biological Resources Study	4.7	4.7	4.8	5.4	5.4
DEH - Parks	Managing Commonwealth Parks and Reserves (d)	52.4	57.0	59.3	61.6	61.7
DOTARS	Rehabilitation of mine sites on Christmas Island	1.0	1.0	1.0	1.0	1.0
	<b>Total</b>	<b>58.1</b>	<b>62.7</b>	<b>65.1</b>	<b>68.0</b>	<b>68.1</b>
	<b>HERITAGE*</b>					
ATSIS	Repatriation/Preservation and Promotion of Indigenous Heritage and Environment	1.2	na	na	na	na
DIMEA	Repatriation/Preservation and Promotion of Indigenous Heritage and Environment	na	1.7	1.7	1.7	1.7
DEH-HD	Heritage Programmes	18.3	28.0	30.0	25.0	25.0
Defence	Heritage	1.7	2.7	2.7	2.7	2.7
DoFA	Refurbishment of Fort Scratchley	0.3	4.3	1.2	-	-
DOTARS	Kingston Pier Refurbishment	-	3.1	-	-	-
DOTARS	Kingston and Arthur's Vale Historic Area	0.5	0.5	0.5	0.5	0.5
DVA	Commemorations Grant Programme	0.9	-	-	-	-
SHFT	Sydney Harbour Federation Trust	17.5	25.1	28.6	29.1	29.6
	<b>Total</b>	<b>40.4</b>	<b>65.4</b>	<b>64.7</b>	<b>59.0</b>	<b>59.5</b>
	<b>ANTARCTIC</b>					
DEH-AAD	Advancing Australia's Interest in Antarctica	86.4	88.0	88.0	89.3	90.5
DITR	Antarctic Research and Southern Ocean mapping	1.1	0.6	0.2	0.2	0.2
	<b>Total</b>	<b>87.5</b>	<b>88.6</b>	<b>88.2</b>	<b>89.5</b>	<b>90.7</b>
	<b>METEOROLOGY</b>					
BoM	National and International Activities (e)	9.4	9.3	9.2	9.1	9.0
DITR	Meteorological Data Supply	1.1	1.1	1.1	1.2	1.1
	<b>Total</b>	<b>10.5</b>	<b>10.4</b>	<b>10.3</b>	<b>10.3</b>	<b>10.1</b>
	<b>Other</b>					
ABS	Environment and Energy Statistics	2.0	2.0	2.0	2.0	2.0
ACIAR	International Development Corporation	1.2	1.2	1.2	1.2	1.2
AGD	Commonwealth Community Environmental Legal Programme	na	0.7	na	na	na
AIMS	Sustainable Use and Protection of Australia's Marine Biological Diversity	22.1	22.5	23.0	23.4	23.5
ANSTO	Application of Nuclear-related Technologies for the Protection and Enhancement of the Environment	5.3	6.2	5.4	6.0	5.1
ATSIS	Community Development and Employment Program	0.5	na	na	na	na
AusAID	International Development Corporation	267.0	280.0	na	na	na
DIMIA	Community Development and Employment Program	na	0.6	0.6	0.6	0.6

*Environmental Expenditure*

<b>Division/ Agency</b>	<b>Description</b>	<b>2003-04 \$m</b>	<b>2004-05 \$m</b>	<b>2005-06 \$m</b>	<b>2006-07 \$m</b>	<b>2007-08 \$m</b>
DEH-CSD	Environmental Resources Information Network	2.7	2.7	2.7	2.7	2.7
DEH-CSD	Community Environmental Education	0.8	1.0	1.3	1.0	0.5
DEH-PCEPD	International Issues	1.0	1.0	1.0	1.0	1.0
DEH-PCEPD	Grants to Voluntary Environment and Heritage Organisations	0.8	1.0	1.0	1.0	1.0
Defence	Other environmental issues	2.0	1.4	1.4	1.4	1.4
DEST	Cooperative Research Centres	50.1	54.0	48.0	34.0	29.1
DEWR	Indigenous Employment Policy	na	na	na	na	na
DITR	Monitoring Landscape Environmental Change	3.0	3.1	3.1	3.1	3.1
DITR	Topographical Mapping of Australia's Geohazards	8.0	7.8	8.1	8.3	8.4
Health	International environmental issues	2.6	2.6	2.6	2.6	2.6
Indigenous Land Corporation	Land Management	77.5	77.8	110.6	106.0	98.3
National Archives of Australia	Touring Exhibition	-	0.2	0.1	0.1	0.1
	<b>Total</b>	<b>446.6</b>	<b>465.8</b>	<b>212.1</b>	<b>194.4</b>	<b>180.6</b>
	<b>TOTAL ALL ENVIRONMENT ACTIVITIES</b>	<b>1964.8</b>	<b>2365.4</b>	<b>1429.9</b>	<b>1323.0</b>	<b>1217.5</b>

**Notes for Appendix 1**

- Denotes nil.
- na Denotes not available.
- .. Denotes not zero but rounded to zero.
- \* In order to avoid double counting of the NHT expenditure, which is already shown in total near the top of the table, the total expenditure shown for this theme does not include additional NHT expenditure.
- (a) See table below outlining details of the AGO climate change programmes in 2003-04.
- (b) The Australian Customs Service estimate comprises funding for the total output within Customs that provides environmental services as part of the activities associated with civil maritime surveillance.
- (c) This budget reaffirms the landmark \$200 million for a Basin-wide strategic approach to water over-allocation in the Murray-Darling Basin agreed at COAG in August 2003, announced in the 2003-04 Additional Estimates.
- (d) There is no direct appropriation from the Australian Government to the Director of National Parks. Funding will be appropriated directly to the Department of the Environment and Heritage and transferred to the Director of National Parks (\$36.0 million in 2004-05).
- (e) Estimated expenditure on environmental activities undertaken by the BoM. This is approximately 5 per cent of the total BoM expenditure including the renewal of the World Class Weather Forecasting initiative.

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**Table for Note (a) above - details of the AGO climate change programmes in 2003-04**

<b>Division/ Agency</b>	<b>Description</b>	<b>2003-04 \$m</b>
AGO	Greenhouse International Policy and Reporting and Greenhouse Sinks	6.0
AGO	Efficiency Standards for Power Generation	0.7
AGO	Energy Efficiency Improvement in Commonwealth Operations	0.8
AGO	Energy Performance Codes and Standards for Domestic Appliances and Industrial Equipment	3.9
AGO	Renewable Energy Internet Site	0.1
AGO	Mandatory Target for the Uptake of Renewable Energy in Power Supplies	2.8
AGO	Bush For Greenhouse	1.3
AGO	Cities for Climate Protection	3.1
AGO	Cool Communities	1.8
AGO	Greenhouse Friendly	0.6
AGO	National Strategies	1.0
AGO	Renewable Energy Showcase	0.3
AGO	Renewable Energy Commercialisation Program	0.1
AGO	Greenhouse Challenge	4.9
AGO	Domestic Greenhouse Policy Development	6.5
AGO	Greenhouse Science	4.1
AGO	National Carbon Accounting System for Land Based Sources and Sinks	3.6
AGO	Impacts and Adaptation	1.0
AGO	Greenhouse and Natural Resource Management	0.7
AGO	<b>Total</b>	<b>43.4</b>

## APPENDIX 2: CONTACTS DETAILS OF DEPARTMENTS AND AGENCIES

**Table A2: List of Division and Agencies with Website and Contact Details**

Acronym	Division / Agency	Website / Contact
AAD	Australian Antarctic Division	<a href="http://www.aad.gov.au">www.aad.gov.au</a> (03) 6232 3209
ABS	Australian Bureau of Statistics	<a href="http://www.abs.gov.au">www.abs.gov.au</a> 1300 135 070
ACA	Australian Communications Authority	<a href="http://www.aca.gov.au">www.aca.gov.au</a> 1300 850 115
ACIAR	Australian Centre for International Agricultural Research	<a href="http://www.aciar.gov.au">www.aciar.gov.au</a> (02) 6217 0500
DAFF	Department of Agriculture, Fisheries and Forestry	<a href="http://www.affa.gov.au">www.affa.gov.au</a> (02) 6272 3933
AGD	Attorney-General's Department	<a href="http://www.ag.gov.au">www.ag.gov.au</a> (02) 6250 6666
AGO	Australian Greenhouse Office	<a href="http://www.greenhouse.gov.au">www.greenhouse.gov.au</a> (02) 6274 1888
AIMS	Australian Institute of Marine Science	<a href="http://www.aims.gov.au">www.aims.gov.au</a> (07) 4753 4490
ANSTO	Australian Nuclear Science and Technology Organisation	<a href="http://www.ansto.gov.au">www.ansto.gov.au</a> (02) 9717 3111
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency	<a href="http://www.arpansa.gov.au">www.arpansa.gov.au</a> (02) 9545 8333
ATO	Australian Taxation Office	<a href="http://www.ato.gov.au">www.ato.gov.au</a> (02) 6279 7538
ATSIS	Aboriginal and Torres Strait Islander Services	<a href="http://www.atsis.gov.au">www.atsis.gov.au</a> (02) 6121 4000
AusAID	Australian Agency for International Development	<a href="http://www.ausaid.gov.au">www.ausaid.gov.au</a> (02) 6206 4000
Aust Post	Australia Post	<a href="http://www.auspost.com.au">www.auspost.com.au</a> (03) 9204 7484
BOM	Bureau of Meteorology	<a href="http://www.bom.gov.au">www.bom.gov.au</a> (03) 9669 4000
CSIRO	Commonwealth Scientific and Industrial Research Organisation	<a href="http://www.csiro.au">www.csiro.au</a> 1300 363 400
Customs	Australian Customs Service	<a href="http://www.customs.gov.au">www.customs.gov.au</a> 1300 363 263
Defence	Department of Defence	<a href="http://www.defence.gov.au">www.defence.gov.au</a> (02) 6265 9111
DEST	Department of Education, Science and Training	<a href="http://www.dest.gov.au">www.dest.gov.au</a> (02) 6240 8111
DEWR	Department of Employment and Workplace Relations	<a href="http://www.dewr.gov.au">www.dewr.gov.au</a> (02) 6121 6000
DEA-AWD	Department of the Environment and Heritage — Approvals and Wildlife Division	<a href="http://www.deh.gov.au">www.deh.gov.au</a> (02) 6274 1111
DEH-HD	Department of the Environment and Heritage — Heritage Division	<a href="http://www.deh.gov.au">www.deh.gov.au</a> (02) 6274 1111
DEH-NRMPD	Department of the Environment and Heritage — Natural Resource Management Programmes Division	<a href="http://www.deh.gov.au">www.deh.gov.au</a> (02) 6274 1111

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DEH-Parks	Department of the Environment and Heritage — Parks Australia	<a href="http://www.deh.gov.au">www.deh.gov.au</a> (02) 6274 1111
DEH-PCEPD	Department of the Environment and Heritage — Policy Coordination and Environment Protection Division	<a href="http://www.deh.gov.au">www.deh.gov.au</a> (02) 6274 1111
DEH-CSD	Department of the Environment and Heritage — Corporate Strategies Division	<a href="http://www.deh.gov.au">www.deh.gov.au</a> (02) 6274 1111
DEH-SSD	Department of the Environment and Heritage — Supervising Scientist Division	<a href="http://www.deh.gov.au">www.deh.gov.au</a> (02) 6274 1111
DFAT	Department of Foreign Affairs and Trade	<a href="http://www.dfat.gov.au">www.dfat.gov.au</a> (02) 6261 1111
DHA	Department of Health and Ageing	<a href="http://www.health.gov.au">www.health.gov.au</a> 1800 020 103
DIMIA	Department of Immigration and Multicultural and Indigenous Affairs	<a href="http://www.immi.gov.au">www.immi.gov.au</a> 13 18 81
DOTARS	Department of Transport and Regional Services	<a href="http://www.dotars.gov.au">www.dotars.gov.au</a> (02) 6274 7111
DOFA	Department of Finance and Administration	<a href="http://www.finance.gov.au">www.finance.gov.au</a> (02) 6215 2222
DVA	Department of Veterans' Affairs	<a href="http://www.dva.gov.au">www.dva.gov.au</a> 133 254
FaCS	Family and Community Services	<a href="http://www.facs.gov.au">www.facs.gov.au</a> 1300 653 227
GBRMPA	Great Barrier Reef Marine Park Authority	<a href="http://www.gbrmpa.gov.au">www.gbrmpa.gov.au</a> (07) 4750 0700
Green Corps	Family and Community Services — Green Corps	<a href="http://www.greencorps.com.au">www.greencorps.com.au</a> 1800 077 700
ITR	Department of Industry, Tourism and Resources	<a href="http://www.industry.gov.au">www.industry.gov.au</a> (02) 6213 6000
NOO	National Oceans Office	<a href="http://www.oceans.gov.au">www.oceans.gov.au</a> (03) 6221 5000
OGTR	Office of the Gene Technology Regulator	<a href="http://www.ogtr.gov.au">www.ogtr.gov.au</a> 1800 181 030
ORER	Office of the Renewable Energy Regulator	<a href="http://www.orer.gov.au">www.orer.gov.au</a> (02) 6274 2192
SHFT	Sydney Harbour Federation Trust	<a href="http://www.habourtrust.gov.au">www.habourtrust.gov.au</a> (02) 8969 2100
TSRA	Torres Strait Regional Authority	<a href="http://www.tsra.gov.au">www.tsra.gov.au</a> (07) 4069 0700