



Australian Government

Department of the Environment and Heritage

Environment budget overview

2005-06



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A message from the Minister



Protecting our environment and natural heritage for future generations is something all Australians can take part in.

This year the Australian Government continues to address Australia's top environmental concerns in a practical and targeted way, matched with historic levels of funding. Overall, the 2005–06 Budget increases spending for the environment and heritage to \$3.2 billion, of which \$923.7 million is committed to my portfolio alone.

This investment targets our most urgent environmental challenges like greenhouse gas emissions, water and waste, helping community groups manage and protect our natural resources through effective on the ground solutions. It supports existing programmes such as Envirofund under the \$3 billion Natural Heritage Trust and other programmes through the National Action Plan on Salinity and Water Quality.

The Government has already demonstrated its commitment to meeting its 2004 election promises. The Government has committed \$200 million over the next five years to the Australian Government's Community Water Grants, an important part of the new \$2 billion Australian Government Water Fund.

Introduced weeds are harmful for agricultural productivity and for the environment, and \$40 million—including \$8 million from the Natural Heritage Trust—has been committed over the next four years to combat the menace of weeds.

The 2005–06 Budget has a strong focus on Australia's position as a world leader in environmental research. The Commonwealth Environment Research Facilities (CERF) programme provides \$100 million over five years to establish world class centres of environmental research that will benefit the entire community by helping our scientists understand and respond to environmental concerns.

The construction of an Air Link, which will operate between Hobart and the Antarctic, will cement Australia's reputation as a leader in Antarctic, marine and climate change research.

The Australian Government is funding a range of new technology projects, including: \$2 million over three years to assist with the uptake of technologies to ensure industry recycles used oil; \$5.7 million per year for two years to extend the popular Photovoltaic Rebate Programme—encouraging the installation of solar-electricity systems in buildings around Australia; and \$1 million over three years for a scoping study into the use of hydrogen buses and establishment of hydrogen fuel depots in Australian capital cities.

I am pleased to present this overview of the Government's key outcomes for Australia's environment and heritage, which outlines spending on environment activities for 2005–06 and the years ahead. This includes all new environment-related measures managed by Australian Government portfolios as well as a summary of the work on which these initiatives build.

A handwritten signature in black ink, appearing to read 'Ian Campbell'.

Senator the Hon. Ian Campbell

Whole-of-Government environment expenditure

The Australian Government remains committed to a whole-of-government approach to sustainability through effective environmental policies and their implementation and management—an approach that continues to result in record levels of environmental spending. It is an approach that engages all Government agencies and all sectors of the community in helping to achieve Australia’s sustainable future.

Led by the Sustainable Environment Committee of Cabinet, the Department of the Environment and Heritage (DEH) and the Department of Agriculture, Fisheries and Forestry (DAFF) are at the forefront of environment policy development and implementation. Other agencies with significant environment-related expenditure include: the Department of Transport and Regional Services; the Australian Customs Service; AusAID; the National Water Commission; the CSIRO; the Department of Education, Science and Training; and the Australian Taxation Office.

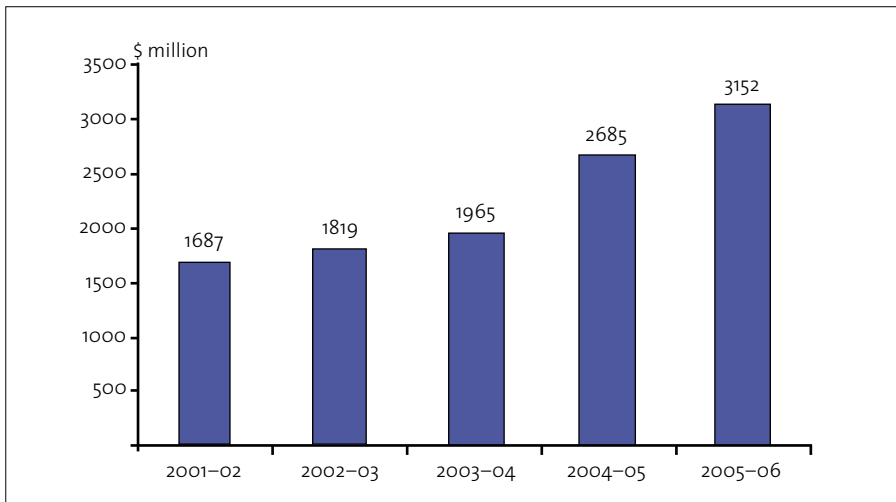


CHART 1.1: WHOLE-OF-GOVERNMENT ENVIRONMENT-RELATED ESTIMATED EXPENDITURE

Together, this spending supports initiatives ranging from: on-ground environmental protection and repair; improved institutional arrangements and incentives for management of land and water resources; research and development; collation and provision of data; taxation concessions; and incentives to overseas development assistance.

The Australian Government’s environment and heritage agenda is comprehensive and ambitious. The challenges it addresses include salinity, water use and recycling, the environmental performance of Government operations and sustainable management of Commonwealth land and water. Further challenges include sustainable resource management including energy use, climate change and natural, Indigenous and historic heritage.

The Australian Government’s contribution to environment protection is not limited to the Australian continent but includes the oceans, island territories, and Antarctica. The Government also works to protect the environment in our regions, particularly the Asia-Pacific. In Australia, internal assistance for environmental sustainability targets natural resource management, oceans, the atmosphere, biological diversity, deforestation and desertification.

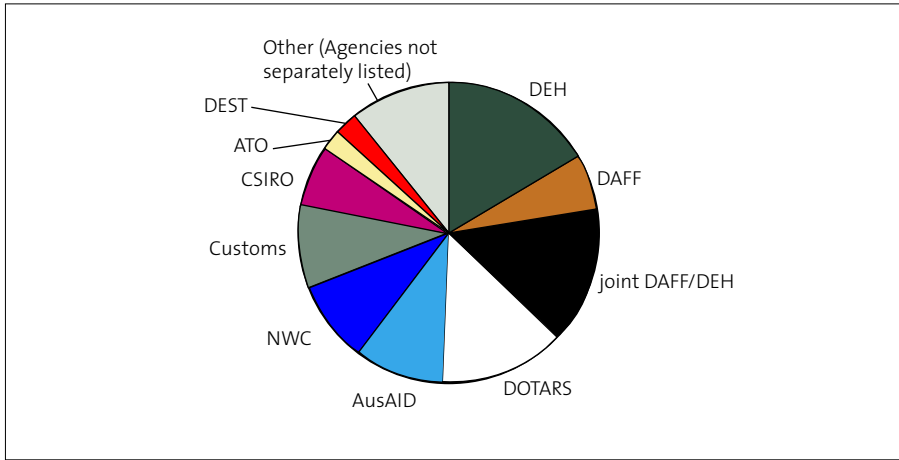


CHART 1.2: MAJOR AGENCY CONTRIBUTIONS TO ENVIRONMENT-RELATED ESTIMATED EXPENDITURE 2005-06

Note: The extent to which spending can be identified and ascribed to environmental purposes varies across portfolios and programmes. As a result, some expenditure with environmental implications may not be recorded in this statement.

TABLE 1.1: MAJOR AGENCY CONTRIBUTIONS TO ENVIRONMENT-RELATED ESTIMATED EXPENDITURE 2004-05 TO 2008-09

DEPARTMENT/AGENCY	2004-05 \$M	2005-06 \$M	2006-07 \$M	2007-08 \$M	2008-09 \$M
DEH	472.8	528.0	594.1	557.2	454.4
DAFF	137.8	187.9	192.0	155.2	34.4
Joint DAFF/DEH	389.0	470.3	431.3	396.1	0.0
Subtotal DAFF/DEH	999.6	1186.1	1217.5	1108.5	488.8
DOTARS	405.2	423.4	435.1	451.0	467.5
AusAID	278.0	305.0	0.0	0.0	0.0
NWC	56.9	283.0	570.3	560.5	200.7
Customs (a)	279.8	270.2	41.7	42.1	42.6
CSIRO	231.3	207.7	212.9	0.0	0.0
ATO	71.0	74.0	76.0	80.0	83.0
DEST	55.2	59.6	50.6	45.3	33.9
Other (Agencies not separately listed)	308.3	343.2	332.5	309.2	287.4
TOTAL	2685.2	3152.2	2936.4	2596.5	1603.8

(a) Figures for the Civil Maritime Surveillance programme in Customs are available for 2004-05 and 2005-06 only. Remaining years' funding represents Southern Ocean Surveillance programme only.

Note: 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'.

Environmental protection, sustainable agricultural production and natural resource management are complementary rather than conflicting goals, which is why the Government's flagship natural resource management programmes — the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality (NAP) — are delivered jointly by DEH and DAFF (see Table 1.2).

In 2004, the Government announced the \$2 billion Australian Government Water Fund, comprising three new programmes: Water Smart Australia; Raising National Water Standards; and the Australian Government Community Water Grants. The first two programmes will be managed by the newly created National Water Commission, while DEH and DAFF will jointly administer the third.

TABLE 1.2: MAJOR AUSTRALIAN GOVERNMENT ENVIRONMENTAL PROGRAMME DETAILS

DIVISION/ AGENCY	DESCRIPTION	2004–05 \$M	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M
Natural Heritage Trust						
DEH/DAFF	Bushcare	105.4	105.4	102.0	102.0	0.0
DEH/DAFF	Landcare	80.6	80.6	78.0	78.0	0.0
DEH/DAFF	Rivercare	83.7	83.7	81.0	81.0	0.0
DEH/DAFF	Coastcare	40.3	40.3	39.0	39.0	0.0
Total		310.0	310.0	300.0	300.0	0.0
Australian Water Fund						
NWC	Water Smart Australia	46.9	253.0	530.3	520.5	165.7
NWC	National Water Standards	10.0	30.0	40.0	40.0	35.0
DEH/DAFF	Australian Water Fund — Community Water Grants	6.3	53.9	54.9	54.9	30.0
Total		63.2	336.9	625.2	615.4	230.7
DAFF/DEH	National Action Plan for Salinity and Water Quality	87.4	168.4	137.9	96.1	0.0

NOTES ON TABLE 1.2

Australian Water Fund—Water Smart Australia

Since the Mid-Year Economic and Fiscal Outlook 2004–05, \$34.8 million of the \$46.9 million originally appropriated for 2004–05 will now be largely spent in 2005–06, primarily reflecting the expected timing of grant payments.

Australian Water Fund—National Water Standards

Since the Mid-Year Economic and Fiscal Outlook 2004–05, \$8.7 million of the \$10.0 million appropriated for 2004–05 will now be largely spent in 2005–06, primarily reflecting the expected timing of grant payments.

New environment-related spending 2005–06 Budget

The new environment-related spending in the Howard Government's 2005–06 Budget is outlined in Table 1.3. These amounts build upon previous environment expenditure levels, and continue the Government's practical and focussed approach to sustainability.

TABLE 1.3: NEW ENVIRONMENT-RELATED SPENDING 2005–06 TO 2008–09

INITIATIVE	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M	4 YEAR TOTAL
Environment and Heritage Portfolio					
Commonwealth Environment Research Facilities (a)	4.8	22.1	22.6	25.2	74.7
Regional marine planning – extension of funding	9.4	-	-	-	9.4
Hydrogen fuel depots and buses – scoping study*	0.3	0.4	0.3	-	1.0
Launceston's air quality	0.4	0.3	0.2	-	1.0
Used oil recycling – uptake of technologies*	0.7	0.6	-	-	1.3
National recycling telephone hotline*	0.1	0.1	0.1	-	0.3
Green stamp programme – extension*	0.4	0.3	0.2	-	0.9
Water Efficiency Labelling and Standards Scheme	1.4	0.0	-0.2	-0.5	0.7
National Pollutant Inventory – continuation*	1.3	1.3	1.3	1.3	5.2
Wildlife Programme and Biodiversity Conservation Responsibilities*	0.6	0.6	0.6	0.6	2.4
St Mary's Cathedral and the Church of St Mary's Star of the Sea – restoration	5.0	-	-	-	5.0
National Heritage Investment Initiative	2.5	3.8	3.8	0.5	10.5
Photovoltaic Rebate Programme – extension*	5.7	5.7	-	-	11.4
Australia–Antarctic Airlink	11.6	12.9	10.9	11.0	46.3
Townsville Aquarium Reef Headquarters – continuation*	0.6	0.6	0.6	0.6	2.2
Total – Environment & Heritage	44.8	48.6	40.3	38.6	172.4
Agriculture, Fisheries and Forestry Portfolio					
Southern Blue-fin Tuna (SBT)	1.0	1.0	1.0	-	3.0
Protection of Australia's Southern Ocean waters and resources	-	3.3	3.4	3.4	10.1
Joint Government Enterprise ('Water for Rivers') (b)	-	-	-	-	0.0
Health and Ageing Portfolio					
Office of the Gene Technology Regulator	7.9	8.0	8.1	8.2	32.2
National Return and Disposal of unwanted medicines	1.8	1.5	1.5	1.5	6.3
Customs					
Southern Ocean Surveillance	-5.5	41.7	42.1	42.6	120.9
Australian Bureau of Statistics					
New Survey of Natural Resource Management	1.1	0.5	1.1	0.6	3.3
Total	51.2	104.7	97.5	94.8	348.1

* The costs of these initiatives are being fully absorbed within existing resources of the Environment and Heritage portfolio.

(a) CERF funding consists of \$100 million over five years with funding of \$25.319 million in 2009–10.

(b) The funding for the Joint Government Enterprise ('Water for Rivers') was appropriated to DAFF in the 2004–05 Budget. This measure provides the authority for that funding.

Environment and Heritage portfolio expenditure



Alastair Betts

Commonwealth Environment Research Facilities (CERF)

Sound policy must be based on sound science, and the 2005–06 Budget includes \$100 million from 2005–06 to 2009–10 inclusive to improve Australia's capacity to understand and respond to priority environment concerns. The CERF will support research to inform environmental public policy objectives in a range of critical areas and draw on multiple disciplines, professional partnerships and existing research efforts.

Under this programme, \$40 million will be provided over five years for a Marine and Tropical Sciences Research Facility for research relating to the Great Barrier Reef, tropical rainforests and coastal issues. Sixty million dollars will be allocated through national funding rounds from July 2006 for high quality research.

Regional marine planning—extension of funding

Australia's marine industries generate more than \$30 billion annually. The development of regional marine plans helps improve our understanding of the biodiversity of the marine environment and the economic potential of Australia's oceans. Marine planning has already made great contributions to science and vastly increased our knowledge of the marine environment.

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In 2005–06, the Government will continue to provide annual funding of \$9.4 million for the implementation of regional marine planning, while reviewing this programme to determine future funding. This will enable DEH to progress the regional marine plan for Northern Australia, including the Torres Strait, initiate the gathering of marine science information in South-Western Australia, and to continue implementation of the South-East Regional Marine Plan.

Hydrogen fuel depots and buses—scoping study

The Government will provide \$1 million over three years for a scoping study into developing hydrogen fuel depots and buses in Australian capital cities. This measure will involve funding of \$300,000 in 2005–06, \$400,000 in 2006–07 and \$300,000 in 2007–08. The costs will be funded through a reprioritisation of existing resources in the Alternative Fuels Conversion Programme.

Subject to the findings of the scoping study, the Government will provide funding of up to \$66 million between 2007–08 and 2011–12 as a contribution to the costs of developing hydrogen fuel transport and infrastructure. The cost of this component of the measure will be met from existing resources within the Environment and Heritage portfolio.

Launceston's air quality

As indicated in its election statement *Strengthening Tasmania's Economy and Building a Better Community*, the Australian Government will provide \$1 million over three years to improve air quality in Launceston. Air quality in the Tamar Valley region of Tasmania continues to fail the national air quality standard for particles by a substantial margin, and there is strong evidence that links exposure to wood-smoke particles with serious health effects, including increased mortality and respiratory illnesses.

The measure will aim for industry agreement to invest in cleaner technologies through such financial incentives as co-funding to replace polluting wood-fired technologies with cleaner-burning alternatives, maintaining the momentum of the highly successful Launceston Wood-Heater Replacement Programme.

Used oil recycling—uptake of technologies

The Government will provide \$2 million (including \$700,000 in 2004–05) over three years to develop and promote the uptake of technologies to ensure the recycling of used oil. This measure delivers the Australian Government's 2004 election commitment to develop and promote the uptake of technologies such as hydrogenation to ensure used oil can be reused as lubricant rather than burned as alternative fuel for industry.

This will provide the used oil collection and recycling industry with a sustained outlet for collected used oil, ensure that Australia diversifies its re-refining capacity for lubricating oil from a single plant to two plants, and add significantly to the volume of re-refined oil.

National recycling telephone hotline

In its 2004 election statement *A Sustainable Australia — Recycling Rewards*, the Australian Government committed to fund the development of a national recycling telephone hotline to enable the public to find information on the types of waste that can be recycled in their local areas. In the 2005–06 Budget the Government will provide \$300,000 over three years to deliver this commitment by working with Planet Ark (building on their 'Recycling Near You' web based service), local government and recyclers.

The hotline will complement a range of national programmes concerning the recovery and recycling of consumer goods and packaging, such as the National Packaging Covenant and proposed schemes to recycle tyres and televisions.

Green Stamp programme—extension

Green Stamp is a programme to encourage recycling by businesses involved in the automotive trades. It has been in place for nearly three years and funding supports staff in the Western Australia Motor Traders Association to undertake environmental audits of individual businesses, develop improvement plans and accredit businesses.

The Government will provide \$900,000 over three years to deliver its 2004 election commitment to extend the Green Stamp programme nationally to encourage recycling in the automotive retail industry, while reducing its resource and energy use and the use of toxic materials.

Water Efficiency Labelling and Standards scheme

In the 2005–06 Budget the Government has decided to implement a five-yearly Water Efficiency Labelling Standards (WELS) Scheme registration fee. This fee will be raised by DEH to provide a viable long-term funding platform for the regulatory oversight and administration of the WELS scheme. The scheme requires a range of water-using appliances to carry an efficiency label and covers domestic washing machines, dishwashers, showers, toilets, certain types of taps, and urinals.

Consumers are expected to reap cost savings of approximately \$600 million by 2021 due to the energy and water savings delivered through the WELS scheme. Water consumption could be reduced by around 87 million litres (ML) per annum by 2021, with water savings over the interim period totalling about 610,000 ML — greater than the volume of Sydney Harbour.



| Windmill: Arthur Mostead | South Coast Beach: Tony Karacsonyi |



Tony Karacsonyi

National Pollutant Inventory—continuation

The Government will provide \$5.2 million over four years to upgrade and continue the operation of the National Pollutant Inventory (NPI), an Internet database that maintains information on the types and amounts of pollutants emitted and the possible health and environmental effects of these emissions. The NPI aims to protect the atmosphere and improve the sustainability of human settlements by providing information to improve environmental planning and management practices.

Under the *National Environment Protection Council Act 1994*, the Commonwealth has a statutory obligation to implement the National Environment Protection Measure for the National Pollutant Inventory. The NPI also provides essential information for State of the Environment reporting, as required under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Wildlife Programme and Biodiversity Conservation Responsibilities

Invasive species can have devastating impacts on our native flora and fauna. In the 2005–06 Budget the Government will provide \$2.4 million over four years to extend existing activities that build expertise and capability both within Australia and with Australia's near neighbours to recognise and deal with introduced and native wildlife at the border.

The programme implements the Government's commitment to stronger border protection to minimise establishment of invasive species, and supports its objective of building regional partnerships. It aims to regulate the import and export of wildlife and wildlife products in accordance with Australia's obligations under international conventions and legislative obligations, and implements risk assessment requirements for the import of live species in accordance with the EPBC Act.

St Mary's Cathedral and the Church of St Mary's Star of the Sea—restoration

Churches and cathedrals have long been at the centre of community life in Australia. In 2005–06 the Government will provide \$3 million to St Mary's Cathedral in Perth and \$2 million to St Mary's Star of the Sea Church in Melbourne to undertake conservation and restoration works.

National Heritage Investment Initiative

In the last Parliament, the Government amended the EPBC Act to strengthen protection of the nation's heritage. Included in the amendments was the establishment of a National Heritage List of places that have outstanding heritage value to the nation.

Over 2005–06 and 2008–09 \$10.5 million will be provided under a new National Heritage Investment Initiative. The Initiative will provide financial incentives to restore and conserve Australia's most important historic heritage. Priority will be given to places included in the National Heritage List.

Photovoltaic Rebate Programme—extension

Photovoltaic (PV) technology is an important element in meeting the increasing electricity demands of future housing while lowering the greenhouse intensity of our economy. PV technology is already commercial in a growing number of niche markets. Market barriers must be overcome and costs reduced to bring about widespread uptake of PV technology in grid-connected residential systems.

The Government has committed supplementation of \$11.4 million over the next two years to extend the PV Rebate Programme to support smaller manufacturers, distributors and installers of PV systems and continue developing the PV market until the Solar Cities and Advanced Energy Storage Technology initiatives impact on the removal of PV market barriers.

Australia–Antarctic Airlink

The Australian Government is committed to an efficient and effective research programme in Antarctica and the Southern Ocean. The Government will provide \$46.3 million over the next four years to lease a long-range Bombardier Global Express intercontinental jet aircraft and provide additional resourcing for an Australian inter-continental air link. This service, which will be based in Hobart, will provide air passenger access to and from Antarctica in support of Australia's Antarctic programme, and also has the potential to provide a surveillance platform for the protection of Australia's assets in the Southern Ocean.

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Townsville Aquarium Reef Headquarters—continuation

The Townsville Aquarium is the Great Barrier Reef Marine Park Authority's (GBRMPA) principal education tool, facilitating community understanding of the Marine Park and critical issues affecting the health and status of the Great Barrier Reef. The aquarium houses the world's largest living coral reef aquarium and is widely recognised as an important asset for North Queensland tourism.

Although the Aquarium operates on a primarily commercial basis, recovering over 80 per cent of its operating costs from self-generated revenue, ongoing funding is required to meet any operating cost shortfalls.



DFAT Overseas Information Branch

The Government will re-allocate \$550,000 per annum to meet these costs and ensure that community service obligations are met.

Agriculture, Fisheries and Forestry portfolio environment-related expenditure

Southern Blue-fin Tuna

Australia is committed to the long-term sustainable management of the global southern blue-fin tuna stock. The Government will provide \$3 million from 2005–06 to 2007–08 as Australia's contribution to membership of the Commission for the Conservation of Southern Blue-fin Tuna (CCSBT) and to CCSBT's Scientific Research Programme. These funds will assist the CCSBT to ensure the conservation and optimum utilisation of Southern Blue-fin Tuna.

Protection of Australia's Southern Ocean waters and resources

The Government will provide the Australian Fisheries Management Authority with supplementation of \$10.1 million from 2006–07 to 2008–09 to continue its efforts, in conjunction with armed patrols conducted by the Australian Customs Service, to protect Australia's Southern Ocean waters and resources. This programme is designed to protect Australia's sovereign interests, including our exclusive economic zone, in the Southern Ocean.

Joint Government Enterprise — 'Water for Rivers'

In the 2004–05 Budget, the Government provided \$7.5 million per annum to DAFF to fund the establishment and operation of a joint government enterprise, 'Water for Rivers'. This joint enterprise of the Australian, New South Wales and Victorian Governments seeks to achieve environmental flows of up to 212 gigalitres in the Snowy River and up to 70 gigalitres in the River Murray by 2012. The joint enterprise will fund a range of measures to recover water for environmental flows.

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Other environment-related expenditure

Continued funding for the Office of the Gene Technology Regulator

(Department of Health and Ageing — OGTR)

The Australian Government will continue to meet the challenges of protecting human health and the environment from the risks that may be posed by gene technology by providing \$32 million over four years to fund the Office of the Gene Technology Regulator.

The Gene Technology Regulator is responsible for assessing the applications from organisations within Australia to use gene technology in everything from research projects through to commercial applications. Approvals are only granted after a thorough scientific assessment by the Office of the Gene Technology Regulator to identify the risks of the proposal and whether they can be managed.

Gene technology is a controversial new technology and one that requires a strong and effective regulatory system that has the community's confidence.

There are currently 147 organisations across Australia that have been accredited to use gene technology. Some of these organisations are conducting leading edge medical research. Although much of this work has no immediate commercial application, it contributes to maintaining an internationally competitive scientific knowledge base that will ultimately benefit the Australian community.

National return and disposal of unwanted medicines

(Department of Health and Ageing)

The Government has provided funding to National Return of Unwanted Medicines Limited to conduct the National Medicines Disposal Program. This important initiative aims to reduce accidental poisoning of children, medication misuse and release of toxins into the environment, by collecting and disposing of expired and unwanted medicines. The programme will receive \$6.3 million over four years, an increase of \$1.5 million.

Additional funding for Southern Oceans Surveillance

(Australian Customs Service)

The Government is providing supplementation of \$120.9 million from 2006–07 to 2008–09 to continue surveillance of Australia's Southern Oceans to protect the integrity of Australia's national border. Specifically, the establishment of a surveillance and enforcement capability against illegal fishing activity in Australia's exclusive economic zone (EEZ) at Heard Island and the McDonald Islands (HIMI) will protect Australian sovereignty and environmental values in the region and the continued operation of a sustainable Australian fishing industry. The proposal provides a visible deterrent against illegal fishers entering and operating in the HIMI EEZ.

New Survey of Natural Resource Management

(Australian Bureau of Statistics (ABS))

The ABS will be given \$3.3 million over four years to conduct a new biennial Natural Resource Management Survey (NRM Survey). The NRM Survey will provide regional (statistical division) estimates of the main land and water management activities undertaken by Australia's farmers. Topics planned for the survey include: weed management; use of efficient irrigation techniques; the management of native vegetation and degraded areas; as well as the factors that affect the ability of farmers to manage the environment. The information from the survey will enable improved monitoring and evaluation of investments made under the Natural Heritage Trust, the National Action Plan and the National Water Initiative as well as supporting State of the Environment reporting.



Recent initiatives

Much new work has been funded since the 2004–05 Budget. Some of the most significant of these initiatives that pave the way for this year's Budget are summarised below.

National Water Initiative

Australia's highly variable and often-scarce water resources are crucial for our economic, social and environmental wellbeing and the National Water Initiative (NWI), agreed to and signed at the 25 June 2004 meeting of the Council of Australian Governments (COAG), is a comprehensive strategy to improve water management across the country. The NWI provides a framework for the continued improvement of the productivity and efficiency of our water use, while maintaining healthy river and groundwater systems.

The Australian Government Water Fund

The \$2 billion Australian Government Water Fund will promote increased productivity and better environmental and social outcomes through investment in smart water infrastructure and technologies, improved knowledge and water management, and better practices in the stewardship of Australia's water resources.

The three main components of the Australian Government Water Fund are: Water Smart Australia; Raising National Water Standards; and the Community Water Grants Programme. The National Water Commission, an independent statutory agency created in the Prime Minister's portfolio, administers the first two programmes. DEH and DAFF administer the Community Water Grants programme.

Water Smart Australia aims to accelerate the development and uptake of smart technologies and practices in water use across Australia. Through competitive grants the Government will directly support projects that develop technologies and practices that improve water use and management.

Through the Raising National Water Standards programme the Government will invest in Australia's national capacity to measure, monitor and manage its water resources. Investment through this programme will support: facilitation of a nationally consistent system for collecting and processing water data; strategic assessment of groundwater resources; local community work to improve the conservation of water systems with high environmental values; and the Water Efficiency Labelling scheme.

Community Water Grants promote the wise use of water. Two hundred million dollars will be available over the next five years for these grants (of up to \$50,000 each) to save and protect water resources through practical on-the-ground work.



Arthur Mostead

National Water Commission

The National Water Commission (NWC) is a key element of the NWI. The NWC is responsible for driving water reform, providing advice to the Council of Australian Governments (COAG) and the Australian Government on national water issues, and assisting in the administration of the Water Smart Australia and Raising National Water Standards programmes under the Australian Government Water Fund.

Murray–Darling Basin Intergovernmental Agreement

At the 25 June 2004 COAG meeting, the Australian Government agreed to contribute \$200 million towards implementation of the Murray–Darling Basin Intergovernmental Agreement (MDB IGA). This agreement between the Australian Government, New South Wales, Victoria, South Australia and the Australian Capital Territory sets out arrangements for investing \$500 million over five years from 2004–05.

The MDB IGA will support measures to reduce water over-allocation and achieve environmental benefits. Water recovery measures may include investment in water infrastructure, encouragement of behavioural change, and purchase of water on the market. Recovered water will be set aside for environmental purposes, with a focus on six significant ecological assets in the Murray–Darling Basin: Barmah-Millewa forest; Gunbower-Koondrook Pericoota forests; Hattah Lakes; Chowilla Floodplain (including Lindsay-Wallpolla); the Murray Mouth Coorong and Lower Lakes; and the Murray River Channel.

See: www.pmc.gov.au/nwi/; www.nrm.gov.au/water-fund/; www.nwc.gov.au/; and www.mdbc.gov.au/

Addressing Australia's Energy Needs Sustainably

In 2004 the Government's *Energy White Paper: Securing Australia's Energy Future* established a comprehensive long-term policy framework for Australian energy. It set out policies and principles that will guide the production and use of energy in Australia well into the 21st century, positioning Australia to be a global leader in combating emissions.

Securing Australia's Energy Future—Low Emissions Technology Demonstration Fund

The Government has provided \$522.9 million over 16 years to establish a Low Emissions Technology Demonstration Fund to accelerate the demonstration of new low emission technologies to achieve significant greenhouse abatement over the long-term. The fund is designed to be technology neutral. Technologies that could be eligible for support include low emission fossil fuel electricity generation, geosequestration, hot dry rocks, energy efficiency and intelligent transport systems.

Securing Australia's Energy Future—Solar Cities

The Government has provided \$75.3 million over nine years to trial the Solar Cities initiative, showcasing solar power and energy efficiency measures by Australian households and businesses. It will demonstrate the economic and environmental costs and benefits of solar technologies, energy efficiency, and smarter electricity meters that allow households to sell excess electricity back into the grid at peak times. Solar cities projects will be in urban settings, where households and businesses will trial solar energy systems for their electricity needs. The Australian Government will also work with state and local governments to improve energy market arrangements, and planning rules, which currently limit the uptake of solar energy.

Securing Australia's Energy Future—Wind Forecasting Capability

Wind is a renewable energy source and Australia's wind resource is world-class. The Government has provided \$14 million over five years to support the development of a wind forecasting capability for Australian conditions. This funding will be used to develop and install systems to provide wind energy forecasts to facilitate greater penetration of wind in energy markets.

Securing Australia's Energy Future—Advanced Electricity Storage Technologies

A fund of \$20.4 million over five years will develop advanced storage systems to manage the intermittency associated with some renewable energy sources. Wind and solar energy production are unable to consistently deliver electricity on demand because generation only occurs when wind and light are available. Low-cost ability to store generated energy, using it when required, will increase the attractiveness of these intermittent energy technologies.

Securing Australia's Energy Future—Energy Efficiency Opportunities Assessment

(Industry Tourism and Resources portfolio)

The Energy Efficiency Opportunities Assessment programme has received \$16.9 million over five years from 2004–05 to encourage the identification and uptake of commercial energy efficiency opportunities among Australia's largest business energy users. The realisation of these opportunities by Australian business will significantly improve economic productivity while reducing greenhouse emissions. Commencing in 2006, large energy-using businesses in Australia will be required to undertake an energy efficiency opportunities assessment every five years and report publicly on the outcomes.

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Securing Australia's Energy Future—Renewable Energy Development Initiative

(Industry Tourism and Resources portfolio)

The Government has provided \$100 million over seven years to support strategically important renewable energy initiatives with strong commercial potential, and emissions-reduction potential. This will provide grants to firms for the development and commercialisation of new products, processes and services in the following renewable energy technology sectors: wind, solar photovoltaics, solar thermal, biomass, geothermal energy, wave/ocean energy, hydro and related enabling technologies.

See: www.pmc.gov.au/publications/energy_future/; www.industry.gov.au; and www.greenhouse.gov.au/energy_transport.



Other initiatives

Kakadu National Park

Following the abolition of entry fees to Kakadu National Park, additional funding of \$16.4 million has been provided by the Government for the management of Kakadu and replacement of income foregone from entry fees to traditional owners.

In February 2005, the Kakadu Board of Management supported by the Australian and Northern Territory governments launched a strategic vision for tourism in Kakadu National Park, which emphasises the park's living culture, its natural beauty and partnership approach to management.



John Baker and the Australian Heritage Photo Library

Great Barrier Reef Structural Adjustment Package—enhancement

On 1 July 2004, rezoning in the Great Barrier Reef Marine Park increased the area of 'no take' zones in the Park from 4.5 per cent to 33.3 per cent, creating the largest network of protected marine areas in the world. The Government has provided further funding towards the structural adjustment package that will assist fishermen, related businesses and communities affected by the implementation of the new zoning.

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National Tidal Centre—additional funding

The Government established the National Tidal Centre in 2004 to collect, monitor and publicly provide sea level data at selected locations around Australia and in the South West Pacific. With funding drawn from government agencies that benefit from its services the Centre produces data to assist in deriving trends in absolute sea level, producing national tide predictions and tide streams, and monitoring effects of climate change on ocean levels. This supports Australia's social, economic, cultural and environmental goals, in particular defence, navigation, public safety and ship operations in Australian and nearby waters. The Centre can also, to a small extent, use data collection and monitoring instruments located in oceans around Australia to monitor tsunami traversing the Australian region. The Centre also provides information and support to the recreation, tourism and marine resource related industries.

Defeating the Weed Menace

(Agriculture, Fisheries and Forestry portfolio)

The Government has committed \$40 million—in addition to \$8 million from the Natural Heritage Trust—towards the National Weeds Strategy for the eradication of Australia's most threatening and invasive weeds. Weeds do immeasurable damage to the environment, agricultural industries, and to the nation's biodiversity. The most effective weed strategy is early detection and prevention and this funding will support research, biological control, community awareness and action, towards continued success in the prevention, control and eradication of weeds in Australia.

Illegal Foreign Fishers in Australia's Northern Waters

(Agriculture, Fisheries and Forestry portfolio)

Deterring illegal fishers is vital to the protection and sustainability of Australia's fish stocks. In December 2004, the Government announced a package of measures to boost efforts to combat illegal fishing in Australia's northern waters. The Government has provided \$43 million to: strengthen processing and detention arrangements for apprehended illegal foreign fishers; assist in the apprehension and prosecution of illegal fishers; and improve the Australian Quarantine and Inspection Service's ability to monitor and protect Australia from the potential quarantine risks posed by apprehended boats.

Eradicating the Red Imported Fire Ant

(Agriculture, Fisheries and Forestry portfolio)

The introduction of the red imported fire ant poses a serious threat to native flora and fauna and also has the potential to become a pest to the agricultural sector. To combat this threat, the National Red Imported Fire Ant Eradication Programme was launched in Queensland in 2001. This programme has been highly successful, with results to date showing that within the targeted 'Core Treatment Zones', approximately 99.4 per cent of previously infested properties no longer have viable nests. In early 2005, the Australian Government provided supplementation of \$24.3 million to continue the fight against this pest.

Maintaining a comprehensive approach

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The new and recent measures outlined so far build on a proud record of achievement, supported by historic levels of funding across Government.

In the Environment and Heritage portfolio, the Government's milestones and achievements are tracked against six themes: climate change; land and inland water; coasts and oceans; heritage; the impacts of human settlements; and the Antarctic; together with the activities of the Bureau of Meteorology.



Arthur Mostead

Climate change

Australia is threatened by climate change in two ways. First, future climate change is expected to bring more frequent extreme weather events and second, Australia's strong economy is heavily dependent upon the domestic use and export of our abundant and valuable fossil fuel reserves and is therefore potentially vulnerable to any poorly designed climate change response measures.

Energy accounts for 68 per cent of our national emissions and this percentage is rising. Energy sector emissions must be reduced as part of an effective climate change response in a way that minimises adverse economic impacts. Through current measures and partnerships with government, industry and the broader

community, Australia is expected to deliver annual energy emissions abatement of 94 million tonnes by 2008–12, the period relevant to current Kyoto emissions targets. This has us on track to meet our international commitment to reducing overall emissions to 108 per cent of 1990 levels by 2008–12. This will be done while maintaining a vibrant energy sector and a prosperous economy.

The Government remains committed to developing a robust and comprehensive global response to climate change. Australia's challenge is to deliver a response to climate change that meets our international obligations and reduces our greenhouse signature, while maintaining a strong economy that provides for the wellbeing of all Australians. The Australian Government's climate change strategy will meet this challenge by focusing and integrating measures in the following strategic areas:

EMISSIONS MANAGEMENT—focussing on targeted measures to deliver on current commitments, while preparing Australia to respond to potential long-term emissions constraints. Measures will integrate greenhouse issues into business and community decision making, reduce greenhouse gas emissions and accelerate the uptake of energy efficiency and low/zero emission technologies. Some of these measures are being jointly implemented with the Industry, Tourism and Resources portfolio.

An example of how the Government is putting these policies into action is the Office of the Renewable Energy Regulator (ORER) which works to oversee the implementation of the Government's Mandatory Renewable Energy Target.

INTERNATIONAL ENGAGEMENT — contributing to the development of an effective global response to climate change. Australia continues to participate actively through the United Nations Framework Convention on Climate Change (UNFCCC) and in other relevant international forums where the Environment and Heritage portfolio works closely with the Department of Foreign Affairs and Trade, as well as in international plurilateral technology partnerships, where the Environment and Heritage portfolio works closely with the Industry, Tourism and Resources portfolio.

IMPACTS AND ADAPTATION — addressing the risks, capturing the opportunities and preparing Australia for the impacts of climate change, through the National Climate Change Adaptation Programme.

SCIENCE AND MEASUREMENT — building our understanding of the science of climate change and our capacity to measure greenhouse emission trends accurately through the Australian Climate Change Science Programme in partnership with leading science agencies, notably the CSIRO and the Australian Academy of Sciences.

PALMER VALLEY STATION - SOLAR POWER SYSTEM

Palmer Valley Station is a large cattle station, owned by Ted and Sheri Fogarty, 150 kilometres south of Alice Springs. Power requirements for the station used to be met by a diesel generator, running for approximately 16 hours per day. This cost the Fogartys over \$20,000 a year making 24-hour power too expensive to consider.

The Fogartys sought a more cost-effective and reliable power system that could offer 24-hour power without additional fuel costs. They chose to install a photovoltaic (solar) array, inverter and batteries to complement their diesel generator. The Australian Government's Renewable Remote Power Generation Programme provided 50 per cent of the costs of the new components. They are impressed with the system's efficiency and being able to use the sun to provide most of their power, "under the new hybrid system, the sun does most of the work and we only need to run the engines for two or three hours a day to keep the batteries topped up. Everything we run now is solar friendly - such as low wattage freezers and special lights that don't draw too much power."

The Fogartys are also realising greater benefits than they had anticipated. Mrs Fogarty commented, "when we first installed our 24-hour solar power system, we only thought of the dollar savings. The convenience of having 24-hour power for our family and staff, and the peacefulness of it, outweighs everything." By reducing reliance on imported diesel, this project reduces greenhouse gas emissions and provides long-term economic benefits for Australia.

See: www.greenhouse.gov.au; www.orer.gov.au; www.industry.gov.au; and www.dfat.gov.au/environment/climate/.

Land and inland waters

The outstanding diversity of life supported by Australia's 7.6 million square kilometres of land and fresh waters is threatened by weed and feral pest invasion, disease, poor fire management, urban development and overgrazing.

The Australian Government is implementing a range of natural resource management approaches to encourage ecologically sustainable land use, prevent land and water decline, and ensure fresh water is available for the environment and for communities.

The most significant is the \$3 billion Natural Heritage Trust, which, in parallel with the National Action Plan for Salinity and Water Quality (NAP) (a joint commitment of \$1.4 billion with the states and territories), provides a long-term, coordinated approach to tackling the major environmental challenges facing our nation. DEH and DAFF jointly deliver these programmes. This year the Government will finish accrediting integrated natural resource management plans under the Trust and National Action Plan, and increase its focus on implementing regional investment plans.



CONSERVING BIODIVERSITY — The Government will work with state and territory governments to develop a national programme to address biodiversity decline, and develop a detailed plan to achieve the objectives of the 2004 National Biodiversity and Climate Change Action Plan. The Maintaining Australia's Biodiversity Hotspots Programme will protect biodiversity in hotspots by providing incentives for landholders and by helping private conservation groups to buy and protect land.

PROTECTED SPECIES — Recovery plans for over 800 species are now in place or in preparation, and multi-species regional recovery plans are being piloted in Western Australia, South Australia and Norfolk Island. The Government continues to fund recovery actions for threatened species through the Trust regional investments and engages community efforts through programmes such as the Threatened Species Network.

PESTS AND WEEDS — The Government will support development of the National Invasive Species Framework and the National Pest Animal Strategy, and begin a review of the National Weeds Strategy. In addition, the Government will continue to use Trust funding to develop biological control agents for weeds like *Mimosa pigra*, bridal creeper and salvinia.

NATIVE VEGETATION — The rate of loss of native vegetation is expected to drop significantly over the next three years, in part due to agreements negotiated with the states and territories under the Trust and NAP. Ongoing work with the states and territories includes:

- seeking support for the recommendations of the Productivity Commission inquiry, Impacts of Native Vegetation and Biodiversity Regulation, to reduce negative impacts on landholders while achieving conservation objectives;
- reviewing the National Framework for the Management and Monitoring of Australia's Native Vegetation to focus on the growing challenge of the decline in the condition of our remaining vegetation;

- working with the Tasmanian Government to progress the Government's Sustainable Future for Tasmania election commitment;
- continuing to enhance the capacity of the National Vegetation Information System; *and*
- continuing to support the 10 regional forest agreements.

Another focus of activity is the development of information and incentives for private landholders. The Government will hold the 2005 National Conservation Incentives Forum, a major training initiative with the Trust for Nature (Victoria). To protect our rangelands, the Government will develop better management practice guidance, assess market-based incentives to encourage sustainable rangeland management, and progressively build the Australian Collaborative Rangelands Information System.

To ensure that new programmes achieve the best outcomes for biodiversity, the Government will assess the biodiversity benefits of investments.

PARKS AND RESERVES — Through the Director of National Parks, the Government will continue to manage the 20 national parks and reserves established under the EPBC Act including Kakadu, Uluru-Kata Tjuta and Booderee National Parks. Support will continue for the National Reserve System and the Indigenous Protected Areas Programmes under the Trust.

PROTECTED WETLANDS — The Government will continue to identify wetlands of international importance—Ramsar wetlands—and update the Directory of Important Wetlands in Australia. Assistance for landholders will include advice on the sustainable management of wetlands based on rigorous research and a Ramsar Managers Network.

RIVER AND GROUNDWATER BASINS — Since 1996 the Government has committed over \$1 billion to restore the health of the River Murray. The Australian Government is contributing \$200 million to support the Murray–Darling Basin Ministerial Council's 'first step' decision to recover around 500 gigalitres of water at a cost of \$500 million over five years. The Government has also committed \$67 million over four years from 2004–05 to fund capital projects and education activities, and oversee salinity mitigation works in the Murray–Darling Basin. This includes funding towards the Murray–Darling Basin Commission's eight year \$150 million Environmental Works and Measures Programme. Thirty-eight projects under this programme are under way, including the watering of drought-stressed river red gums and the construction of fishways.

The Government will continue to support and work with the states and territories to protect the Lake Eyre Basin (the intergovernmental agreement is due for review in early 2006). It will also continue to support joint remedial works in the Great Artesian Basin and the WA Carnarvon Artesian Basin including the capping of old, free flowing bores and replacing bores with pipes (\$42.7 million over 2004–09).

Active participation in the Convention on Biological Diversity, Convention on Wetlands (Ramsar Convention) and the Convention to Combat Desertification will continue. This includes helping to negotiate an international regime on genetic resources, and sharing Australian expertise in wetlands and desertification issues.

FISHWAYS

Fishway monitoring, design and construction has been a successful cooperative venture between scientists, agencies and communities in the Murray–Darling Basin. The Australian Government, one of six signatories to the Murray–Darling Basin Agreement, is co-funding this programme which is an important step in the long-term ecological recovery of the River Murray.

Fishways, which consist of a series of interconnected pools, make it possible for native fish species to migrate upstream past weirs at any time. A programme is currently underway to construct a series of fishways along the River Murray to allow fish unimpeded passage from the sea to Hume Dam, a distance of 2225 kilometres.

See: www.nht.gov.au; www.nrm.gov.au; www.deh.gov.au/biodiversity; www.deh.gov.au/land; www.deh.gov.au/parks; www.deh.gov.au/water; and www.napswg.gov.au.

Coasts and oceans

Australia's coasts are in relatively good condition but under increasing pressure near agricultural and urban areas. The main risks are reduced water quality and loss of habitat. This year the Australian Government will invest approximately \$40 million in coastal protection under the Natural Heritage Trust.

INTEGRATED MANAGEMENT — The Government will continue to work with the states, territories and local authorities to implement the national framework for integrated coastal and oceans management. In addition, this year the Government will continue to implement the south-eastern regional marine plan, focus on the northern and Torres Strait regional marine plans, and commence work for the south-western regional marine plan.

GREAT BARRIER REEF — Last year, through the Great Barrier Reef Marine Park Authority, the Government created the world's largest network of highly protected marine areas – a third of the Great Barrier Reef Marine Park is now highly protected. The Government will continue to support commercial fishermen and others affected by the changes through the \$56.3 million structural adjustment package.

COASTAL POLLUTION — The Government will work with the Queensland Government to implement the Great Barrier Reef Water Quality Protection Plan, and support water quality improvement plans under the Coastal Catchments Initiative (\$18.1 million over 2002–06) in water quality hotspots, including the Great Barrier Reef, Peel-Harvey Estuarine System and Moreton Bay.

INTRODUCED MARINE PESTS — The Government will continue its work, with state and territory governments, to establish a permanent National System for the Prevention and Management of Introduced Marine Pest Incursions. The Government signed the Intergovernmental Agreement on a National System for the Prevention and Management of Marine Pest Incursions, on 15 April 2005, with Victoria, Tasmania and the Northern Territory.

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MARINE PROTECTED AREAS — Ongoing work to identify and declare new marine protected areas in Commonwealth waters through regional marine planning will see further extensions to the National Representative System of Marine Protected Areas.

SUSTAINABLE FISHERIES — Australia now has the third highest number of seafood products of any country endorsed by the international Marine Stewardship Council. The Government will continue to assess whether the management of Commonwealth and export fisheries is ecologically sustainable, and to work with other countries in our region to conserve shared fish stocks, such as southern blue fin tuna.

INTERNATIONAL ENGAGEMENT — The Government will continue to participate in the Convention on Migratory Species and the International Whaling Commission to reduce the risks faced by protected marine and migratory species. Continuing participation in the International Maritime Organisation will help to prevent and control marine pollution from shipping, sea dumping and sea installations such as artificial reefs. The Government will also continue to call for protected areas on the high seas through the United Nations, and to help Pacific island countries and APEC members with oceans management issues.

See: www.deh.gov.au/biodiversity; www.deh.gov.au/coasts; www.oceans.gov.au; www.gbrmpa.gov.au; and www.nrm.gov.au.

ARAFURA SEA VOYAGE

Marine scientists and Indigenous communities learned from each other in a unique collaborative voyage off northern Australia late in 2004. Traditional owners and Aboriginal Sea Rangers from Arnhem Land joined marine scientists on a marine survey of inshore waters around the Arnhem Coast and Arafura Sea — the first investigation of these remote waters since the 19th Century expeditions of Philip Parker King on the Mermaid and John Lort Stokes on the Beagle. Members of Indigenous communities provided guidance on research sites and traditional knowledge of species for scientists involved in the project. All data and reports from the survey will be made available to the Indigenous communities around the Arnhem Land coast. The Australian Government provided funding for this activity, in partnership with the Northern Territory Government, the Northern Land Council and the Museum and Art Gallery of the Northern Territory.

Natural, Indigenous and historic heritage

Australia's unique natural, Indigenous and historic heritage makes a significant contribution to our sense of national identity and purpose. The Howard Government has introduced a new National Heritage System (including an independent expert advisory body, the Australian Heritage Council) to identify, recognise and protect places of outstanding heritage value to the nation. This system, underpinned by the Government's Distinctively Australian programme, also includes mechanisms to protect places of particular importance to indigenous people.

WORLD HERITAGE — The Government is committed to the nomination of appropriate places for the World Heritage list, and the protection of Australia's existing World Heritage Areas. For example, the Royal Exhibition Building and Carlton Gardens in Melbourne were recently inscribed on the World Heritage List, while the Daintree Conservation Initiative is providing \$6 million over three years to assist in the conservation of heritage values in the Wet Tropics World Heritage Area.

NATIONAL HERITAGE — The Government is committed to the progressive addition of Australia's most important heritage places to the National Heritage List. Importantly, the protection afforded to these sites does not constrain activities that remain consistent with their protected values, thereby permitting activities such as tourism and recreation to co-exist with heritage values.

EUREKA STOCKADE GARDENS

National Heritage places have a significance that extends beyond local or regional borders, and their values are protected by the Australian Government under the EPBC Act. Yet this is not just a list of what needs protection or places we like, it is also a list that defines our nation.

On 26 November 2004 the Eureka Stockade Gardens, described as the place that gave Australia a 'fair go' was inscribed on the National Heritage List. In announcing the listing, the Minister for the Environment and Heritage, Senator Ian Campbell, said it was fitting that the Gardens were protected to the full extent of Commonwealth law. "This was a place where heavily taxed Australian gold miners stood up to politicians and the establishment and demanded that they be treated with equity and fairness and have a say in how they were governed", Senator Campbell said. "It was a watershed moment that tragically claimed the lives of an estimated 30 miners and several troopers, but those deaths helped to create a foundation for significant reform that resonates even today."

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COMMONWEALTH HERITAGE — The Government is committed to improving the way it identifies and protects the heritage values of places it owns or manages ensuring the natural, Indigenous and historic values of these places are protected to the full extent of the Commonwealth's powers.

INDIGENOUS HERITAGE — The Government has re-affirmed its commitment to preserve Australia's Indigenous heritage through the Indigenous Heritage Programme, which supports the identification and maintenance of Indigenous heritage sites. In addition, the Aboriginal and Torres Strait Islander Heritage Protection Act continues to provide protection for sites and objects, and the Indigenous Advisory Committee established under the EPBC Act, provides advice to the Minister.

HERITAGE OBJECTS — The Australian Government is also ensuring that Australia's significant heritage objects are identified, protected and preserved through the *Historic Shipwrecks Act 1976*, the *Protection of Movable Cultural Heritage Act 1986* and the National Cultural Heritage Account.

SYDNEY HARBOUR — Through the Sydney Harbour Federation Trust (the Trust), the Government is ensuring that significant former Defence and other Commonwealth lands on or near the foreshores of Sydney Harbour are conserved and preserved for the benefit of present and future generations. Providing public access to the lands, rehabilitating their natural values and interpreting their histories are important objectives of the Trust. Recent examples of the Trust's work include calls for expressions of interest in leasing Trust buildings and facilities on a number of sites, the implementation of refurbishment, landscaping, civil and conservation works on most sites and the preparation of Cockatoo Island for a three-day music and cultural festival over the 2005 Easter long weekend.

See: www.deh.gov.au/heritage; www.heritage.gov.au; www.ahc.gov.au; whc.unesco.org; and www.harbourtrust.gov.au.

Impacts of human settlements

Most Australians live and work in cities and towns and the challenge for the community and the Government is to achieve the right balance between urban development and environment protection.

The Government is working with industry and other governments on nationally significant environment protection and heritage issues with a special focus on standard setting for air quality and vehicle emissions.

WATER EFFICIENCY — The Government's mandatory, national Water Efficiency Labelling and Standards Scheme requires a range of water-using appliances or products to carry an efficiency label. This Scheme is expected to save the community more than \$600 million through reduced water and energy bills by 2021.



Merran Williams

HAZARDOUS WASTE — The Government ensures that hazardous wastes are exported from or imported into Australia in accordance with our international obligations, notably under the Basel Convention on the control of transboundary movements of hazardous wastes and their disposal, given effect by the *Hazardous Waste (Regulation of Imports and Exports) Act 1989*.

REDUCTION OF PLASTIC BAGS — Plastic bag use has significantly decreased since the Government backed the Australian Retailers Association Code of Practice for the Management of Plastic Bags in 2003. Since then, signatories to the code of practice have reduced plastic bag use by 26.9 per cent, while usage across the entire retail sector has reduced by 21 per cent. The next target under the ARA Code of practice is to achieve a 50 per cent reduction by the end of 2005. The government is also negotiating with retailers to achieve a complete phase-out of all but essential plastic bags by the end of 2008.

INDUSTRY PARTNERSHIPS — The Government is working with a range of industries to minimise waste and improve environmental performance targeting packaging, plastic bags, automotive wastes (such as tyres and oil), and electrical and electronic products (in particular, televisions and computers).

POLLUTION INFORMATION — The National Pollutant Inventory (NPI) provides Australians with free access to information on the types and amounts of pollutants being emitted in their community. The number of facilities reporting to the NPI has tripled since this programme commenced in 1998–99.

AIR POLLUTION — The Government is continuing to target two of the main contributors to urban air pollution—motor vehicles (through vehicle emissions and fuel standards) and wood heaters (through a number of strategies to address air pollution). The Government will also continue to develop and review air quality standards, through National Environment Protection Measures, and give attention to indoor air issues through management strategies to improve the quality of indoor air in non-industrial settings.

OIL RECYCLING — In 2001, the *Product Stewardship (Oil) Act 2000* enacted a levy on lubricating oil to fund benefit payments to recyclers of used oil. Since then, the scheme has increased oil recycling by more than 40 per cent. In addition, the Government has funded the installation of over 700 used oil collection facilities across Australia.

URANIUM MINES — Working with the Northern Territory Government and other stakeholders, through a programme of scientific research, monitoring and assessment supported by legislation, the Government is protecting the environment at uranium mines in the Alligator Rivers Region.

CHEMICALS AND NEW ORGANISMS — The Government has regulatory systems in place for the assessment and management of risks (including environmental risks) associated with the introduction of new chemicals, pesticides and genetically modified organisms. In conjunction with the states and territories, the Government is developing a national environmental risk management framework to ensure that regulatory decisions about the environmental risks of industrial, agricultural and veterinary chemicals are given consistent and systematic effect.

OZONE PROTECTION AND CLIMATE CHANGE — Australia remains ahead of schedule under the Montreal Protocol in phasing out ozone depleting substances (ODS). Domestically, the Government is progressively extending national regulation of end uses of ODS and their synthetic greenhouse gas replacements. Regulations are either in place or proposed for the following sectors: methyl bromide; refrigeration and air-conditioning; fire protection; foams; and aerosols.

See: www.deh.gov.au/industry; www.deh.gov.au/atmosphere; and www.npi.gov.au.

CYCLE CONNECT — BICYCLE LOCKERS AND CAGES AT PUBLIC TRANSPORT NODES

Cycle Connect is a \$2.4 million grants programme that encourages greater use of bicycles for trips to and from city bus and train stations, by funding installation of secure bicycle parking facilities. Substituting short car trips with bicycle rides is one way of reducing congestion, greenhouse gas and air pollution while keeping fit and healthy at the same time.

In 2004–05, Cycle Connect grants were made to governments in Sydney, Melbourne, Brisbane and Adelaide, extending existing schemes by 1300 lockers and cage spaces through partnership arrangements with State governments. Bendigo received a grant for 20 new lockers and the Fremantle railway station is getting a secure cage facility to house over 100 bicycles. A second round of grants totalling \$1.2 million will be made in 2005–06.

Antarctica

Antarctica influences the global climate because of its immense size and low temperatures. Together with the Southern Ocean, the region directly influences Australia's climate, weather and marine industries.

Australia has been a key supporter of the Antarctic Treaty since it came into force in 1961 and takes a lead role in the Antarctic Treaty System. This allows the Australian Government to be an effective advocate for protecting the Antarctic environment, undertaking research, and preserving the Antarctic for peaceful use.

The Australian Government's Antarctic programme has a number of elements which will be supported by the Government's new \$46.3 million Antarctic Airlink. These elements are:

ANTARCTIC TREATY SYSTEM — Through the Antarctic Treaty System, the Australian Government is pursuing an improved international management framework for tourism and other non-government activities in Antarctica.

INTERNATIONAL ENGAGEMENT — The Government is working with the parties of the Madrid Protocol to put in place rules for liability for environmental damage which include measures to ensure adequate response to environmental emergencies. In addition, Australia and New Zealand are leading work within the Committee on Environmental Protection to develop State of the Antarctic environmental reports.

PROTECT FISHERIES — Significant achievements include being instrumental in getting the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) to adopt a Centralized Vessel Monitoring System to help combat illegal fishing, and strengthening Australia's fisheries enforcement capability near Heard Island through patrols (five vessels have been apprehended in the past four years).



Wayne Papps, AAD

SEABIRDS — Under the Agreement on the Conservation of Albatrosses and Petrels, the Australian Government will support work to reduce the impacts of longline fishing, tackle emergency situations where a particular species of albatross or petrel is in rapid decline, and control or eradicate non-native species threatening breeding colonies.

WHALING — The Government is working through the International Whaling Commission for a global ban on commercial whaling and an end to so-called 'scientific' whaling, to maintain the Southern Ocean Sanctuary, and to promote the South Pacific Whale Sanctuary proposal. Australia is also encouraging coordination of cetacean conservation measures at a regional level.

RESEARCH — The Government will provide logistical and financial support for the four key research programmes of the Antarctic Science Strategy 2004–09 (ice, oceans, atmosphere and climate; southern ocean ecosystems; adaptation to environmental change; and impacts of human activities in Antarctica).

REDUCING THE HUMAN FOOTPRINT ON ANTARCTICA

The Australian Antarctic Division's Environmental Management System (EMS), certified to the international ISO 14001 standard in 2002, is a systematic means of managing the Australian Antarctic Program's interaction with the unique Antarctic, sub-Antarctic and Southern Ocean environments.

A key goal of the Australian Antarctic Division's EMS is the reduction of the consumption of fuel and energy — operating and supporting the Australian Antarctic Program requires approximately 3 million litres of diesel fuel annually. In reducing the dependence on fossil fuels, Australia has taken a leading role in developing and implementing alternative energy sources in Antarctica.

During 2003 and 2004, two large wind turbines, which can generate around 600kW of electrical energy between them, were installed at Mawson station. Since their installation Mawson station has been able to reduce its diesel fuel consumption by over 25 per cent.

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HUMAN IMPACTS ON ANTARCTICA — The Government will ensure that its Antarctic stations minimise their impact on the environment by continuing to clean up old waste dumps and continuing to investigate energy conservation options. The Government will also make sure the Antarctic Environmental Management System continues to meet the ISO 14001 standard.

See: www.aad.gov.au.

Meteorology

The Bureau of Meteorology (the Bureau) 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, ozone depletion and air quality. The Bureau will spend \$10 million on environment-focussed project activities in 2005–06, including:

OCEAN FORECASTING SYSTEM — Jointly developed by the Bureau, CSIRO and the Royal Australian Navy, this system will generate routine analyses and forecasts of the marine environment, providing

information on ocean currents and changes in the ocean that affect maritime and defence operations, the marine environment and regional and global climate.

E-WATER COOPERATIVE RESEARCH CENTRE (CRC) — The Bureau will participate as one of the research providers in a new \$40.25 million CRC to be known as 'eWater'. This will strengthen its involvement with the water industry in areas such as radar rainfall applications and the use of numerical weather modelling products for improved water management.

AIR QUALITY PREDICTION SYSTEM — An air quality prediction system has been implemented in Sydney and Melbourne based on the Bureau's weather prediction model developed for the Sydney Olympics. An extension of the system to the Adelaide airshed is now planned following the development of the necessary emissions inventory.

BUSHFIRE COOPERATIVE RESEARCH CENTRE — The Bureau continues to contribute to the Bushfire Cooperative Research Centre through the conduct of meteorological research and the provision of operational support. Advances have already been made in the determination of the climatology of fire danger and the forecasting of wind changes, which are of vital importance during fire-fighting operations.

RADAR NETWORK AND DOPPLER SERVICES UPGRADE — The installation of radars as part of the Government's five-year, \$62.2 million commitment to the upgrade and modernisation of the Bureau of Meteorology's vital weather radar network continues. The deployment and operation of technologically advanced Doppler radars 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.

AUSTRALIAN COMMUNITY CLIMATE AND EARTH SYSTEM SIMULATOR (ACCESS) — The Bureau and CSIRO will develop a coupled climate and earth system simulator to create models and modelling outcomes that support climate and numerical weather modelling research and operational systems.

See: www.bom.gov.au.

Agriculture, Fisheries and Forestry Portfolio

The Australian Government's environmental policies and programmes support our primary industries by applying the latest environmental knowledge to improve productivity and sustainability. Farmers and other primary producers are key stakeholders in the achievement of national natural resource management outcomes.

DEH works closely with DAFF to achieve shared environmental objectives. Examples include joint management of the Natural Heritage Trust and NAP, and shared responsibilities for issues such as water efficiency and pests and weeds.

NATIONAL ACTION PLAN FOR SALINITY AND WATER QUALITY — NAP aims to halt the spread of dryland salinity and improve water quality. At the same time, the Government is accelerating on-ground investment, with expenditure of over \$246 million approved as at February 2005. All regional plans and investment strategies are expected to be completed by mid-2005. The Government is also trialling a range of market-based instruments to achieve the NAP's aims

ENVIRONMENTAL MANAGEMENT SYSTEMS — The Government is directing \$31.2 million of Trust funding towards assisting primary producers to establish environmental management systems.

HEALTHY SOILS — The Government will involve farmers and community groups in demonstrating the benefits of better management practices for soil health (\$5 million over four years from the Trust).

WEEDS—Management and control of weeds and associated production losses cost the agricultural industry around \$4 billion each year. The new \$40 million Defeating the Weeds Menace programme will target the nation's most threatening weeds, focusing on on-ground action and improved control measures, including biological control.



John Baker

NATIONAL LANDCARE PROGRAMME — The Government is helping to increase the profitability, competitiveness and sustainability of Australian primary industries through improved management of natural resources. The primary mechanism to achieve these aims is the provision of support to the landcare movement for on-ground projects. The landcare movement is a voluntary community group movement which aims to improve natural resource management. There are 4000 groups operating nationally with 40 per cent of Australian farmers as members.

FORESTRY — The Government continues to advance the sustainable use and management of Australia's forest resources. The Government is directing \$3.45 million Trust funding towards development of commercial environmental forestry in collaboration with the CSIRO.

FISHERIES — DAFF and the Australian Fisheries Management Authority (AFMA) will continue to fight illegal fishing and make sure our Commonwealth fisheries are ecologically sustainable. To date AMFA has prepared environmental assessment reports for all major Commonwealth fisheries.

ECONOMIC ANALYSIS — The Australian Bureau of Agriculture and Resource Economics (ABARE) will continue to analyse the potential economic and environmental impacts of policies on climate change, water resource management, and fisheries.

See: www.ffa.gov.au; www.waterforrivers.org.au; www.abare.gov.au; and www.afma.gov.au

Foreign Affairs and Trade Portfolio

The Ambassador for Environment and the Department of Foreign Affairs and Trade (DFAT) work closely with other departments to advance Australia's environmental objectives in international and regional forums.

The Ambassador and DFAT have the lead on international climate change negotiations, working closely on technical matters with the Environment and Heritage and Industry, Tourism and Resources portfolios, and with other portfolios as appropriate.

DFAT works closely with the Environment and Heritage and Agriculture, Fisheries and Forestry portfolios in Australia's negotiation of multilateral environment agreements and international legal frameworks, including on sustainable development, biological diversity, high seas, whaling, forestry, hazardous waste, and trade-related environmental issues.

In 2005–06, AusAID will provide an estimated \$305 million for activities that directly address environmental problems in developing countries (around 12 per cent of Official Development Assistance expenditure). Priorities include promoting the environmental needs of the Asia-Pacific region, and focusing Australia's support for the environment in developing countries on activities that impact on poverty reduction and sustainable livelihoods. International assistance for environmental sustainability targets natural resource management, oceans, the atmosphere, biological diversity, deforestation, and desertification.

Other Government Portfolios

Activities undertaken by other Commonwealth agencies range from implementing environmental management systems in the day-to-day operations of government agencies, to science, research and industry partnerships.

SCIENCE AND RESEARCH — New knowledge, skills and technologies underpin sound environmental policy and on-ground solutions. Significant initiatives include:

- CSIRO's continuing research on climate change, ecosystems and sustainable natural resource management;
- Strategic investment of over \$41 million in 2005–06 by the Australian Research Council to advance Australia's environmental research capacity;
- Seventeen Cooperative Research Centres that research environmental issues, such as managing dryland salinity, invasive species and sustainable tourism; *and*
- The Australian Institute for Marine Science that conducts research to improve understanding of marine systems and biodiversity, supporting the sustainable use of Australia's marine resources.

COMMUNITY INCENTIVES — The Government provides incentives to encourage and support environmental sustainability in the community including:

- A range of environmental taxation concessions and incentives implemented by the Australian Taxation Office (ATO) such as: deductions for expenditure on environmental impact statements, water conservation, and donations to registered environmental organisations; a tax offset facility for soil conservation; and a levy on lubricating oils to fund recycling and reuse of these products.
- The Green Corps — Young Australians for the Environment (\$23.9 million in 2004–05) which provides 1700 young people with the opportunity to conserve, preserve and restore Australia's natural environment and cultural heritage, in partnership with the community and state, territory and local governments.
- A requirement for Australian Government agencies to develop and implement Environmental Management Systems across their activities, to encourage continuous improvement in the environmental performance of these agencies, and decrease resource and energy use.

RESOURCE AND HERITAGE PROTECTION

- The Australian Customs Service's civil surveillance and response services at sea and land borders help the Department of the Environment and Heritage to combat illegal export and import of wildlife. A surveillance and enforcement capability at Heard Island and the McDonald Islands will also help protect Australian fisheries.
- The Department of Defence will spend approximately \$2.5 million in 2005–06 on programmes to identify, promote and manage sites that have significant heritage values. A rolling programme for the development and implementation of heritage management plans and the development of a Defence Heritage Register is currently underway, as is the development and implementation of heritage management tools to be used across the Defence heritage estate.

INDUSTRY PARTNERSHIPS — Industry plays a vital role in achieving sustainable development. By working together with industry, both domestically and in international forums, the Government coordinates its environmental agenda with the requirements of Australian industry.

- The Renewable Energy Action Agenda, a 10-year industry development plan, aims to achieve a sustainable and internationally competitive renewable energy industry with annual sales of \$4 billion by 2010. Key achievements include the formation of the Australian Business Council for Sustainable Energy, completion of a Renewable Energy Technology Roadmap, and the development of renewable energy standards and vocational training courses.
- The Tourism and Conservation Initiative will encourage the tourism industry, protected area managers, private landholders and conservation groups to engage in projects that benefit tourism,

conservation and help regional communities create economic opportunities, for example, seed funding to create new nature-based tourism products.

INDIGENOUS — The Government is committed to ensuring the full participation of Aboriginal and Torres Strait Islander communities in ecologically sustainable development. This commitment is being met through programmes that provide for the identification, protection, preservation, and management of cultural property and areas of significance to Indigenous people.

For example, a number of Indigenous Employment Policy projects managed by the Department of Employment and Workplace Relations contribute to ecologically sustainable development and environmental performance. These projects support Indigenous participation in areas such as conservation, land and resource management and horticulture. Participants are also working on conservation and restoration projects, the sustainable harvesting of natural resources, and being trained to work as park rangers in national parks.

Further information on the environment-related programmes of various Australian Government portfolios can be found at their respective web sites, which can be accessed through: www.directory.gov.au.

Appendix 1: Environment Budget Overview

TABLE A1.1: ENVIRONMENT ACTIVITIES — PROGRAMME AND TAX BUDGET ESTIMATES

Note: This table includes estimated budgets for programmes in a wide variety of Government Departments and Agencies outside the Environment and Heritage portfolio. In many cases these figures do not align with, or cross between, the themes used to structure this table. In these cases, programmes have been wholly allocated to the most appropriate theme.

DIVISION/AGENCY	DESCRIPTION	2004–05 \$M	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M
CLIMATE CHANGE						
DEH	Australian Greenhouse Office Programmes (administered funding) (a)	60.8	76.5	151.4	145.5	137.5
DEH – ICED	Emissions Management (a)	29.8	36.4	37.4	36.1	7.9
DEH – ILAD	International Engagement (a)	3.2	3.9	3.9	4.1	-
DEH – ILAD / ICED	Understanding of Climate Change (a)	19.3	22.6	23.0	24.2	-
ORER	Office of the Renewable Energy Regulator	3.1	2.9	3.2	3.3	3.5
Aust Post	Greenhouse Challenge	0.3	0.3	0.3	0.3	0.3
CSIRO	Understanding & responding to climate change & variability	35.8	24.5	25.1	-	-
ABARE	Climate Change	1.5	1.5	1.5	1.5	1.5
DITR	Methane to Markets	0.1	0.1	0.0	0.0	0.0
DITR	Carbon Dioxide Capture & Geological Storage Regulation Development	0.4	0.4	0.4	0.4	0.4
DITR	Energy Efficiency Opportunities Assessment	2.2	3.7	3.9	3.7	3.3
DITR	Renewable Energy Development Initiative	2.6	22.0	28.5	28.2	12.2
DITR	Renewable Energy Action Agenda	0.4	0.3	na	na	na
DITR	Invest Australia – renewable energy	0.1	na	na	na	na
Geoscience Aust.	Geological storage of greenhouse gas – the CO ₂ CRC program	0.6	0.7	0.7	0.8	0.8
DOTARS	Renewable Energy Windfarm – Cocos Keeling Islands	-	-	-	-	-
Total – Climate Change		160.4	195.8	279.3	248.1	167.4
LAND & INLAND WATERS						
DEH/DAFF	Natural Heritage Trust – Bushcare (b)	104.4	104.4	101.0	102.0	-
DEH/DAFF	Natural Heritage Trust – Landcare (b)	80.6	80.6	78.0	78.0	-
DEH/DAFF	Natural Heritage Trust – Rivercare (b)	83.7	83.7	81.0	81.0	-
DEH	Australian Biological Resources Study Participatory Grants Programme	1.8	1.9	1.9	2.0	2.0
DEH	Protecting Australia's biodiversity hotspots (including the Daintree Conservation Initiative)	6.7	12.2	11.2	-	-
DEH	Australian Government's Community Water Grants (c)	1.0	48.2	50.5	50.9	26.2
DEH	Strengthening Tasmania – Tamar River Pylons	0.5	1.0	0.8	0.8	-
DEH	Development of Sewerage Schemes for Boat Harbour & Sister's Beach Tasmania	1.0	-	-	-	-
DEH	Acquisition of leases & legal costs	9.9	-	-	-	-
DEH – AWD	Wildlife protection	12.6	10.8	8.1	8.2	9.2
DEH – LWCD	Land & water strategies	12.8	11.3	10.0	9.5	7.4
DEH – NRMPD	Land & water investments	15.9	14.9	14.2	11.1	5.5
DEH – PAD	Terrestrial parks & reserves (d)	48.7	48.9	51.1	51.6	46.6
DEH – SSD	Tropical wetlands research	1.4	1.2	1.4	1.4	1.5
DNP	Director of National Parks (e)	13.0	13.1	13.7	14.3	19.4

DIVISION/AGENCY	DESCRIPTION	2004–05 \$M	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M
ABS	New Survey of Natural Resource Managemnt	-	1.1	0.5	1.1	0.6
ACIAR	Australian Centre for International Agricultural Research	1.2	1.2	1.2	1.2	1.2
ATO	Landcare & Water Facility Tax Offset	0.0	0.0	0.0	0.0	0.0
CSIRO	Improved water allocation & management, including in irrigation	34.0	23.0	23.6	-	-
CSIRO	Sustainable natural resource management	45.8	53.0	54.3	-	-
ABARE	Water Resource Management	2.1	2.1	2.1	2.1	2.1
DAFF/DEH	National Action Plan for Salinity & Water Quality (NAPSWQ) (f)	85.9	167.3	136.7	94.8	-
DAFF	Joint Government Enterprise ('Water for Rivers')	7.5	7.5	7.5	7.5	7.5
DAFF	Restoring Our Rivers	10.6	39.5	59.5	58.5	-
DAFF	Great Artesian Basin Sustainability Initiative	7.9	8.1	8.3	8.4	8.6
DAFF	National Landcare Programme (NLP)	39.3	37.3	39.4	36.2	-
DAFF	Market Based Instruments National Pilots Program	2.1	1.3	-	-	-
DAFF	Defeating the Weeds Menace	2.0	10.0	12.0	8.0	-
DAFF	Red Imported Fire Ant – Eradication Programme	15.5	12.3	5.1	-	-
DAFF	Australian Plague Locust Commission	0.2	0.2	0.2	0.2	0.2
DAFF	National Weed Response Programs	1.6	1.5	0.2	0.2	0.2
DAFF	Regional & Community Projects	15.0	35.0	25.0	-	-
DAFF	AAA (Agriculture Advancing Australia) – FarmBis	13.6	15.7	15.8	17.6	-
DAFF	West 2000 Plus Program	0.1	0.1	0.1	0.1	0.0
Biosecurity Aust.	Protecting Australia's agricultural industries & environment from potential new weed threats	0.3	0.6	na	na	na
DEWR	Indigenous Employment Policy (g)	na	na	na	na	na
DEWR	Green Corps Programme	23.9	24.5	25.0	25.5	26.0
DEWR	Work for the Dole (g)	na	na	na	na	na
DEWR	Community Development Employment Projects (g)	na	na	na	na	na
DOTARS	Rehabilitation of mine sites on Christmas Island	1.0	1.0	1.0	1.0	1.0
Geoscience Aust.	Geoscience in support of natural resource management	1.2	1.2	1.2	1.2	-
Geoscience Aust.	Topographic Mapping of Australia	5.3	5.6	5.8	5.9	5.9
Geoscience Aust.	Landsat Contingency Planning	na	na	na	na	-
NAA	Just Add Water exhibition	0.6	0.3	0.3	0.3	0.3
NWC	Water Smart Australia	46.9	253.0	530.3	520.5	165.7
NWC	Raising National Water Standards	10.0	30.0	40.0	40.0	35.0
	Total – Land & Inland Waters	767.6	1164.5	1417.9	1241.1	372.1
	COASTS & OCEANS					
DEH/DAFF	Natural Heritage Trust - Coastcare (b)	32.9	33.1	33.4	39.0	-
DEH	Great Barrier Reef Marine Park Structural Adjustment Package – enhancement	49.1	5.6	-	-	-
DEH - LWCD	Coastal strategies	5.4	5.2	4.8	3.9	1.5
DEH - NRMPPD	Coastal investments	1.6	1.6	1.5	1.1	-
DEH - MD	Marine conservation (2004–05 incl. NOO funds)	16.4	19.4	8.7	8.7	6.6
GBRMPA	Care & development of the Great Barrier Reef Marine Park	39.3	38.0	36.7	31.2	31.4

DIVISION/AGENCY	DESCRIPTION	2004–05 \$M	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M
Customs	Civil Maritime Surveillance and Response (h)	235.3	236.6	na	na	na
Customs	Southern Ocean Surveillance	44.5	33.6	41.7	42.1	42.6
AIMS	Australian Institute of Marine Science	22.5	23.0	23.5	23.7	24.7
CSIRO	Sustainable marine fisheries	26.9	10.4	10.7	-	-
CSIRO	Healthy coastal rivers, estuaries & coastal zone	8.4	11.9	12.2	-	-
CSIRO	Marine Environment Prediction	-	5.1	5.2	-	-
DAFF	Southern Blue-fin Tuna (SBT)	0.9	1.0	1.0	1.0	-
AFMA	Ecologically sustainable fishing	16.5	23.5	21.1	20.7	20.9
DAFF	Natural Resources Sustainability	15.0	13.8	13.8	14.1	14.4
DAFF	Fisheries Resources Research Fund	3.9	3.3	3.1	3.2	3.3
DAFF	National System for the Prevention & Management of Marine Pest Incursions	1.4	1.3	1.0	-	-
DAFF	Fisheries Environment	0.9	-	-	-	-
AFMA	Protection of Australia's Southern Ocean waters & resources	6.7	13.2	14.0	13.4	13.6
ABARE	Fisheries	1.7	1.7	1.7	1.7	-
DITR	Regulation of offshore petroleum exploration activity	0.4	0.4	0.5	0.5	0.5
Geoscience Aust.	Australian Marine Spatial Information System	0.4	0.7	0.7	0.7	0.7
Geoscience Aust.	Oil spill monitoring, Coastal estuaries & wetlands research & sea surface temperature monitoring	0.6	0.6	0.7	0.7	0.7
Geoscience Aust.	Coastal & marine environment research & mapping	1.3	1.3	1.9	1.9	1.9
DOTARS	Aust. Maritime Safety Authority National Plan	4.6	4.9	5.1	5.1	5.3
DOTARS	Marine Monitoring Programme – Christmas Island Ports	0.1	-	-	-	-
	Total – Coasts & Oceans	536.6	489.2	242.8	212.5	168.0
	NATURAL, INDIGENOUS & HISTORIC HERITAGE					
DEH	Payment to National Cultural Heritage Account	0.2	0.2	-	-	-
DEH	Grants-in-aid – National Trust	0.8	0.8	0.9	0.9	0.9
DEH	Regional Natural Heritage Programme	1.6	7.4	-	-	-
DEH	Maintenance & Protection of Indigenous Heritage Programme	1.9	3.4	3.5	3.5	3.6
DEH	Strengthening Tasmania – Low Head Precinct	0.1	0.1	0.1	-	-
DEH	St Mary's Cathedral and the Church of St Mary's Star of the Sea – restoration	-	5.0	-	-	-
DEH	National Heritage Investment Initiative	-	2.2	3.5	3.5	0.2
DEH – HD	Heritage (i)	24.5	22.9	24.0	24.3	26.7
SHFT	Sydney Harbour Federation Trust	31.7	28.7	29.1	29.6	30.5
Defence	Heritage Management	1.5	2.5	2.5	2.5	2.5
Finance	Refurbishment of Fort Scratchley	1.2	4.6	0.1	-	-
DCITA	Maintenance of Indigenous Languages & Records	8.3	8.5	8.7	8.9	9.1
DOTARS	Kingston Pier Refurbishment	0.4	2.6	-	-	-
DOTARS	The Ivens F (Toon) Buffett Environmental Trust Fund	-	0.4	0.0	0.0	0.0
	Total – Natural, Indigenous and Historic Heritage	72.3	89.2	72.3	73.1	73.5

DIVISION/AGENCY	DESCRIPTION	2004–05 \$M	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M
	IMPACTS OF HUMAN SETTLEMENTS					
DEH	Commonwealth Environment Research Facilities	-	3.0	21.0	21.0	24.0
DEH	National Environment Protection Council Service Corporation	0.4	0.4	0.4	0.4	0.4
DEH	Ozone Protection & Synthetic Greenhouse Gas Account	2.3	3.3	3.3	3.6	3.6
DEH	Launceston's Air Quality	-	0.3	0.3	0.2	-
DEH – AWD	Environmental assessments	14.4	13.8	12.7	12.9	15.0
DEH – PCEPD	Pollution prevention strategies	34.3	36.9	34.5	18.8	16.2
DEH – SSD	Supervision of uranium mines	8.5	7.6	8.3	8.4	9.0
ABS	Environment & Energy Statistics	1.4	1.8	1.2	1.5	1.4
ACA	Implementation of EMR exposure arrangements & awareness	0.4	0.3	na	na	na
AGD	Commonwealth Community Environmental Legal Sub-Programme	0.7	0.7	0.7	0.7	0.8
ANSTO	Characterisation of Biomolecules	0.1	0.1	0.1	0.1	0.1
ANSTO	Isotopic Tracers in Atmospheric Transport	1.3	1.7	1.7	1.7	1.8
ANSTO	Cosmogenic Climate Archives of the Southern Hemisphere	1.5	1.5	1.6	1.6	1.6
ANSTO	Accelerator Science – Fine particle atmospheric pollution	0.1	0.1	0.1	0.1	0.1
ANSTO	Isotopes for Water	1.2	1.2	1.3	1.3	1.3
ANSTO	Environmental Management Project	1.4	1.4	1.6	1.6	1.6
ANSTO	ANSTO Minerals	0.7	0.7	0.7	0.7	0.7
ARC	National Competitive Grants Programme – An Environmentally Sustainable Australia	38.9	41.4	34.1	15.8	6.5
ARPANSA	Environmental Radioactivity Monitoring	2.0	3.0	2.1	3.0	2.2
ARPANSA	Measurement of the Solar Ultraviolet Radiation Environment	0.3	0.3	0.3	0.3	0.3
ATO	Environmental Impact Statements & Remediation	8.0	8.0	8.0	8.0	8.0
ATO	Tax Deductions for Water Conservation & Amelioration of Degraded Lands	25.0	25.0	25.0	25.0	25.0
ATO	Product Stewardship Arrangements for Waste Oil	16.0	19.0	21.0	24.0	27.0
ATO	Register of Environmental Organisations (Tax Deductibility)	22.0	22.0	22.0	23.0	23.0
ATO	Capital Gains Tax Treatment of Perpetual Conservation Covenants
AusAID	Overseas Aid Program	278.0	305.0	na	na	na
CSIRO	Knowing, protecting & benefiting from ecosystems	46.8	26.0	26.6	-	-
CSIRO	Sustainable Cities	33.5	46.1	47.3	-	-
CSIRO	Indigenous livelihoods	-	1.8	1.8	-	-
CSIRO	Investing in sustainability	-	5.8	5.9	-	-
DAFF	Agriculture & Veterinary Minor Use Program	0.1	0.1	0.1	0.1	0.1
DAFF	Kangaroo Island Agricultural Development Partnership	0.0	-	-	-	-
DAFF	North Adelaide Plains Agricultural Development Partnership Project	0.0	-	-	-	-
DAFF	The South East & Murraylands Regions Dairy Development Agricultural Development Partnership Project	0.1	-	-	-	-

DIVISION/AGENCY	DESCRIPTION	2004–05 \$M	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M
Defence	Environment Assessment & Approvals	1.4	1.4	1.4	1.4	1.4
Defence	Environmental Management System	7.9	7.9	7.9	7.9	7.9
Defence	Contamination assessment and remediation	10.0	4.0	4.0	4.0	4.0
Defence	Environmental Monitoring	4.5	4.5	4.5	4.5	4.5
Defence	Green Buildings	0.2	0.2	0.2	0.2	0.2
Defence	Environmental Works	1.9	1.9	1.9	1.9	1.9
DEST	Cooperative Research Centres (CRC) Programme	55.2	59.6	50.6	45.3	33.9
DEWR	Environmental Management System	0.1	0.1	0.1	0.1	0.1
DEWR	Globally Harmonized System of Classification & Labelling of Chemicals (GHS) Development & Implementation	1.1	1.1	1.1	1.1	1.2
DFAT	Combined Environment-related funding	1.4	1.4	1.5	1.5	1.5
DIMIA	Annual Energy Audits	-	-	-	-	-
DITR	Environment Industries Action Agenda	0.4	0.3	na	na	na
DITR	National Biotechnology Strategy	1.0	0.5	0.5	0.5	-
DITR	Environment Management System (EMS)	0.0	0.0	0.0	0.0	0.0
DITR	Tourism White Paper Tourism & Conservation Initiative	1.1	1.9	1.7	-	-
DITR	Invest Australia – environment industries	0.0	na	na	na	na
DITR	World Summit on Sustainable Development – energy partnerships	0.5	-	-	-	-
Geoscience Aust.	Geohazards research and information	2.5	2.5	2.5	2.5	2.5
Finance	Environmental Management System	na	na	na	na	na
Finance	Refurbishment, Restoration & Development Programme	3.1	3.0	0.8	0.2	0.0
DOTARS	Airport Noise Transparency Concepts	na	na	na	na	na
DOTARS	Australian Bicycle Council	na	na	na	na	na
DOTARS	Conditional Credits for Heavy Vehicles	1.2	0.4	-	-	-
DOTARS	Local Govt Financial Assistance Grants (j)	396.7	414.0	428.9	444.8	461.2
DOTARS/DEH	Green Vehicle Guide	1.1	0.2	0.1	0.1	-
DOTARS/DEH	New Vehicle Emissions & Fuel Standards	-	-	-	-	-
Health	World Health Organisation (k)	10.0	10.0	10.0	10.0	10.0
Health	International Program on Chemical Safety	0.1	0.1	0.1	0.1	0.1
Health	National Return & Disposal of Unwanted Medicines	1.3	1.8	1.5	1.5	1.5
Health	National Industrial Chemicals Notification and Assessment Scheme (l)	-	-	-	-	-
OGTR	Gene Technology Regulation	8.4	7.9	8.0	8.1	8.2
	Total – Impacts of Human Settlements	1050.3	1103.0	810.9	709.5	710.0
	ANTARCTICA					
DEH – AAD	Antarctic policy	29.3	33.6	34.5	34.2	34.4
DEH – AAD	Antarctic science	58.1	66.7	68.5	67.8	68.4
Geoscience Aust.	Antarctic & Southern Ocean profiling	0.2	-	-	-	-
Geoscience Aust.	Antarctic geoscience	0.3	0.3	0.3	0.3	0.3
	Total — Antarctica	87.9	100.6	103.3	102.3	103.1

DIVISION/AGENCY	DESCRIPTION	2004–05 \$M	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M
BoM	METEOROLOGY					
	National & International Meteorological Activities (m)	10.1	10.0	9.9	9.8	9.7
	Total	10.1	10.0	9.9	9.8	9.7
TOTAL ALL ENVIRONMENT ACTIVITIES		2685.2	3152.2	2936.4	2596.5	1603.8

NOTES ON TABLE A1.1

GENERAL:

Amounts in this document are generally rounded to one decimal point using standard rounding conventions. Due to rounding, the aggregation of elements within this table may not match the actual 'total.' Amounts less than \$50,000 appear as 0.0 while zero amounts, including those where the programme has finished appear as a single dash. The letters 'na' are used where figures are not available.

Department of Environment and Heritage (DEH) amounts in this table are divided between Departmental and Administered funding. Departmental amounts are recorded against the appropriate Divisions within DEH, for example DEH-NRMPD, whereas Administered funding is simply recorded against DEH. It should be noted that these Departmental figures include funding for capital (equity injection).

To avoid double counting, Environment and Heritage portfolio new measures shown in this table are listed with Administered funding only, as Departmental funding is included in the DEH Divisional and portfolio agency totals (and as such, if a new measure has Departmental funding only it will not appear in this table). Full programme funding amounts for all DEH new measures are shown in Table 1.3.

The Australian Government requires all its agencies to develop and implement Environmental Management Systems across their activities. Where agencies are able to discretely identify budget estimates for these activities, these figures have been included in this table.

SPECIFIC:

- (a) Table A1.2 (following) provides a breakdown of Australian Greenhouse Office programme amounts for this funding.
- (b) The funding for the Natural Heritage Trust (NHT) is appropriated to the Department of the Environment and Heritage, however programmes delivered through the NHT are jointly managed and run by DEH and the Department of Agriculture, Fisheries and Forestry. To avoid double counting, the amounts shown in this table exclude grants made to the Great Barrier Reef Marine Park Authority and the Sydney Harbour Federation Trust. Full Natural Heritage trust figures are provided in Table 1.2.
- (c) Full budget figures for this programme are shown at Table 1.2. These figures do not include Departmental funding to avoid double counting. Funding for the Community Water Grants programme is appropriated to the Department of the Environment and Heritage however these grants are jointly administered with the Department of Agriculture, Fisheries and Forestry.
- (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 (\$40.8 million in 2005–06).
- (e) In addition to the amounts transferred to the Director of National Parks by the Parks Australia Division of DEH, the Director of National Parks is expected to receive other revenue as per these figures.
- (f) The funding for the National Action Plan for Salinity and Water Quality is appropriated to the Department of Agriculture, Fisheries and Forestry, however programmes delivered through the NAP are jointly managed and run by DAFF and DEH. To avoid double counting, amounts transferred to the Department of Environment and Heritage (already included in the DEH totals in this table) are excluded from these figures. Full NAPSWQ figures are provided in Table 1.2.
- (g) Some 'Work for the Dole', 'Indigenous Employment Policy', and 'Community Development Employment Projects' activities can be related to the preservation and management of Australia's environment (in particular the Green Reserve, an initiative that forms part of the Work for the Dole programme). While these programmes deliver beneficial environmental outcomes, their primary purpose is to achieve employment outcomes. As such it is difficult to identify the environment-related expenditure separately.
- (h) The Australian Customs Service (ACS) estimate listed here is the total cost of civil maritime surveillance activities. These surveillance activities principally relate to border security and protection but have environmental benefits associated with the protection of fishing stocks and reef and island environments. It is not possible to separate the costs of activities that provide a direct environmental benefit.
- (i) A component of this funding, appropriated directly to the Department of the Environment and Heritage, is provided to support the functions of the Australian Heritage Council (\$5,577 million in 2005–06).
- (j) Data from the Australian Bureau of Statistics indicates that in 2002–03, local government expenditure on environmental protection and natural resource management activities absorbed 25.6 per cent of their total budgets. Therefore 25.6 per cent of grants from the Commonwealth to local government has been included in this table.
- (k) Australia supports environmental health activities, undertaken through the WHO's Health and Environment Programme, through its annual contribution to the WHO. The amount of Australia's contribution to the WHO directed to environment-related activities is unable to be discretely identified.
- (l) Environmental activity undertaken by the National Industrial Chemical Notification and Assessment Scheme is cost recovered from industry charges.
- (m) Estimated expenditure on environmental activities undertaken by the BoM. This is approximately 5 per cent of the total BoM expenditure.

TABLE A1.2: AUSTRALIAN GREENHOUSE OFFICE — PROGRAMME DETAILS

DESCRIPTION	2004–05 \$M	2005–06 \$M	2006–07 \$M	2007–08 \$M	2008–09 \$M
<i>Emissions Management</i>					
Low Emissions Technology Demonstration Fund	1.7	2.1	52.1	51.9	73.2
Solar Cities	1.6	6.7	21.4	24.8	19.8
Advanced Electricity Storage Technologies	0.4	3.8	5.9	5.9	4.9
Wind Forecasting Capability	1.2	5.2	4.8	3.8	1.8
Action on energy efficiency	6.7	7.6	8.2	8.4	0.0
Challenge Plus	8.6	9.0	10.5	10.6	0.0
Local greenhouse action	3.3	3.6	4.2	4.5	0.0
Low emissions technology and abatement	2.5	7.0	9.4	9.5	8.2
Greenhouse Gas Abatement Programme	14.8	15.7	21.6	20.4	12.8
Alternative Fuels Conversion Programme	3.3	3.5	2.2	1.1	0.0
Renewable Remote Power Generation Programme	22.6	25.3	24.5	23.7	24.5
Renewable Energy Commercialisation Programme	3.0	3.1	0.7	0.0	0.0
Photovoltaic Rebate Programme	5.4	6.2	5.7	0.0	0.0
Renewable Energy Equity Fund	3.3	1.5	1.1	0.3	0.2
Greenhouse action to enhance sustainability in regional Australia	4.9	5.2	5.7	5.7	0.0
Total – Emissions Management	83.3	105.5	177.9	170.7	145.4
<i>International engagement</i>					
Influencing international climate change policy	4.7	5.3	6.9	7.1	0.0
Total – International Engagement	4.7	5.3	6.9	7.1	0.0
<i>Understanding of climate change</i>					
Climate change science programme	6.7	7.0	8.7	8.8	0.0
National climate change adaptation programme	2.6	4.2	4.6	5.1	0.0
Emissions measurement and analysis	8.6	9.3	9.4	9.8	0.0
Strategic national response	7.4	8.2	8.2	8.4	0.0
Total – Understanding of climate change	25.3	28.6	30.9	32.0	0.0
Total – Australian Greenhouse Office	113.3	139.4	215.7	209.8	145.4

Table A1.1 provides a breakdown of the total AGO funding by DEH Division. Figures in this table include both Departmental and Administered funding

Appendix 2: List of Abbreviations

AAD	Australian Antarctic Division (Division of DEH)
ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ACA	Australian Communications Authority
ACIAR	Australian Centre for International Agricultural Research
ACS	Australian Customs Service
AFMA	Australian Fisheries Management Authority
AGD	Attorney-General's Department
AGO	Australian Greenhouse Office*
AIMS	Australian Institute of Marine Science
ANSTO	Australian Nuclear Science and Technology Organisation
APEC	Asia-Pacific Economic Cooperation
ARC	Australian Research Council
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
ATO	Australian Taxation Office
AusAID	Australian Agency for International Development
Aust Post	Australia Post
AWD	Approvals and Wildlife Division (Division of DEH)
BoM	Bureau of Meteorology
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCSBT	Commission for the Conservation of Southern Blue-fin Tuna
CERF	Commonwealth Environment Research Facilities
CRC	Cooperative Research Centre
CSD	Corporate Strategies Division (Division of DEH)
CSIRO	Commonwealth Scientific and Industrial Research Organisation
Customs	Australian Customs Service
DAFF	Department of Agriculture, Fisheries and Forestry
DCITA	Department of Communications, Information Technology and the Arts
Defence	Department of Defence
DEH	Department of the Environment and Heritage
DEST	Department of Education, Science and Training
DEWR	Department of Employment and Workplace Relations
DFAT	Department of Foreign Affairs and Trade
DHA	Department of Health and Ageing
DIMIA	Department of Immigration and Multicultural and Indigenous Affairs
DITR	Department of Industry, Tourism and Resources
DOTARS	Department of Transport and Regional Services
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act, 1999</i>
FaCS	Family and Community Services
Finance	Department of Finance and Administration

GBRMPA	Great Barrier Reef Marine Park Authority
HD	Heritage Division (Division of DEH)
ICED	Industry, Communities and Energy Division (Division of DEH)*
ILAD	International, Land and Analysis Division (Division of DEH)*
LWCD	Land, Water, Coasts Division (Division of DEH)
MD	Marine Division (Division of DEH)
MDB IGA	Murray-Darling Basin Intergovernmental Agreement
NAA	National Archives of Australia
NAP	National Action Plan for Salinity and Water Quality
NHT	Natural Heritage Trust
NPI	National Pollutant Inventory
NRMPD	Natural Resource Management Programmes Division (Division of DEH)
NWC	National Water Commission
NWI	National Water Initiative
NTC	National Tidal Centre
ODS	ozone depleting substances
OGTR	Office of the Gene Technology Regulator
ORER	Office of the Renewable Energy Regulator
PAD	Parks Australia Division (Division of DEH)
PCEPD	Policy Coordination and Environment Protection Division (Division of DEH)
PV	photovoltaic
SHFT	Sydney Harbour Federation Trust
SSD	Supervising Scientist Division (Division of DEH)
UNFCCC	United Nations Framework Convention on Climate Change
WELS	Water Efficiency Labelling Scheme

**Note: The Australian Greenhouse Office has been integrated into the Department of Environment and Heritage becoming two divisions of the Department: the Industry, Communities and Energy Division; and the International, Land and Analysis Division.*

Notes

Notes



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