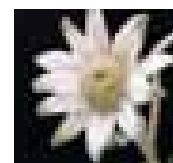
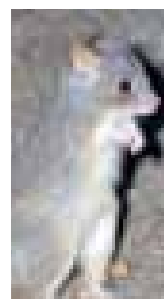
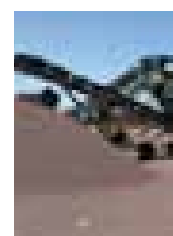
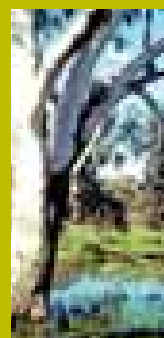


DEPARTMENT OF  
Environment and Conservation NSW

# ANNUAL REPORT 2005-06

## VISION

A healthy environment cared for and  
enjoyed by the whole community and  
sustained for future generations



Department of **Environment and Conservation** NSW



# Contents

The Hon Bob Debus  
Minister for the Environment  
Parliament House  
Macquarie Street  
SYDNEY NSW 2000

Dear Minister

It is my pleasure to forward to you for presentation to the New South Wales Parliament the third Annual Report of the Department of Environment and Conservation (DEC), covering the period 1 July 2005 to 30 June 2006.

The DEC Annual Report has been prepared in accordance with the provisions of the *Annual Reports (Departments) Act 1985*, the *Annual Reports (Statutory Bodies) Act 1984* and the *Public Finance and Audit Act 1983*. DEC consolidated financial statements received an unqualified opinion from the Auditor General.

Yours sincerely



**Lisa Corbyn**  
Director General

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**Cover photos, left to right reading downwards:**  
DEC; G Croft; DEC; V Scollen, courtesy of Chemsal; courtesy of Centre for Organic and Resource Enterprises and Peats Soil and Garden Supplies; K Stepnell, DEC; M McFadden, courtesy of Taronga Zoo; DEC; S Garland, DEC; O Rogge, DEC; S Garland, DEC.



# Overview

## Our vision

A healthy environment cared for and enjoyed by the whole community and sustained for future generations

## Our roles

- We manage natural and cultural heritage and deliver programs to assist in conservation and environmental protection.
- We build knowledge, tools and policy frameworks to inform and improve decision-making by government and others.
- We influence behaviour throughout the community to help protect the environment.
- We regulate activities to conserve Aboriginal cultural heritage and protect the environment.

## Our approaches

- We influence the community's decision-making, including economic decisions, by providing up-to-date science and knowledge to improve the environment.
- We regulate activities according to the risk they pose to the environment, human health or Aboriginal cultural heritage.
- We work with our partners in all spheres of government, business and the community to develop and deliver environmental and conservation solutions.
- We strive for excellence in our management of natural and cultural heritage.
- We motivate and support people to be environmentally responsible and inspire new generations to learn more about conservation and the environment.
- We contribute to public debate about solutions to environmental and conservation problems.
- We respect the special relationship Aboriginal people have with the landscape and seek to incorporate their knowledge, insights and involvement in our conservation efforts.

## Our values

As individual staff, work teams and as a department we seek to:

### **Protect the environment**

We are strongly committed to protecting the environment.

### **Respect Aboriginal culture and heritage**

We respect Aboriginal knowledge and culture, both traditional and contemporary, and encourage and support the involvement of Aboriginal people in our work.

### **Act with integrity**

We are ethical, impartial and honest.

### **Be transparent**

We are open, accessible and accountable to the community and each other.

### **Act professionally**

We treat our colleagues, our many external partners and other members of the community with respect. We base our decisions on facts, objective standards and analysis, consistent with community values. We value our diversity of ideas and skills as the basis of selecting the best approach. Once a decision is made, we make a commitment to delivering that decision.

### **Work collaboratively**

We collaborate with our colleagues and our external partners to deliver our goals.

### **Be innovative**

We foster creative and inspirational thinking, and encourage learning and improvement.



## Director General's review

For the Department of Environment and Conservation (DEC), 2005–06 has been an exciting year, with major new environmental initiatives giving us a welcome boost as we consolidated significant reforms and completed our organisational restructure. We also remained focused on delivery.

### New programs and reserves

Our exciting new programs range from conservation and natural resource management, and industry sustainability partnerships, to strategies that improve the lives of Aboriginal people.

In November 2005, the Premier announced one of the State's largest ever programs of environmental initiatives, to be led by DEC. The NSW City and Country Environment Restoration Program provides funding of \$439 million over five years to programs which tackle some of our most significant environmental challenges. It demonstrates the importance of economic instruments to drive waste reduction, builds strong linkages, delivers benefits from programs across DEC and fosters partnerships with many others.

We have made major additions to the western NSW national parks, resulting in positive conservation and local employment benefits. The Brigalow and Nandewar Community Conservation Area allows for cross-tenure conservation underpinned by industry development programs and strong community involvement. We are also laying the foundations for bringing Yanga Station, which includes 150 km of Murrumbidgee River frontage and amazing river red gums and wetlands, into the national park system.

Our rivers and wetlands are having the hardest time ever as a result of water extraction and the drought. DEC has progressed its wetland initiative to protect both coastal and inland wetlands, contributing to the \$13.4 million NSW Wetland Recovery Package, with the good news that the Commonwealth will now match NSW's funding. Combined with NSW RiverBank, the package will improve our wetlands and we are now linking it to a new DEC major project on floodplain management. This year the NSW Government also declared five wild rivers to protect their pristine qualities for the future.

We have continued to design innovative approaches and use economic instruments for environment protection, in particular with the work being done on biodiversity banking and regional conservation planning. DEC is also championing a new approach to focus our recovery efforts through the Threatened Species Priorities Action Statement.

### Delivery

On the waste, chemicals and pollution front, we are shifting towards widening industry responsibility and accountability, having signed new sustainability compacts with major companies like Hewlett Packard and Sensis. We have also released the updated *Action for Air* and the next stage of the national chemical management framework. We are seeing progress in programs to tackle historical legacies by regulating the clean-up of Rhodes Peninsula and Homebush Bay sediments, and supervising Orica's major Botany Bay groundwater clean-up. We delivered the second Extended Producer Responsibility Priority Statement to reduce wastes of concern, and reviewed the 2003 Waste Strategy. We are beginning to see the results of these programs through our improved waste data system.

It has also been a big year for augmenting legislation, with important amendments to the Protection of the Environment Operations Act and many of its regulations. We are transferring the skills we have developed in our pollution enforcement programs to our regulation of threatened species and Aboriginal heritage.

We have also focused on delivery in natural resource management (NRM). This year we have built a lasting partnership with catchment management authorities and the Natural Resources Commission, playing a strong role in developing the monitoring, evaluation and reporting strategy for the NRM standards and targets, and in refining new native vegetation tools including the PVP (property vegetation plan) developer and biodiversity forecaster.

An important stepping-stone has been the completion of DEC's Science Investment and Management Plan, given the importance of science to the delivery of our environment and conservation programs. Our collaboration with the university sector is strong, and we are very proud that our Forensic Laboratory at Lidcombe achieved the first ever environmental accreditation in Australia.

### **Aboriginal heritage**

We have increased our emphasis on Aboriginal heritage programs, with major gains including:

- the hand-back of Biamanga and Gulaga national parks
- new declarations of Aboriginal Places and the repatriation of ancestral remains
- the adoption of DEC's Aboriginal People, Environment and Conservation Principles
- completion of the needs assessment for and launch of the DEC Aboriginal Cultural Awareness Training Program
- continued commitment to and progress in the Culture and Heritage Cluster, which we chair, and Two Ways Together
- the appointment in April 2006 of DEC's Aboriginal Cultural Heritage Advisory Committee which plays a crucial role in advising us on our programs.

### **Corporate governance**

This year we have further improved our systems and governance arrangements including launching our new 2006–10 corporate plan, progressing toward a new DEC award, implementing key consultation steps in our OH&S program and rolling out our new corporate identity package.

Finally, as with last year, I want to give credit to the staff and the many people that help us along the way and keep us on track. The Board of the Environment Protection Authority, the NPW Advisory Council, the new statutory Aboriginal Cultural Heritage Advisory Committee, the many advisory and audit committees and the Board of the Botanic Gardens Trust have retained their positive, constructive approach to DEC's work. I also want to pay tribute to a number of outstanding public servants who were on the Executive and retired this year, as their dedication to the public service and to DEC made a real difference.

I sincerely express my appreciation to the Minister for the Environment, Bob Debus, who gives us strong leadership, an enthusiastic dedication to the environment and a connection with our staff which remains an inspiration.



**Lisa Corbyn**  
**Director General**

# EPA Board

## Chair's report

The past year has brought major changes for the EPA Board as it continues to bring issues of environmental significance into prominent focus for the government and the community.

We have two new Board members, Councillor Genia McCaffery who has a wealth of experience in local government issues, and Ms Yvonne Stewart from the Arakwal Aboriginal Community on NSW's North Coast – the Board's first Aboriginal member. Yvonne has experience in environment protection in regional areas, and also gives the Board an important perspective on the environmental issues facing Aboriginal communities.

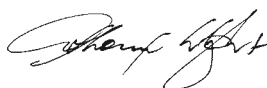
April 2006 saw the retirement of the Board's chair, David Harley. David's commitment to environment protection guided the EPA Board through times of great change, with sound and independent advice provided to the Minister, the Director General and DEC staff.

To ensure the most effective input into policy debate, the Board formulated a strategic agenda for the year that identified major themes for consideration. These included environment protection in Aboriginal communities, water management, chemicals, economic instruments, urban sustainability, waste and resource conservation, and air quality issues. The Board's broad base of expertise has provided DEC with important feedback on policy development and implementation in these areas.

This has been a crucial year in formulating a number of key platforms for the work of the EPA as a statutory body and DEC with its broader responsibilities. The Board and its members have directed and provided independent scrutiny on the NSW State of the environment 2006 report through their role on the State of the Environment Advisory Council; and on waste management by reviewing the Waste Strategy and participating in the Extended Producer Responsibility Reference Group. The Board has also helped finalise DEC's Science Investment and Management Plan, which sets the strategic science direction into the future, through its Science Subcommittee.

The Minister for the Environment attended the Board's December meeting in 2005 to discuss the City and Country Environment Restoration Program, focusing on how the program will drive waste regulation and reform and support urban and regional sustainability projects.

On behalf of the EPA Board, I would like to thank the Minister for supporting the work of the EPA Board, David Harley for his strong and collaborative chairing of the Board, the Director General Lisa Corbyn, and the staff of DEC for their commitment and dedication in assisting the Board by providing quality advice and detailed briefings.



**A.G. (Tony) Wright**  
Acting Chair



**Left to right:** John Keniry, Tony Wright – Acting Chair, (back) Bob Junor, (front) Lisa Corbyn, Judy Henderson, Gerry Bates, Peter Prineas. **Absent:** Yvonne Stewart, Genia McCaffery.

# About DEC

## Who we are

The Department of Environment and Conservation (DEC) is a NSW government agency primarily responsible for working with the community to protect and conserve our environment, including our natural and cultural heritage.

DEC is under the portfolio of the Minister for the Environment, and provides environment protection and conservation services and advice to government. DEC is responsible for developing policies and programs, and implementing government regulations and reform initiatives for environment protection and conservation, and is also a significant land manager, responsible for national parks and reserves that cover more than 8% of NSW.

In carrying out its functions, DEC operates under certain well-recognised 'brands' and legislative authorities. DEC maintains the National Parks and Wildlife Service (NPWS) logo, as many people associate this brand with our national parks.

In regulatory matters for environment protection, DEC acts under the powers of the statutory Environment Protection Authority (EPA). The independent EPA Board provides policy direction and approves significant prosecutions and exemptions under the *Protection of the Environment Operations Act 1997*.

Staff of the Botanic Gardens Trust (BGT) are part of DEC, although BGT and its Board of Trustees are responsible separately to the Minister for the Environment. DEC also administers programs on behalf of the statutory Environmental Trust. Both these trusts' activities are reported in separate annual reports.

## What we do

DEC delivers 'whole-of-environment' approaches and solutions for priority environmental, and natural and cultural heritage, issues in NSW.

DEC works towards achieving a clean and healthy environment by administering environment protection legislation. This legislation covers air and water quality, contaminated land, noise control, pesticides, hazardous chemicals, dangerous goods, radiation and waste. The legislation sets out broad-ranging environment protection requirements and outlines specific roles for agencies and local councils to implement these requirements. DEC uses various means to achieve compliance with this legislation, including education, economic incentive schemes, regulation, enforcement, and monitoring and reporting.

A major role for DEC is building a comprehensive, adequate and representative reserve system, managing the reserves for the conservation of natural and cultural heritage, and providing opportunities for people to enjoy the reserves while ensuring minimal impact on conservation values. Conservation on private lands is encouraged through formal agreements between landholders and DEC. DEC is responsible for conserving protected Australian animals and plants across the state, and for identifying, protecting and managing wilderness.

One of DEC's key roles is the protection and management of objects, places and landscapes of special significance to Aboriginal people. The reserve system also includes places of historical or social significance to the broader population, which DEC manages for conservation and the enjoyment of the people of NSW.

DEC promotes environmentally sustainable production, resource use and waste management. This involves developing, coordinating and implementing a range of strategies and programs, including educating industry and the community, and developing markets for recovered resources and recycled materials. DEC also conducts programs of social, cultural, and environmental monitoring and research.

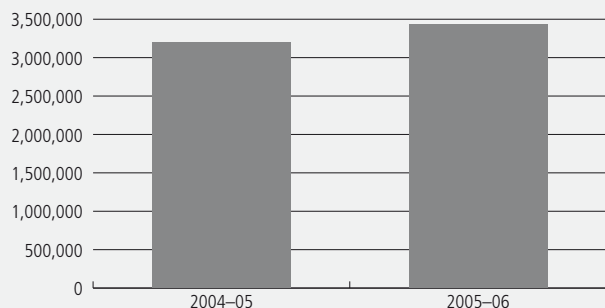


## ■ PERFORMANCE INDICATOR

### Total visits to DEC websites

**Definition:** This indicator measures the total number of visits to some of DEC's websites by both staff and external contacts. The statistics include visits to the former Environment Protection Authority (EPA) and National Parks and Wildlife Service (NPWS) websites and the corporate DEC website, which delivers agency-wide information and resources, but do not include visits to the former Resource NSW or Botanic Gardens Trust websites. A 'visit' consists of one or more page views by a single visitor.

Total visits to DEC websites



**Result:** The combined number of visits to the three websites in 2005–06 is nearly 3.43 million, an increase of more than 200,000 visits from the previous year. The three websites are being integrated into a single site for release in 2007, which will assist users to access the vast range of information about environmental issues and services.

The most popular pages in 2005–06 were:

- NPWS site – find a park; specific national park pages (Royal, Blue Mountains, Kosciuszko, Sydney Harbour, Ku-ring-gai Chase); annual passes and vehicle entry fees; native plants and animals; camping comparison tables.
- DEC and EPA sites – careers; noise; legal and licensing; public register; litter; principal air pollutants.

## Major new initiative: NSW City and Country Environment Restoration Program

In November 2005, the NSW Premier announced a major program of environmental initiatives. The City and Country Environment Restoration Program provides funding of \$439 million to be spent over five years. The program aims to restore many of the state's natural and urban areas to socially, economically and environmentally sustainable levels. Under this program, through the projects described below, the government will work towards restoring our iconic wetlands, protecting our marine environment, securing the high conservation values of our Crown lands, and reducing the ecological footprint of our urban centres.

As part of the program, a new waste and environment levy was introduced which builds on the current waste levy. From 1 July 2006, the levy will rise by \$6 per tonne per year over five years, in addition to the previously scheduled increases and consumer price index adjustments. The increased levy sends a strong economic signal about the importance of avoiding the creation of waste and the need to recover, reuse and recycle our valuable resources, as well as making resource recovery from waste more competitive.

### Restoring and protecting our natural heritage

#### NSW RiverBank

\$105 million over five years to buy environmental water from willing sellers for environmental flows and save the river systems and wetlands which are declining. See chapter 3, page 51.

#### Two new marine parks

\$25 million over five years to establish marine parks on the Batemans Shelf and Manning Shelf to better protect special marine environments for future generations. A further \$5 million will be spent to implement the management plan for Cape Byron Marine Park. See chapter 3, page 63.

#### High conservation value area fund

\$13 million over four years to purchase perpetual Crown leases on land with a high conservation value and, where appropriate, add this land to the reserve system.

### Revitalising our urban environments

#### Urban sustainability grants

\$80 million over five years for local government to work with business and the community to address urban environmental issues, and harvest stormwater.

#### Strategic Environmental Trust grants

\$76 million over five years for grants to support the Environmental Trust in generating new knowledge about our environment, developing solutions to environmental challenges and communicating with the broader community.

#### Major crackdown on illegal dumping

\$18 million over five years to ensure non-compliance does not undermine the effectiveness of waste programs.

#### A new Waste and Environment Levy to drive waste reform and fund environmental programs

An annual increase in the waste and environment levy in the Greater Metropolitan Region over five years to reduce waste to landfill, encourage recycling and fund this program. Rebates to local councils worth \$80 million over five years will reward local resource recovery achievements. See chapter 2, page 34.



## Creating a sustainable future for country NSW

### Native vegetation assistance package

\$37 million to fund a Native Vegetation Assistance Package of innovative socio-economic programs to help farmers adjust to new land-clearing laws.

## Our clients and stakeholders

Our clients and stakeholders include:

- the NSW Minister for the Environment
- state and Commonwealth government
- the National Parks and Wildlife Advisory Council
- the Aboriginal Cultural Heritage Advisory Committee
- the EPA Board
- committees advising DEC
- community organisations and associations
- Aboriginal communities
- users of parks, reserves and gardens
- neighbours of parks and reserves
- local government and its associations
- catchment management authorities
- industry and its associations
- tourism associations
- local, state and national conservation and heritage groups
- educators
- recreational groups
- volunteers
- the media
- recipients of our scientific data (research universities, students)
- public users of our information services.

### ■ PERFORMANCE INDICATOR

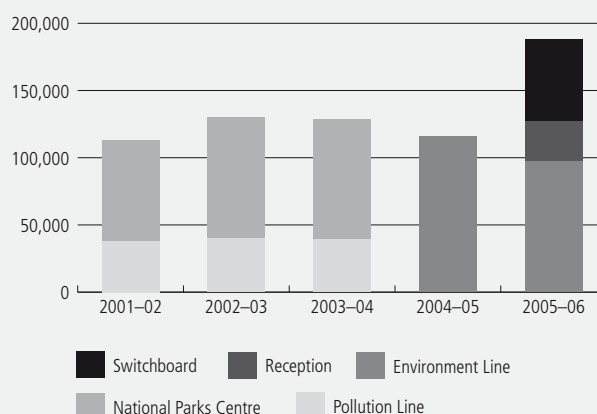
#### Number of information requests handled by DEC Information Centre

**Definition:** The DEC Information Centre provides information:

- on the phone and face-to-face via 'Environment Line'
- through reception services and switchboards
- by inquiries received through the website, by fax and by mail.

This does not include pollution incident and motor vehicle reports, or any after hours calls. See the performance indicator for incident reports on page 37, and Appendix 12.

#### Requests for information to Environment Line, Pollution Line and National Parks Centre



**Interpretation:** The integration of public information services has allowed more comprehensive and consistent data collection. In 2005-06, 188,029 requests were handled by DEC's Information Centre. Comparisons with previous years' information statistics are not valid due to the integration of services.

# Executive and organisational structure

## Our executive

At June 2006, DEC's executive management team comprised the Director General and 12 senior officers.



**Left to right:** Bob Conroy, Director Central Branch; Steve Garrett, Acting Executive Director, Legal Services; Tony Fleming, Deputy Director General, Parks and Wildlife Division; Arthur Diakos, Executive Director, Corporate Services Division; Tim Rogers, Executive Director, Sustainability Programs Division; Lisa Corbyn, Director General; Jim Booth, Executive Director, Policy and Science Division; Tim Entwisle, Executive Director, Botanic Gardens Trust; Simon Smith, Deputy Director General, Environment Protection and Regulation Division; Sally Barnes, Executive Director, Strategy, Communication and Governance Division; Jason Ardler, Executive Director, Cultural Heritage Division; and Lynden Bartrim, Acting Director Executive Services. **Absent:** Donna Campbell, Executive Director, Legal Services; Susan Calvert, Director Executive Services; and Joe Woodward, Executive Director, Operations.

# Corporate structure

## Director General

**Lisa Corbyn**

### Corporate Services Division

**Executive Director**  
**Arthur Diakos**

- Administration and Facilities Branch
- Finance Branch
- Human Resources Branch
- Information Management & Communications Technology Branch
- Service Centre Branch

### Cultural Heritage Division

**Executive Director**  
**Jason Ardler**

- Aboriginal Heritage Operations Branch
- Policy and Knowledge Branch

### Environment Protection and Regulation Division

**Deputy Director General**  
**Simon Smith**

- Environmental Innovation Branch
- Reform and Compliance Branch
- Regional Operations (Metropolitan, North East, North West and South Branches)
- RiverBank Branch
- Specialised Regulation Branch

### Parks and Wildlife Division

**Deputy Director General**  
**Tony Fleming**

- Central Branch
- Northern Branch
- Southern Branch
- Reserve and Wildlife Conservation Branch
- Western Branch

### Policy and Science Division

**Executive Director**  
**Jim Booth**

- Environment and Conservation Policy Branch
- Environment and Conservation Science Branch

### Strategy, Communication and Governance Division

**Executive Director**  
**Sally Barnes**

- Corporate Governance Branch
- Executive Services Branch
- Information and Publishing Branch
- Legal Services Branch
- Ministerial and Parliamentary Services Branch
- Public Affairs Branch

### Sustainability Programs Division

**Executive Director**  
**Tim Rogers**

- Business and Community Programs Branch
- Frameworks and Product Stewardship Branch
- Local Government and Resource Recovery Branch

### Botanic Gardens Trust

**Executive Director**  
**Tim Entwisle**

- Communications and Marketing Branch
- Domain and Royal Botanic Gardens Branch
- Finance and Business Services Branch
- Mount Annan Botanic Gardens Branch
- Mount Tomah Botanic Gardens Branch
- Science and Public Programs Branch

# Performance summary

## Our goals and focus areas

This annual report is structured around the *Department of Environment and Conservation (NSW) Corporate Plan 2004–06*, which is available on [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au). The plan sets DEC's strategic direction and highlights specific priorities in key areas of its wide-ranging environment and conservation agenda for the two years to June 2006.

The plan's four goals set the framework for DEC's work and form the headings of chapters 2–5.

In each chapter, DEC's achievements for 2005–06 are divided into one or more strategic focus areas, accompanied by key outcomes DEC aims to achieve. The plan also identifies 38 priorities for DEC's environment and conservation work, which are reported again at the start of each focus area.

## Reporting on our performance

DEC reports on its performance publicly through its annual report. The 29 performance indicators reflect DEC's priorities and commitment to ongoing programs and partnerships.

The Botanic Gardens Trust has a separate corporate plan and annual report.

DEC's goals, strategic focus areas, priorities and performance indicators are listed below.

## Our corporate priorities and performance indicators for 2004–06

### Performance indicators

- Total visits to DEC websites.
- Number of information requests handled by DEC Information Centre.

### Goal: Protection of ecological and human health



**Strategic focus area:**  
A healthier and cleaner environment

### Priorities

- Improve approaches to compliance for regulatory activities for cultural heritage, environmental protection and threatened species to ensure the highest risks to the environment are effectively managed and controlled.
- Support the government's incident and security emergency preparedness so that we are ready to deal with bushfires and biological, chemical and radiological threats and other incidents.
- Develop a science investment plan that recognises the importance of decisions made on a scientific basis and identifies priority areas for environmental science, research and information provision.
- Lead the National Chemicals Working Group to achieve a risk management framework for chemicals, and improved criteria, information and education for adverse chemical impacts.

### Performance indicators

- Number and estimated value of new pollution reduction programs negotiated with licensees.
- Pollutant load indicator for total assessable air and water pollutants from premises licensed under load-based licensing.
- Prosecutions completed under EPA legislation.
- Prosecutions completed under threatened species, parks, wildlife and Aboriginal heritage legislation.
- Number and value of penalty infringement notices issued by DEC under EPA legislation.
- Percentage of time valid air quality data is available on DEC's monitoring network.
- Estimated tonnes of VOC emissions to the GMR prevented per summer due to DEC regulation of the fuel industry.
- Percentage of Beachwatch and Harbourwatch sites that comply with Beachwatch swimming water quality guidelines more than 90% of the time.
- Number of regulatory actions under the Contaminated Land Management Act.
- Number of hazardous material incidents where DEC provided technical or clean-up advice.



**Strategic focus area:**  
**Community wellbeing improved**

### Priorities

- Establish and promote new 'liveability' concepts, such as linking improvements in health and air quality and by promoting 'Healthy Parks, Healthy People'.
- Increase the active participation of Aboriginal communities in conservation management, on and off reserved land.
- Complete the development of a NSW odour mitigation policy.
- Develop a noise mitigation policy framework to guide development within the state.

### Performance indicators

- Percentage of general terms of approval for integrated development assessment processes issued by DEC to consent authorities within statutory timeframes.
- Percentage of Environment Line pollution incident reports about issues relating to air quality, odours or noise from regulated premises.
- Number of formal agreements with Aboriginal communities for co-management of protected areas.

## Goal: Conservation of natural and cultural values across the landscape



**Strategic focus area:**  
**Biodiversity protected and restored**

### Priorities

- Lead the process of reforming NSW threatened species conservation laws, systems and approaches.
- Review, develop and lead implementation of the next stage of the NSW Biodiversity Strategy, 'Living NSW'.
- Provide tools and knowledge to support catchment management authorities and councils in their protection of the natural and cultural values of biodiversity.
- Work to address the impacts of climate change on biodiversity.
- Develop and implement off-reserve programs and initiatives for conservation as part of building a comprehensive, adequate and representative protected area system.
- Develop and implement a strategy for improved protection of NSW wetland systems.

### Performance indicators

- Private and unreserved land in NSW managed for conservation under DEC-managed programs.



### Strategic focus area: Aboriginal cultural heritage protected

#### Priorities

- Lead other government agencies in building effective relationships with Aboriginal people and communities to protect cultural heritage and to deliver the government's Culture and Heritage Cluster Action Plan.
- Review legislation and approaches for the protection of Aboriginal cultural heritage.
- Progress the return to Aboriginal communities of ancestral remains, cultural materials and knowledge, including working with Aboriginal communities and the Australian Museum.
- Identify, assess and protect places of significance to Aboriginal people in NSW.

#### Performance indicators

- Number of Aboriginal remains and collections of cultural material held under the *National Parks and Wildlife Act 1974* repatriated to Aboriginal communities.
- Number of Aboriginal Place declarations (for sites of Aboriginal cultural significance) made under the *National Parks and Wildlife Act 1974*.



### Strategic focus area: Reserve system managed and improved

#### Priorities

- Develop and implement a strategy to build and finance the reserve system, with emphasis on under-represented areas such as central and western NSW and marine environments.
- Systematically assess the natural and cultural values of the reserve system.
- Develop and implement an approach that promotes excellence in management of the reserve system, including the State of the Parks program and plan of management review.
- Develop and implement a strategic framework for cultural heritage management and interpretation within the reserve system.

#### Performance indicators

- Area of land managed by DEC for conservation outcomes.
- Number of national parks, historic sites and nature reserves covered by a plan of management or where a draft plan has been on exhibition.
- Number of reserves covered by a fire management strategy (adopted or in preparation).
- Number of historic heritage projects undertaken as part of the Heritage Assets Maintenance Program (HAMP).



### Strategic focus area: Public use of reserve system sustainable

#### Priorities

- Develop a policy and strategic planning framework for sustainable and culturally appropriate use of national parks.
- Put in place a total asset management approach for reserves.

#### Performance indicators

- Number of participants in Discovery education programs and percentage satisfied.



## Goal: Sustainable consumption, production, resource use and waste management



**Strategic focus area:**  
Sustainability reflected in government and business decisions and operations

### Priorities

- Actively contribute to the government's metropolitan and regional planning strategies to promote sustainability principles and environmental protection.
- Guide purchasing and resource use by government agencies towards more sustainable practices.
- Minimise DEC's own environmental impact in terms of energy, water and paper consumption.
- Work with businesses to move them towards sustainable practices.

### Performance indicators

- Percentage of products with recycled content purchased by NSW agencies as reported under WRAPP.
- Percentage of waste recycled by NSW agencies as reported under WRAPP.



**Strategic focus area:**  
Resource conservation improved

### Priorities

- Implement the NSW Waste Avoidance and Recovery Strategy focusing on avoiding and preventing waste, increasing use of renewable and recoverable materials, and reducing roadside and railway litter and illegal dumping.
- Contribute early in the planning process to improve conservation and efficiency in resource use in urban and rural areas e.g. for water.
- Develop a sustainability framework for a more integrated approach to managing environmental issues.

### Performance indicators

- Change in waste disposed to landfill in the Greater Sydney Region under the Waste Avoidance and Resource Recovery Strategy.

## Goal: A credible, efficient and effective organisation



**Strategic focus area:**  
One integrated DEC

### Priorities

- Build staff knowledge and accountabilities and the capacity to deliver services across DEC, emphasising conservation, environmental and cultural heritage concepts, values and practices.
- Review and implement the internal Cultural Heritage Change Program and the government's Two Ways Together plan.
- Establish effective cross-divisional links within DEC.
- Develop and implement new industrial awards for DEC.
- Establish and implement effective integrated corporate support services across DEC, including policies, procedures, systems and infrastructure.
- Set and achieve challenging targets for occupational health and safety.
- Review work priorities to achieve DEC's two-year budget savings targets while also ensuring manageable workloads for staff.

### Performance indicators

- Percentage of Freedom of Information requests granted by DEC that provide 80% or more of requested information.
- Number and value of reported DEC staff accidents and workers' compensation claims.
- Percentage of DEC staff represented in equal employment opportunity groups.

### Strategic focus area photos, pages 10–13:

B Peters, DEC; M van Ewijk, DEC; K Stepnell, DEC; M van Ewijk, DEC; S Garland, DEC; O Rogge, DEC; DEC; S Savolainen, DEC; T Garbellini, DEC.



# Financial summary

This overview of the performance of DEC's financial operations for 2005–06 should be read in conjunction with the accompanying financial statements and related notes (pages 93–129). The report provides separate financial statements for the EPA and Stormwater Trust.

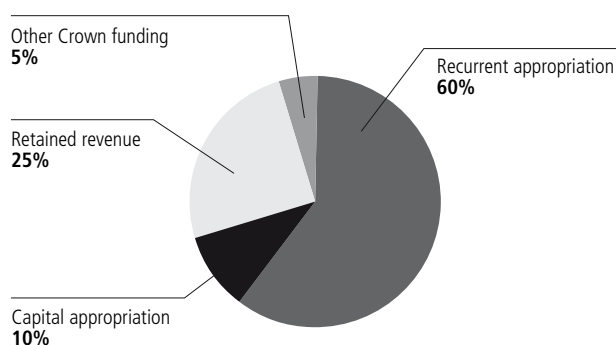
The net cost of services is the cost to the NSW Government of DEC services and is derived by deducting the total retained revenue from total expenses and adding/deducting any loss/gain on the sale of non-current assets. Our operations resulted in total expenses of \$489.28 million, total retained revenue of \$123.37 million, and a net cost of services of \$365.91 million.

In addition, DEC collected revenue on behalf of the NSW Government amounting to \$163.45 million, which contributed to Crown revenue.

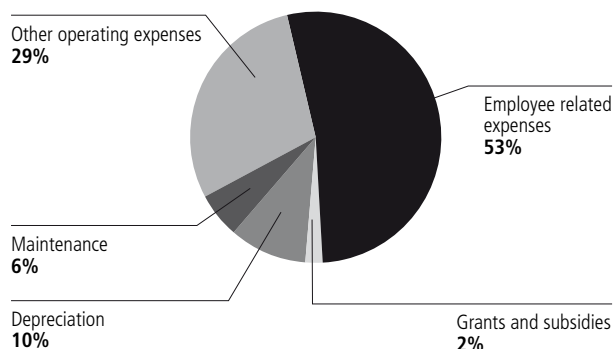
## How we use our financial resources

The following pie charts provide a snapshot of where DEC revenue came from and how it was allocated in 2005–06.

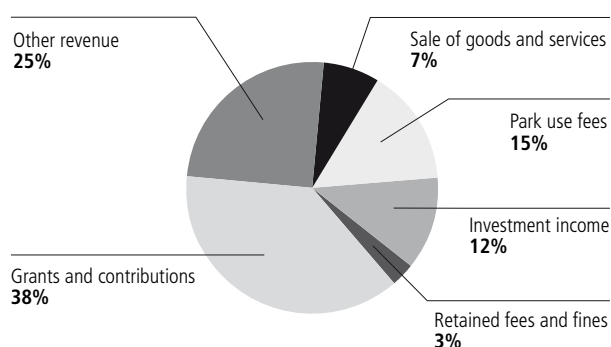
**Source of revenue 2005–06**  
(Total revenue: \$502.519 million)



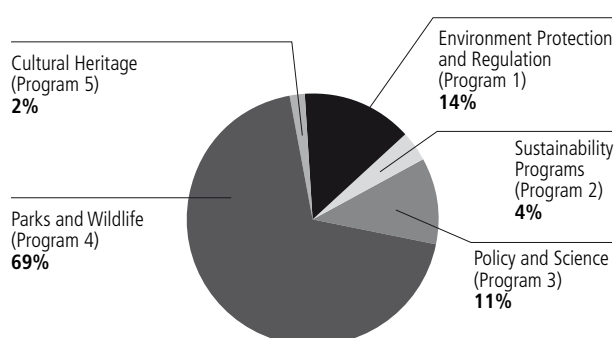
**Allocation of total expenses 2005–06**  
(Total expenses: \$489.281 million)



**Source of retained revenue 2005–06**  
(Total retained revenues: \$123.371 million)



**2005–06 Programs – net cost of services**  
(Total: \$365.91 million)



# Protecting ecological and human health

Strategic focus area	Outcomes
A healthier and cleaner environment	<p>Cleaner air, water and land</p> <p>Protection of ecological needs and sustainable use of the environment</p> <p>Understanding of the public health impacts of contamination, chemical use, waste and radiation</p>
Community wellbeing improved	<p>Land use decisions provide more 'liveable' and healthy communities by:</p> <ul style="list-style-type: none"> <li>• protecting Aboriginal cultural heritage sites and practices</li> <li>• minimising noise, dust, odour and vibration</li> <li>• promoting environmental health linkages</li> </ul>

## In this chapter

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## 2.1 A healthier and cleaner environment

### 2.1.1 Corporate plan priorities 2004–06

#### Improve approaches to compliance

*Improve approaches to compliance for regulatory activities for cultural heritage, environmental protection and threatened species to ensure the highest risks to the environment are effectively managed and controlled*

During 2005–06, DEC continued its comprehensive improvement of regulatory activities, focusing on:

- improved operation and administration of Aboriginal heritage protection (page 55)
- a new approach to manage threatened species in forestry operations in the Eden Region (page 20)
- earlier declaration of contaminated sites where contamination poses a significant risk of harm (page 29)
- targeted waste compliance campaigns on priority issues including contaminated soil, liquid waste and roadside litter (page 23)
- innovative remote surveillance and increased collaboration with local councils to continue RID Squad work in investigation and enforcement of illegal dumping and illegal landfill (page 23)
- improved guidance material about DEC expectations and processes for licensed premises and NSW councils (page 23 for liquid waste generators and page 18 for the *Compliance audit handbook*)
- threatened species priorities (page 49).

Regulatory reform has also allowed improved approaches to compliance by simplifying and clarifying regulatory requirements and strengthening the integrity of the regulatory framework. Reforms during 2005–06 included:

- changes to the *Protection of the Environment Operations Act 1997* (POEO Act), constituting the biggest overhaul of pollution laws in almost 10 years (page 32)
- significant amendments to the Protection of the Environment Operations (Clean Air) Regulation 2002 including replacing requirements in the now repealed Clean Air (Plant and Equipment) Regulation 1997 (page 33)
- repeal of the Clean Waters Regulation 1972 and the Classified Waters Scheme, which have been replaced by requirements for regulatory authorities to consider when exercising functions under the POEO Act (page 32)
- changes to threatened species regulation through the *Threatened Species Legislation Amendment Act 2004* (chapter 3, pages 43–44)
- commencement of Protection of the Environment Operations (Waste) Regulation 2005 (page 33)

#### Emergency preparedness

*Support the government's incident and security emergency preparedness so that we are ready to deal with bushfires and biological, chemical and radiological threats and other incidents*

During 2005–06, DEC participated in eight NSW and federal exercises to test emergency management arrangements – these exercises dealt with avian influenza, terrorism, hazardous materials and major fire incidents (page 32).

DEC provided technical and clean-up advice for 216 hazardous materials incidents, including on-site advice in 42 cases (page 31).

Sixty DEC staff were trained in hazardous materials and emergency response management, to improve DEC's readiness to respond to incidents and security emergencies.

By June 2006, DEC had adopted fire management strategies for 464 reserves covering more than 4.5 million hectares. These strategies guide DEC work schedules and bushfire suppression maps, and are compatible with district bushfire management plans. DEC staff worked on 187 fires affecting DEC parks and reserves, and also assisted with 60 off-park fires, including interstate fires (page 66).

DEC used the NSW Government emergency response management framework to guide staff in the event of an emergency, and to allocate resources to respond to state emergencies requiring environmental clean-up.

## Science investment plan

*Develop a science investment plan that recognises the importance of decisions made on a scientific basis and identifies priority areas for environmental science, research and information provision*

During 2005–06, DEC finalised its Science Investment Management Plan, encompassing all science carried out in DEC. The plan, to be implemented in 2006–07, aligns DEC investment in science with DEC strategic outcomes, including issues raised in NSW State of the environment 2006, and NSW Government priorities, including those of the Office of Science and Medical Research (page 32).

## National Chemicals Working Group

*Lead the National Chemicals Working Group to achieve a risk management framework for chemicals, and improved criteria, information and education for adverse chemical impacts*

DEC undertook considerable consultation across government, industry and environmental groups to prepare a discussion paper about introducing a more streamlined, transparent and nationally consistent environmental risk management framework for chemicals. This paper is to be released in July 2006 by the Environment Protection and Heritage Council of state and federal environment ministers (page 30).

During 2005–06, DEC also continued to control the use of restricted chemical products, and reviewed the rules for use of sodium fluoroacetate (1080) and copper chrome arsenate (CCA) in NSW (page 29).



DEC staff member Max Carpenter samples water for pollutants as part of an environmental compliance program.

## 2.1.2 Regulating environmental impacts

DEC is responsible for regulating industrial impacts on the environment through a range of licensing schemes and regulatory actions under environment protection legislation, as well as for regulating activities under parks, threatened species, wildlife and Aboriginal heritage legislation. This year DEC built consistent regulatory principles across all these areas, augmenting regulatory skills and strengthening approaches to threatened species and Aboriginal heritage.

At the same time, DEC used a **risk management approach** to manage environment protection licensing and pollution reduction programs. At 30 June 2006, there were 3166 licences granted under the POEO Act, with 165 new licences issued in 2005–06. The focus on the environmental risk of a licensed industrial activity has allowed DEC to concentrate on the more significant industry sectors and premises regarding licence conditions, pollution reduction programs, compliance reviews and inspections, and follow-up of annual return information.

Although the number of pollution reduction programs (PRPs) has reduced this year, the value of the PRPs has increased substantially (see page 18), reflecting this risk-based approach.

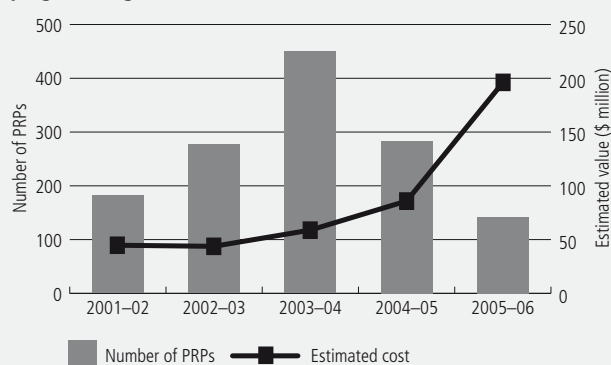
**Environmental compliance and performance reviews** integrate compliance audits and licence review programs with ongoing regulatory activities. In addition to assessing compliance with existing requirements, DEC aims to improve environmental performance by referring industry to best environmental management practices. In 2005–06, DEC finalised and published the findings of the compliance audits and the review of best practice for chemical storage handling and spill management.

## ■ PERFORMANCE INDICATOR

## Number and estimated value of new pollution reduction programs negotiated with licensees

**Definition:** This indicator measures the number and estimated value of new pollution reduction programs (PRPs) negotiated during the year. PRPs are legally enforceable programs DEC negotiates with licensees. They require changes to works or management practices to bring about environmental improvements in a specified timeframe. The conditions of a PRP are attached to an environment protection licence. PRPs may be implemented in stages over a number of years, with specific conditions attached to each stage. The dollar costs are approximate DEC estimates.

**Number and estimated cost of new pollution reduction programs negotiated with licensees**



**Interpretation:** The total cost of PRPs negotiated by DEC for 2005–06 was \$195.9 million, an increase of \$109 million since 2004–05 and \$137 million compared with 2003–04. This increase was driven by the PRPs to upgrade Sydney Water's sewage treatment systems to reduce overflows over five years. The number of PRPs decreased compared with 2004–05. The peak in 2003–04 was due to the large number of PRPs negotiated for rural sewage treatment systems, which are now being implemented.

Nearly half the PRPs (47% or 67) negotiated in 2005–06 addressed water quality issues. A further 36% addressed air, noise and odour. Significant PRPs included:

- \$158 million by Sydney Water to upgrade its sewage treatment systems
- \$8 million by Griffith City Council to upgrade its sewage treatment plant
- \$4 million by Casella Wines to install and operate a wastewater treatment plant.

In March 2006, DEC published a revised *Compliance audit handbook*. The handbook is a guide for DEC officers undertaking environmental compliance audits and provides general procedures and protocols to ensure all audits are consistent, adequate, reliable and comparable. The handbook can also be used by other organisations and is available on [www.environment.nsw.gov.au/resources/cahandbook0613.pdf](http://www.environment.nsw.gov.au/resources/cahandbook0613.pdf).

During 2005–06, DEC completed 101 audits and 1439 inspections of licensed premises. Amendments to section 78(4A) of the POEO Act added a provision that DEC must audit, on an industry-wide or regional basis, compliance with licence requirements and whether such requirements reflect best practice. As a result, DEC also reviewed licences of audited premises.

The chemical storage, handling and spill management audit program was taken a step further with the development of an education package using the audit program findings. The package consists of a plain English guideline for all activities involving storing and handling chemicals, and a hands-on training course for councils which will be piloted in 2006–07. The next audit program will aim to prevent site contamination.

At DEC's state-of-the-art Lidcombe scientific laboratories, DEC staff conducted more than 250 ecotoxicology and 50,000 chemical tests to support environmental compliance programs and investigations.

DEC has a **program of regulatory reforms** to simplify and clarify requirements and strengthen the integrity and long-term sustainability of the regulatory framework so it delivers better environment protection and resource recovery outcomes. This includes contributing to or making submissions to several Red Tape reviews that are underway in NSW and nationally. It also includes legislative changes, such as those made to threatened species legislation (see pages 43–44) and significant amendments, such as those made to the POEO Act which commenced on 1 May 2006 (see page 32).

The **load-based licensing (LBL) scheme** works to reduce pollution by linking industry licence fees to emissions. Pollutant load fees are paid by the state's larger, most potentially polluting industries and are proportional to the quantity and type of pollutants discharged and the condition of the receiving environment. Significant reductions in pollutant loads continue to be achieved (see pollutant load indicator on page 19).

This year DEC instituted significant changes to its **motor vehicle compliance program**. This included developing and piloting new approaches which will make the program more sustainable in the future, and broadening the number of people and facilities that can participate in testing and inspections. Revamping the program and training staff has reduced time devoted to issuing penalty notices in the short term. In March–May 2006, DEC piloted a new Noise Testing and Anti-Tampering Inspection Scheme.



## ■ PERFORMANCE INDICATOR

### Pollutant load indicator for total assessable air and water pollutants from premises licensed under load-based licensing

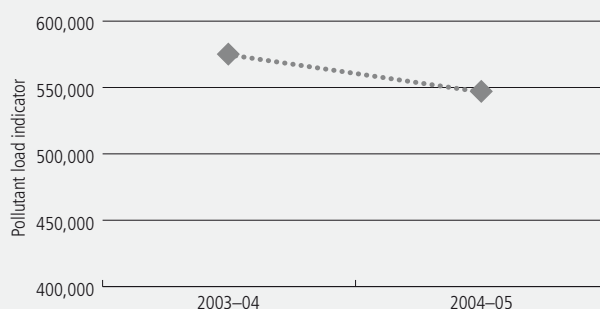
**Definition:** The pollutant load indicator (PLI) represents the total pollutant load emitted by all LBL activities for the reporting year, adjusted to reflect the relative harm of the pollutants and the sensitivity of the environment into which they are emitted. A pollutant emitted in very large quantities can have a lower impact than another pollutant with relatively small emissions because of differing levels of toxicity and the sensitivity of the environment. Fluorides, for example, have a higher pollutant impact than volatile organic compounds, even though their actual pollutant load is lower. The higher the PLI, the greater the environmental harm.

Under the LBL scheme, 12 types of air pollutants and 17 categories of water pollutants were reported by licensees and assessed by DEC. Air pollutants were arsenic, lead, fine particles, fluorides, nitrogen oxides, mercury, sulfur oxides, volatile organic compounds, hydrogen sulfide, coarse particles, benzene and benzo(a)pyrene. Water pollutants were total polycyclic aromatic hydrocarbons, total phenolics, pesticides and polychlorinated biphenyls, mercury, arsenic, chromium, salt, phosphorus, selenium, biochemical oxygen demand, total suspended solids, nitrogen, oil and grease, zinc, lead, copper and cadmium.

The following graphs present the total PLIs for air and water pollutants over the most recent years of the LBL scheme for which DEC has received complete load data. DEC has not yet received data from all licensees for the 2005–06 period so this data will be updated in 2007. In addition, data for 2003–04 and 2004–05 is considered provisional (shown with a dotted line), as quality assurance systems can lead to some restatement for up to two years following reporting. Such restatements are usually minor but substantially improve the integrity of the scheme and any decision-making based on LBL information.

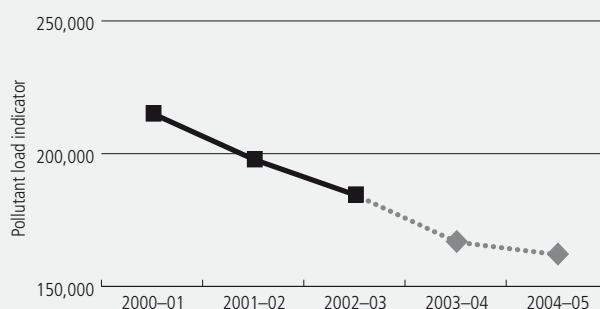
In June 2004, recognising growing international concern about the impacts of air pollutants, DEC reformed the LBL scheme by increasing the weighting for many air pollutants, and effectively increasing the total air PLI by around 50%. As a result, air data received before 2003–04 is not readily comparable with subsequent years and is not shown.

**Total assessable air pollutants PLI**



**Interpretation for air pollution emissions:** Overall, the trend indicates an improvement in controlling the levels of harm from air pollutants emitted by licensed activities. The PLI for total air pollutant emissions decreased from the previous year by 5% to 546,607 in 2004–05, including decreases in the three major individual pollutants; nitrogen oxides, sulfur oxides and fine particulates. Although not shown (see definition above), this is consistent with the 8% decline for total air pollutant emissions between 2001 and 2003.

**Total assessable water pollutants PLI**



**Interpretation for water pollution emissions:** The trend indicates continued improvement in controlling the levels of harm from water pollutants emitted by licensed activities, with a 25% improvement in the PLI between 2001–02 and 2004–05. Note that the PLIs for individual water pollutants may fluctuate within the total PLI trend.

Under the scheme, DEC will approve individuals and facilities that conduct motor vehicle noise tests and inspections of emission control devices. The scheme is expected to commence in late 2006.

DEC issued 1123 defective vehicle notices for noisy vehicles in 2005–06. These notices are issued when DEC suspects that a vehicle is excessively noisy or has had its emission control device removed or tampered with. The notices are issued based on reports from authorised DEC officers, or officers from the NSW Police and Roads and Traffic Authority (RTA). During 2005–06, there were 13 joint operations involving officers from DEC, the Police and the RTA.

## Sewer system regulation

DEC regulates most sewage treatment systems of state and local government. The largest operator is Sydney Water Corporation which has operations in Sydney, the Blue Mountains and the Illawarra. DEC's role includes issuing licences to control pollutant discharges from the sewage treatment plants and reticulation systems, and setting pollution reduction programs for areas where performance improvement is required. DEC applies economic instruments to influence performance and, where required, undertakes compliance audits and prosecutions.

In 2005–06, DEC focused on Sydney Water's delivery of sewer overflow performance targets by 2010, and on environmental monitoring to detect areas where major problems are still occurring. DEC varied the sewage treatment system licences to require sewer overflow abatement actions in dry and wet weather in 2005–10.

This will be achieved through pollution reduction programs which are estimated to cost more than \$158 million.

## Forestry regulation

DEC regulates forestry activities on public land in NSW to ensure threatened species and water quality are protected. Protection is achieved through setting best practice conditions in licences issued under the *Threatened Species Conservation Act 1995* and the POEO Act. DEC also sets approval conditions for some native forestry operations on private land on request.

During 2005–06, DEC licensed or set approval conditions for forestry operations in native forests and plantations – 352 for threatened species protection and 256 for water quality protection. These operations were in the upper north-east, lower north-east, southern, Eden, Pilliga (Western) and Riverina forestry regions.

To ensure compliance with these conditions, DEC conducted eight audits in 2005–06. Four additional audits were conducted in response to community complaints.

As a result of the auditing program, Forests NSW was issued with seven warning letters and undertook remediation action on 27 separate issues. Three clean-up notices and one penalty notice were also issued. The range of non-compliances included not retaining adequate hollow-bearing trees or young trees which will develop hollows in future; incorrect marking of, and incursions into, harvesting exclusion zones; not draining forest roads on the approaches to stream crossings; exceeding the required distances between drainage structures on roads and snig tracks; and not retaining streamside vegetation.

In the Eden area, species management plans will be developed for three threatened species: *Pseudomys fumeus* (smoky mouse), *Isoodon obesulus* (southern brown bandicoot) and *Heleioporus australiacus* (giant burrowing frog), as an improved way of managing threatened species in forestry operations.

## Prosecutions

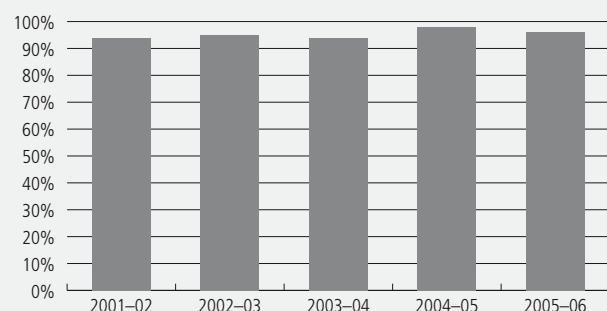
DEC can commence prosecutions for environment protection offences under the authority of the EPA. DEC can also commence prosecutions for offences under threatened species, parks, wildlife and Aboriginal heritage legislation.

### ■ PERFORMANCE INDICATOR

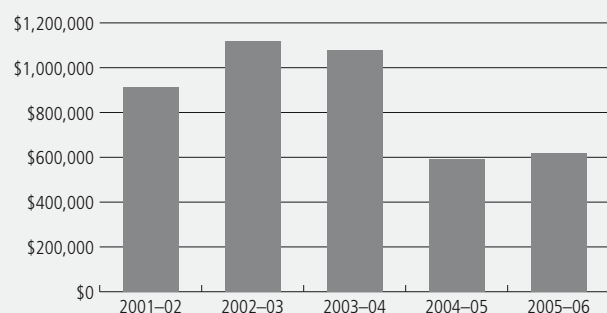
#### Prosecutions completed under EPA legislation

**Definition:** This indicator measures the number of prosecutions completed by DEC under EPA legislation, the proportion that were successful and the resulting value of fines awarded by the Land and Environment or local courts. 'Successful' refers to prosecution cases that DEC won. These include cases where the defendant was convicted and a penalty was imposed, and those where DEC's case was proved but no conviction or penalty was imposed.

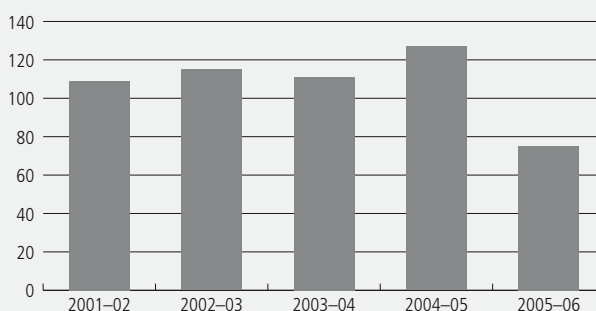
Percentage of successful prosecutions under EPA legislation



Value of fines



Prosecutions completed under EPA legislation



**Interpretation:** DEC maintained its consistently high success rate in 2005–06, winning 96% of prosecutions completed under EPA legislation. DEC continued to focus its efforts on complex and serious breaches of EPA legislation, while improving its skills in enforcing parks, threatened species, wildlife and Aboriginal heritage legislation. During the year, DEC commenced 91 prosecutions under EPA legislation. Total fines imposed for completed EPA prosecutions rose by \$26,225 to \$616,000 in 2005–06. The number of completed EPA prosecutions declined to 75 in 2005–06, partly due to fewer court-elected infringement notices (see performance indicator on page 22), and DEC's pursuit of breaches of threatened species, parks, wildlife and Aboriginal heritage matters (see performance indicator on page 21).



In total, DEC commenced 180 prosecutions during the year, similar to last year. The number of completed prosecutions, 113, was fewer than last year but the value of fines increased. The 113 prosecutions resulted in:

- 101 convictions
- 7 matters where the offence was proven but a conviction was not recorded
- 5 acquittals.

See Appendix 8 for more information on all prosecutions.

Significant prosecutions under various legislation completed during 2005–06 are outlined below.

#### EPA v Australian Waste Recyclers 1 Pty Ltd

The company was fined \$225,000 for breaching its environment protection licence when it unlawfully received about 6400 tonnes of hazardous coal tar waste at its St Marys facility. The waste contained polycyclic aromatic hydrocarbons which are known carcinogens and seriously threaten human health if they are inappropriately disposed of. The defendant company did not have the expertise or the facilities to deal with hazardous waste of this type. The Land and Environment Court found that the company's conduct was deliberate, calculated and undertaken for financial gain, with complete disregard for public safety.

#### EPA v Tyco Water Pty Ltd

Tyco Water Pty Ltd was fined \$50,000 by the Land and Environment Court for polluting Prospect Creek in Fairfield with between 0.24 and 2.36 megalitres of raw human sewage. Although Tyco had put in place a bypass system to enable it to conduct repairs on a sewerage system, the bypass system failed and raw sewage entered the creek through an overflow point that Tyco had not checked. Although there were immediate pollution impacts on the creek and risks of exposure, there were no long-term effects on the environment.

#### EPA v Caltex Refineries (NSW) Pty Ltd

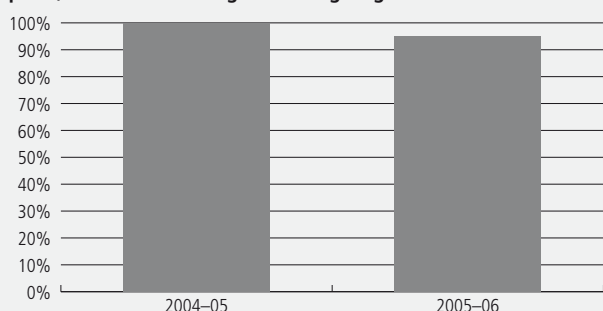
Caltex Refineries was fined \$45,000 by the Land and Environment Court after pleading guilty to polluting waters at Kurnell, when a mixture of creosote and oil was discharged from an underground pipeline after a valve corroded. The incident resulted in over 14,000 litres of creosote and oil leaking into the surrounding soils and escaping into a nearby drain. About 400 metres of a watercourse, adjacent wetlands and groundwater were polluted. Caltex had not inspected or developed a proper maintenance program for the underground pipeline, but reported the incident to DEC in accordance with the terms of its environment protection licence and spent about \$4 million on the clean-up operation.

### ■ PERFORMANCE INDICATOR

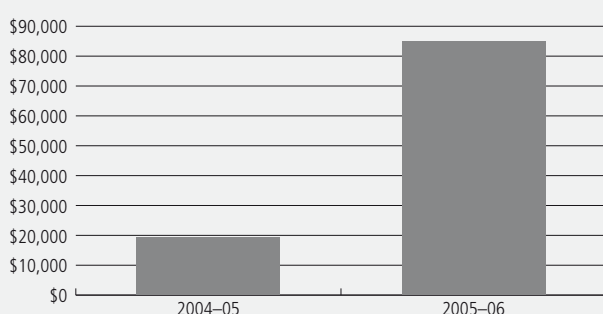
#### Prosecutions completed under threatened species, parks, wildlife and Aboriginal heritage legislation

**Definition:** This indicator measures the number of prosecutions completed by DEC under threatened species, parks, wildlife and Aboriginal heritage legislation, the proportion that were successful and the resulting value of fines awarded by the Land and Environment or local courts. 'Successful' refers to prosecution cases that DEC won. Offences under the *National Parks and Wildlife Act 1974* and the *Threatened Species Conservation Act 1995* cover activities that are both on and off park.

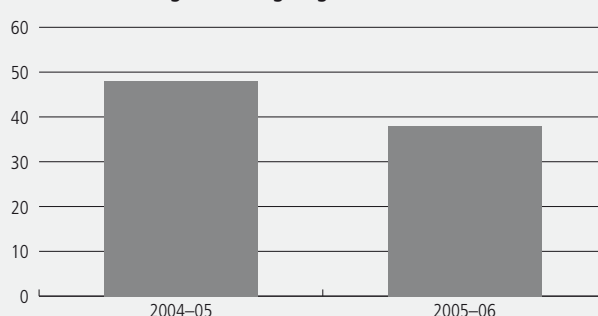
Percentage of successful prosecutions under threatened species, parks, wildlife and Aboriginal heritage legislation



Value of fines



Prosecutions completed under parks, threatened species, wildlife and Aboriginal heritage legislation



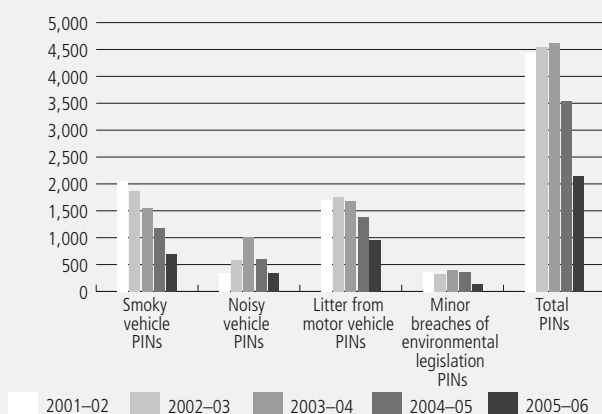
**Interpretation:** The 95% success rate for threatened species, parks, wildlife and Aboriginal heritage prosecutions is consistent with the 96% success rate for EPA prosecutions (see previous indicator). Total fines of \$84,910 were imposed for these prosecutions, a four-fold increase compared to fines imposed in 2004–05. During 2005–06 DEC commenced 89 prosecutions, up from 58 in the previous year. The number of completed prosecutions decreased by 10 to 38. The increase in the number of prosecutions commenced has been a result of DEC improving its skills in enforcing parks, wildlife and Aboriginal heritage legislation and more rigorously pursuing serious breaches relating to threatened species and cultural heritage.

## ■ PERFORMANCE INDICATOR

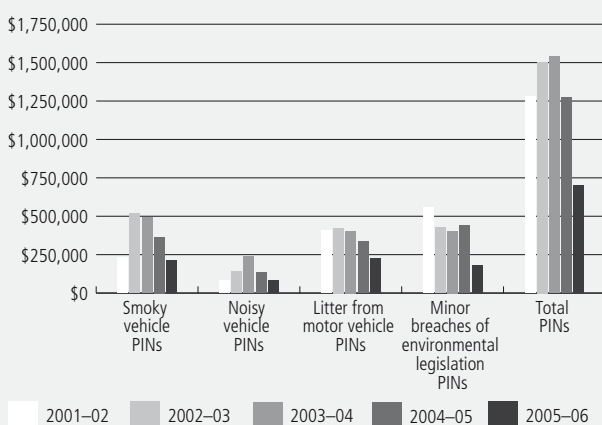
### Number and value of penalty infringement notices issued by DEC under EPA legislation

**Definition:** Penalty infringement notices (PINs) are issued for minor breaches of EPA legislation administered by DEC, as well as for smoky and noisy vehicles and littering from vehicles. This indicator measures only the number of PINs issued and processed by DEC. PINs processed and issued directly by authorised agencies (primarily local councils and NSW Police which totalled more than 6700 during 2005–06) are not included in this indicator. See Appendix 8 and page 19 for further details of PINs issued by other authorised agencies.

Number of PINs issued



Value of PINs issued



**Interpretation:** PIN numbers and values are lower compared to previous years. In part this reflects improvements in motor vehicle standards but it also reflects significant changes to DEC's motor vehicle compliance program. These changes take advantage of improved technology, broadening the number of individuals and facilities that can inspect and test emission control devices, and increasing DEC's use of 'non-fine' noise testing and anti-tampering rectification orders. During 2005–06, DEC trained staff in areas such as regulating dangerous goods and pesticides, which should further improve compliance with DEC regulations.

### EPA v Ballina Shire Council

Ballina Shire Council was fined \$35,000 by the Land and Environment Court for failing to comply with a condition of its environment protection licence that required it to carry out environmental monitoring at its Ballina landfill. The council should have monitored the site for three years, while regularly sending the results to DEC so DEC could better gauge the impact of the landfill on the environment. The Land and Environment Court said that the fact that the breach continued for three years increased the seriousness of the offence. The court also said that by not drawing the breach to DEC's attention in its annual returns, the council had evaded its responsibilities under the law.

### DEC prosecutions of Cody Wade Angland, Mitchell John Cotterill and Jed Wayne Stockton

The defendants were respectively fined \$700, \$1600 and \$1500 by the local court for offences concerning illegal 'pig-dogging' in Woomargama National Park. The three men were charged for using dogs to illegally hunt pigs in the park. Two dead pigs were found in the men's car and one dog was wearing a breastplate. Illegal pig hunting interferes with DEC's program to control feral pigs in national parks and can result in flora and other fauna being damaged.

### DEC prosecution of Hugh Charles Gordon and BGP Properties Pty Ltd

The Land and Environment Court fined Newcastle businessman, Hugh Charles Gordon, \$30,000 and BGP Properties Pty Ltd \$40,000 after DEC brought prosecution proceedings against them for destroying or injuring about 2000 plants of the threatened species plant *Tetratheca juncea* at a Lake Macquarie property.

The fine is the highest ever awarded against an individual under the *National Parks and Wildlife Act 1974*. The cleared land contained the largest recorded sub-population of *Tetratheca juncea* plants in the world. There are believed to be less than 10,000 plants of this type worldwide, so the population of *Tetratheca juncea* in the Lake Macquarie area is of state and national significance.

## 2.1.3 Waste

DEC regulates the waste industry, provides policy advice and guidance to waste generators and the public, and manages the waste avoidance and resource recovery programs covered in chapter 4. This section covers DEC's waste regulation activities.

DEC's waste compliance and enforcement program uses a broad range of compliance tools such as targeted inspections, sector compliance programs, enforcement actions, education and cleaner industry programs. By ensuring compliance with NSW environmental laws, DEC gives certainty to the waste industry and provides better environment protection.

Under the POEO Act, authorised officers from DEC, other state agencies and councils can issue penalty notices for littering offences and members of the community can provide reports to DEC. During 2005–06, 6670 penalty notices for littering were issued.

In the past year, DEC conducted 10 waste compliance campaigns that targeted disposal of contaminated soil, roadside litter, companies generating liquid wastes, and improving the environmental performance of the composting sector.

During August 2005, DEC inspected 16 licensed landfills to assess compliance with the use and application of daily cover. The daily covering of waste limits infiltration of water, controls and minimises risk of fire, minimises emission of landfill gas, suppresses site odour, reduces the numbers of flies and rodents, and decreases litter generation. Seven fines and three written warnings were issued to landfill operators for breaching licence conditions.

## Controlling illegal dumping

DEC works with councils and other agencies such as the Sydney Catchment Authority to fund two **Regional Illegal Dumping Squads** (RID Squads): the Western Sydney RID Squad and the Southern RID Squad which extends from the Illawarra to Shoalhaven. The participating councils investigate illegal dumping and landfilling on a regional basis, allowing for a more strategic and focused response.

During 2005–06:

- the Western Sydney RID Squad commenced 804 investigations, and issued 5 clean-up notices and 233 penalty notices
- the Southern RID Squad commenced 965 investigations, and issued 17 clean-up notices and 160 penalty notices.

Funding for the RID Squads for the next three years has been approved by the Environmental Trust. This year a new agreement with participating councils was signed to continue the Western Sydney RID Squad to 2009.

In May 2006, DEC embarked on a new phase of remote surveillance to catch illegal waste dumpers by conducting covert surveillance from light aeroplanes and helicopters. The **Eyes in the Sky Program** has identified over 50 potential illegal dumping sites across Wollongong, western Sydney and Newcastle. DEC officers have commenced on-ground investigations and enforcement actions.

## Liquid waste handling

If handled inappropriately, liquid wastes can harm the environment. In October 2005, DEC distributed five Liquid Waste Fact Sheets to licensed premises that generate liquid waste and to NSW councils. The topics covered by the fact sheets, which are available on [www.environment.nsw.gov.au/publications/liquidwastefs.htm](http://www.environment.nsw.gov.au/publications/liquidwastefs.htm), are:

- storing liquid waste
- handling liquid waste
- preventing spills



DEC officer inspects a truck transporting waste.

- responding to spills
- reducing liquid waste through cleaner production.

Between October and December 2005, DEC authorised officers inspected 25 waste tankers to check compliance with waste and dangerous goods transport legislation at liquid waste treatment plants in Sydney, the Illawarra and the Hunter region.

During the campaign, a fine was issued to a waste transporter for breaching dangerous goods transport legislation by not carrying appropriate safety equipment. The consignor of the waste also received a fine for not displaying the necessary dangerous goods placards on the liquid waste tanker.

The waste tanker inspection project revealed improved compliance with waste and dangerous goods transport legislation, with the number of compliant vehicles inspected increasing to 84% in 2005–06 compared to 58% in 2004–05.

## 2.1.4 Air quality

### Action for Air

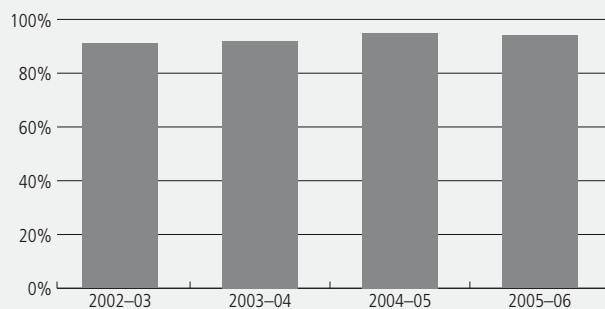
Tackling air pollution involves ensuring performance is improved across all sectors – the transport, domestic, commercial and industrial sectors. The NSW strategy to improve air quality in the Greater Metropolitan Region (GMR) (Sydney, the lower Hunter and the Illawarra) over 25 years, **Action for Air**, was released in 1998. During 2005–06 DEC reviewed progress in improving air quality, and updated Action for Air. DEC will release *Action for Air: 2006 update* in August 2006. Issues addressed include climate change (see NSW Greenhouse Plan on page 25), health and liveability, the health costs of air pollution and transport-related air pollution.

## ■ PERFORMANCE INDICATOR

### Percentage of time valid air quality data is available on DEC's monitoring network

**Definition:** This indicator measures the percentage of time valid data was available to the community on DEC's air quality monitoring network in the Greater Metropolitan Area (Sydney, the lower Hunter and the Illawarra) and four regional cities: Albury, Bathurst, Tamworth and Wagga Wagga. 'Valid' data is data that has been fully quality-assured. The maximum time valid data can be expected from the network is about 95% of the time, because of the need to calibrate data monitoring equipment.

Percentage of time valid air quality data is available from DEC's monitoring network



**Result:** The network produced valid data 94% of the time in 2005–06. Previous years were also close to this level (95% in 2004–05 and 92% in 2003–04).

In April 2006, DEC released a study that estimates the **health cost of ambient air pollution in the GMR**. The information was prepared to assist decision-making on proposals that affect the GMR's air quality. The study has conservatively estimated the health cost of ambient pollution in the GMR to be between \$1 billion and \$8.4 billion each year. A reduction in air pollution will therefore deliver long-term benefits by improving the population's health. Estimates of the cost of air pollution will change over time due to population growth, changes to vehicles and fuel standards, and changes in production processes.

During 2005–06, DEC continued developing innovative programs to tackle emissions from smaller sources through the **Clean Air Fund** which was established with funding from the Environmental Trust. Programs included local air improvement projects, the new air emissions inventory, the air quality toolkit and training for local council officers.

DEC completed the technical aspects of the **air emissions inventory** which assesses the contribution different sources of air pollution make to overall air quality. Over 90 air pollutants from mobile, industrial, commercial, domestic and biogenic sources in the GMR were measured. The inventory will help determine future policy priorities and whether there is a need to add to existing ways of managing air pollution.

DEC developed a web-based '**Local government air quality toolkit**' to enable councils to better assess and control potential air pollution sources. The toolkit helps councils to identify air pollution sources and understand the impact these may be having on the local environment. Local industries such as construction sites, auto repair shops, small food outlets, small-scale sawmills and intensive agricultural activities can all contribute to air pollution. Training workshops for local government officers based on the toolkit were held around NSW from March to June 2006. The toolkit will be available online in 2006–07.

DEC was represented on a working group for the National Environment Protection Council's 10-year review of **national air quality standards** which prepared an Issues Scoping Paper (released in October 2005) and reviewed the Ambient Air Quality National Environment Protection Measure (NEPM). DEC also chaired a national working group on ground level ozone standards that provided findings to the review. DEC was represented on the Air Toxics NEPM working group to develop an air toxics prioritisation methodology, undertaking consultation with environment and health professionals, industry and the community.

## Monitoring and reporting

DEC's **air quality monitoring network** continues to be the largest in Australia, with 20 stations in the GMR. All sites measure ozone, nitrogen dioxide and particles as well as visibility. Some sites also monitor carbon monoxide and sulphur dioxide. Additional monitoring stations that measure particles only are in Albury, Bathurst, Tamworth and Wagga Wagga.

Sydney's air quality has generally improved in recent years. Levels of many pollutants that harm human health have fallen. The two classes of pollutants that are still of concern are summertime smog, caused primarily by motor vehicle emissions, and wintertime brown haze, caused primarily by emissions from wood heaters and diesel vehicles.

DEC informs the public about air quality by updating a regional pollutant index (RPI) twice daily on the website, providing 24-hour summaries and issuing quarterly air quality monitoring reports. Currently, the data management system is being upgraded to provide the community with improved access to ambient air quality monitoring data. DEC and NSW Health continue to inform the public about days of high air pollution in the GMR and the possible health impacts.

Health alert messages are tailored for the particular pollutant and forecast levels:

Alert level	Regional pollutant index
High	≥ 50 for all pollutants
Hazardous	≥ 75 for ozone and NO <sub>2</sub> ≥ 200 for fine particles

During the 2005–06 summer period, three high alerts were issued, one of which was an exceedance of the ozone standard. No hazardous alerts were issued.



## Transport emissions

A one-year **trial of technology to reduce emissions from older diesel vehicles** was completed in June 2006. The project, funded by the Environmental Trust, was a partnership project between DEC and the Roads and Traffic Authority. The purpose of the project was to establish the feasibility and benefits of implementing a diesel retrofit program. The project investigated technical, operational and other issues associated with retrofitting after-treatment devices to the exhausts of diesel vehicles to capture harmful pollutants, establish the cost and benefits of fitting these devices, and expose operators to the new technology.

The study concluded that catalysts and filters are practical and effective devices for reducing emissions from diesel vehicles with the most appropriate device depending on where and how vehicles are operated. The catalysts reduced particulates by 30%, the filters by 90%.

## Greenhouse initiatives

The **NSW Greenhouse Plan** was released on 29 November 2005. The plan includes medium and long-term targets to reduce greenhouse gas emissions in NSW by 60% by 2050. As well as researching the impacts of climate change on biodiversity and conservation (see page 43), DEC is leading the following initiatives to reduce greenhouse emissions:

- developing an environmental rating scheme for trucks and buses, to implement new technologies that reduce emissions and promote transport energy efficiency
- reviewing policies relating to waste, landfill and recovery of energy from waste to incorporate the impact of greenhouse gas emissions
- facilitating sustainability compacts between government and industry that include energy efficiency measures (see pages 77–78).

## 2.1.5 Waters and catchments

### Metropolitan Water Plan

In May 2006, the NSW Government released a revised Metropolitan Water Plan following an independent review. The plan presents policies and actions to supply the demand for water in the Sydney region over the next 25 years, and to improve the health of the Hawkesbury–Nepean River. DEC participated in the development of the plan, and is an environmental regulator of some projects.

Under the plan, DEC worked on a new recycled water strategy for western Sydney. The **Western Sydney Recycled Water Initiative** includes plans for recycled water to be used for residential, industrial and agricultural purposes; local water recycling projects; and a Replacement Flows Project which relates to recycled water which has been treated at a purpose-built plant being released into the Hawkesbury–Nepean River to replace the current environmental flows released from Warragamba Dam.

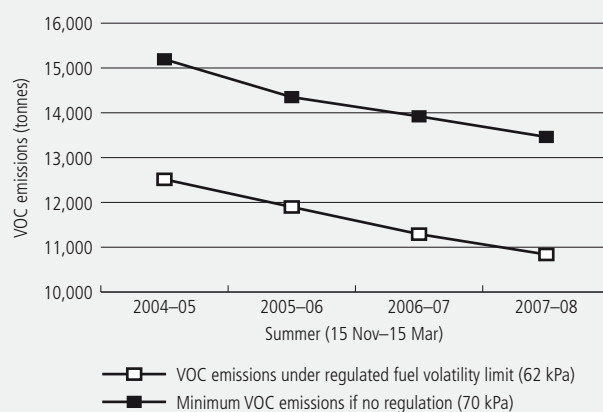
#### ■ PERFORMANCE INDICATOR

### Estimated tonnes of VOC emissions to the GMR prevented per summer due to DEC regulation of the fuel industry

**Definition:** Petrol vapour, containing volatile organic compounds (VOCs), is one of the main causes of smog in the GMR during summer. Lowering VOCs reduces fuel evaporation and emissions from vehicles. The summer period is targeted because the warmer temperatures contribute to greater evaporation of petrol.

This indicator estimates the reduction in VOC emissions achieved due to amendments in 2004 to the Protection of the Environment Operations (Clean Air) Regulation. The amendments require those in the fuel industry to comply with volatility limits set on petrol supplied in the GMR between 15 November and 15 March each year.

Estimated VOC emissions from GMR motor vehicles in four-month summer periods (tonnes)



**Interpretation:** The limits in the Regulation, which are the tightest in Australia, commenced in November 2004. The estimate in VOC emissions from petrol complying with the limits is compared with an estimate of the emissions if no regulation of petrol volatility had been introduced. The regulated limits are expected to lead to further falls in VOC emissions in the GMR in the summer of 2006–07.

DEC assisted the Department of Natural Resources to explore options for improving **environmental flow releases to the Shoalhaven River** from Tallowa Dam. This work has involved assessing the water needs of the river's complete ecosystem, including its main river channel, river banks, estuary, and important ecological features such as rare and endangered species. Environmental flow rules will be incorporated into the draft Water Sharing Plan for the GMR.

During 2005–06 DEC also led the development of an inter-agency environmental monitoring project for the Hawkesbury–Nepean River, and contributed to:

- the assessment process for the desalination plant
- reforms to encourage the involvement of the private sector in water services in Sydney
- a water education plan to maintain and increase awareness of water conservation.

## Water management

DEC's Director General continues to chair the **Water CEOs Committee**. This committee facilitates cross-agency collaboration in progressing the state's water reform agenda, including considering implementation issues associated with the National Water Initiative. This year Water CEOs developed its future strategic agenda to focus on agreed priorities for specific rural water management issues, including floodplain management, water sharing plans, water monitoring, diffuse source pollution, and wetland initiatives.

**NSW RiverBank** is a \$105 million major initiative to protect and restore the health of our inland rivers and wetlands, implemented by DEC (see page 51). To maximise the environmental outcomes that NSW RiverBank can achieve, DEC developed a submission to seek matching funding from the Australian Government Water Fund to create a \$203 million NSW Rivers Environmental Restoration Program.

To help NSW progress towards meeting its *Living Murray First Step* water recovery target of 249 gigalitres by 2009, in May 2006 the Premier announced that the NSW strategy for recovering this volume of water would focus on infrastructure and market-based measures, and would include purchasing 80 to 125 gigalitres of water from willing sellers. DEC will continue to work collaboratively with other NSW agencies to implement this strategy.

## Maintaining and improving water quality

The release of the **NSW marine water quality objectives** in May 2006 completes the suite of water quality objectives for all NSW surface waters (fresh, estuarine and marine). DEC coordinated the development of the objectives as long-term goals for improving water quality in NSW waters.

The marine water quality objectives, which were endorsed by the NSW Government following consultation with peak community groups and councils, streamline local and state policies for coastal planning and management. They are a useful tool for councils, catchment management authorities (CMAs), government agencies and community groups to use in strategic planning and development assessment.

DEC has developed three guidance booklets to support organisations using the water quality objectives:

- *Local planning for healthy waterways using the NSW water quality objectives* suggests ways in which strategic local planning can contribute to the health of waterways
- *Investing in our catchments: Water quality and its role in river health* outlines policy and technical tools that can support CMAs' planning for and investment in waterways
- *Using the Australia and New Zealand Environment Conservation Council (ANZECC) guidelines and water quality objectives in NSW* provides a simplified user's guide to the national guidelines, the water quality objectives and the environmental values of water.

To access these booklets or find out more about water quality objectives, visit [www.environment.nsw.gov.au/ieo](http://www.environment.nsw.gov.au/ieo).

## Monitoring

From July to October 2005, DEC undertook the fourth **Audit of the Sydney Drinking Water Catchment** as required by the *Sydney Water Catchment Management Act 1998*. The report provides a benchmark for stakeholders who are interested in the supply of raw drinking water and the health of the catchment. The report used a core set of environmental indicators to provide a valuable baseline for future audits, and made recommendations relating to raw water quality, managing water resources, land condition and ecosystem health. The report is available on [www.environment.nsw.gov.au/water/sdwc2005.htm](http://www.environment.nsw.gov.au/water/sdwc2005.htm).

DEC has participated in the **Sustainable Rivers Audit**, a comprehensive river health monitoring program in the Murray–Darling Basin. Under the program, in 2004–06 DEC conducted macroinvertebrate sampling at 336 sites, collecting and identifying over 80,000 taxa. A full report on the status of the Basin will be made in late 2007, when all data is available.

DEC also manages the Beachwatch and Harbourwatch programs which provide important recreational water quality information to the community. DEC supports the Beachwatch Advisory Committee which oversees the program.

## Urban stormwater program

The **Urban Stormwater Program** and the **Stormwater Trust** finished their work on 30 June 2006. The program provided seed funding to improve stormwater quality and enable the stormwater industry to develop new ways of better managing stormwater quality. Under the program, more than 24,000 tonnes of pollution, the equivalent of 2400 garbage truck loads, have been prevented from entering waterways.

The main programs undertaken by the Trust included grants to councils and other managers to fund stormwater projects; grants to help fund councils' preparation of stormwater management plans (which were required for all population centres with more than 1000 people); the Urban Stormwater Education Program; and the Stormwater Extension Officer Program, which funded officers based around the state.

The Trust's later work, with active DEC involvement, included ensuring that funding was available to assist local government with stormwater management into the future. In late 2005, the NSW Government amended the *Local Government Act 1993* to allow councils to levy a stormwater management service charge. This option gives councils access to more sustainable long-term funding.

During the year, DEC negotiated a transitional program with catchment management authorities which will now support councils' stormwater management activities. This will help ensure that water quality, stormwater harvesting and flooding are managed in an integrated manner by natural resources managers. In addition, the Government has initiated the Urban Sustainability Grants Program under the Environmental Trust with a key focus on stormwater.

## Water quality market-based instruments

The **Hunter River Salinity Trading Scheme** (HRSTS) is Australia's most sophisticated and successful emissions trading scheme. Established in 1995, it has significantly reduced salt levels in the Hunter River, which used to have saline peaks that could damage crops and make the water unfit for irrigation. DEC worked with mining companies, power stations and irrigators to design a scheme that protected water quality and provided a powerful incentive for companies to find alternatives to discharging saline emissions into the river. As a result, the river, which drains the largest coastal catchment in NSW covering 22,000 square kilometres, is now less salty than an average bottle of mineral water.

In April 2006, 200 salinity credits were sold by auction. The eleven bidders included nine mines and two power stations. The average price paid was \$564 per credit, and the proceeds from the auction fund the cost of running the scheme, including an extensive network of river monitoring gauges.

Credits enable companies to include saline discharges to the Hunter River as part of their operations, but only in a way that ensures that the river is not polluted. The total discharge is determined on a day-to-day basis, with reference to the salinity targets set out in the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002. The more credits the licence holder has, the more salt water they can discharge. However, the timing of any discharge is subject to specific rules set out in the Regulation.

An offset is one or more actions put in place in an appropriate location to counterbalance (offset) an impact on the environment. The **Green Offsets for Sustainable Regional Development Program** investigated ways of managing salt loads in stressed rivers in the Murray–Darling Basin as part of the National Market Based Instruments Pilot Program. Under the pilot, DEC has put in place an offset program with Ulan Salt Mine in Macquarie–Castlereagh to achieve reduced salt loads at a cost-saving to the company of approximately \$91 million over the next 20 years. DEC has also developed the basis for salinity offset programs with the Norse Skog Paper Mill in the Murray Catchment and the Moree Spa Baths in the Gwydir Catchment.

In August 2005, DEC released a final report, *Green offsets for sustainable regional development*, which describes findings from offset trials undertaken as a part of the National Action Plan for Salinity and Water Quality. The trials have shown that offsets can provide cost-effective options for DEC-licensed premises to meet environmental requirements after all cost-effective on-site mitigation measures have been implemented. The application of offsets will depend on the presence of effective drivers, such as requirements for no net impact for new developments and expansions to existing developments. The report also contains an institutional framework for implementing salinity offsets in the current planning, regulatory and policy framework.

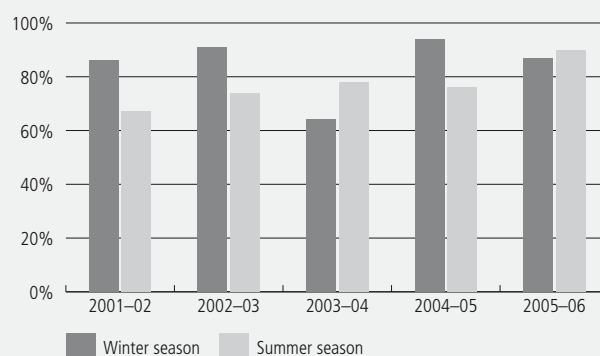
### ■ PERFORMANCE INDICATOR

#### Percentage of Beachwatch and Harbourwatch sites that comply with Beachwatch swimming water quality guidelines more than 90% of the time

**Definition:** DEC's Beachwatch and Harbourwatch programs monitor water quality at 129 coastal sites in Sydney, the lower Hunter and the Illawarra, reporting on a daily, weekly, monthly and yearly basis to the community and stakeholders. Samples are tested for two indicator bacteria, faecal coliforms and enterococci, and sites must meet the criteria for both to meet the swimming guidelines. The winter season extends from May to September; summer covers October to April.

DEC continues to support local councils undertaking recreational water quality monitoring under the Beachwatch Partnership Program. The program provides technical advice, training, quality assurance and assistance with community reporting. During the 2005–06 summer season, DEC worked in partnership with nine councils to monitor and report on recreational water quality at more than 120 swimming locations.

#### Beachwatch and Harbourwatch sites complying with Beachwatch swimming water quality guidelines more than 90% of the time



**Interpretation:** Summer 2005–06 results were the best yet recorded (an increase of 14% from the previous year), due to long-term improvements in the management of stormwater and wastewater, and dry weather conditions.

'State of the beaches 2005–06', due for release in October 2006, provides a detailed analysis of monitoring results.

The **South Creek Nutrient Offset Pilot** is trialling measures to reduce nutrient run-off from agricultural sources to South Creek in the Hawkesbury–Nepean Catchment. The pilot is examining measures needed to offset major nutrient discharges in the catchment, e.g. from sewage treatment plants. During 2005–06 the pilot supported, measured and monitored a range of works at seven properties to reduce nutrient run-off, including settlement ponds, constructed wetlands and recycling systems.

The recent amendments to the POEO Act mentioned on page 32 provide a stronger legislative basis for DEC to negotiate environmentally-friendly offset programs with industry.

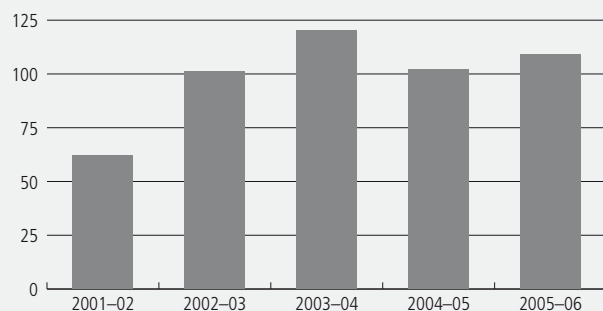


## ■ PERFORMANCE INDICATOR

### Number of regulatory actions under the Contaminated Land Management Act

**Definition:** This indicator outlines the number of regulatory actions DEC has taken under the *Contaminated Land Management Act 1997*. When contamination presents a significant risk of harm as defined under the Act, DEC may take one or more of these regulatory actions to clean up the site. Actions include assessing contamination under the Act, declaring investigation areas and remediation sites, and developing orders and agreements for voluntary proposals relating to investigation or clean-up tasks.

#### Regulatory actions under the Contaminated Land Management Act



**Interpretation:** Activity and clean-ups of contaminated sites increased. The sharp increases in 2002–03 and 2003–04 reflected a policy change that meant all sites where contamination poses a significant risk of harm were declared earlier.

This year, DEC has:

- overseen completion of the remediation or investigation of 13 sites, which has allowed 25 regulatory notices to be withdrawn
- received 30 new site notifications
- assessed significant risk of harm to people and the environment on 23 sites.

## 2.1.6 Contaminated sites

DEC is responsible, through the *Contaminated Land Management Act 1997* (CLM Act), for investigating and regulating the remediation of significantly contaminated sites to ensure the protection of ecological and human health. The clean-up of these sites can be complex and costly and take several years.

The **Rhodes Remediation Project** is one of Australia's largest ever remediation projects. The Rhodes Peninsula, located on Parramatta River and bounded by Homebush Bay to the west and Brays Bay to the east, contains former industrial sites that are heavily contaminated with toxic chemicals including chemical wastes and dioxins. DEC has been regulating the remediation of three sites: the Lednez (Union Carbide) site, the (former) Allied Feeds site and the Statewide (former Glad) site. The contamination on all three sites was from Union Carbide which was a major producer of organochlorine pesticides. The sites contain many persistent organic pollutants including dioxin, an identified carcinogen that has been found in fish in Sydney Harbour.

DEC has:

- assessed environmental impact statements
- assessed the technologies that will be used to clean up the sites
- regulated licensing and enforcement under the POEO Act and the *Environmentally Hazardous Chemicals Act 1985*
- reviewed and approved environmental management plans and proof of performance programs.

Contaminated soil on the Allied Feeds site is being treated with thermal treatment technology. A directly-heated thermal desorption plant is undergoing an extensive program of proof-of-performance trials before being fully commissioned on the Allied Feeds site. An indirect thermal process has been approved for the Lednez site and Homebush Bay sediments.

DEC is continuing to regulate the investigation and **remediation of Botany Bay groundwater contamination** arising from activities undertaken decades ago. To comply with a clean-up notice issued by DEC, Orica completed construction of its Botany Bay Groundwater Treatment Plant (GTP) in October 2005 and began treating groundwater in January 2006. During the plant's initial period of operation, DEC required Orica to shut down the



Ongoing remediation at Rhodes.

B Peters, DEC

GTP for 18 days in May, and again in June, when dioxins marginally above the permitted level were detected in an air emissions sample. Orica made modifications to inhibit dioxins forming during the treatment process and were able to resume operating the GTP in June 2006, treating approximately 2.5 megalitres of contaminated groundwater per day. The capacity of the plant is anticipated to increase to 7 megalitres per day once further modifications are made.

Due to the shutdowns of the GTP and its limited capacity, groundwater extraction has been intermittent. As a result, the groundwater extraction program focused on containing contaminated groundwater on Foreshore Road to prevent it from reaching Botany Bay. This combination of groundwater containment and treatment is an effective way of protecting Botany Bay from the legacy of poor practices in the past.

In September 2004, the Environmental Trust established a \$2 million, two-year **Council Gasworks Remediation Program**, in response to councils' concerns about the cost of remediating gasworks sites for which they are legally responsible under the CLM Act. DEC provides technical expertise to help inform the Trust decisions, and chairs the technical committee. The funding has assisted Armidale Council to remediate contaminated soil and groundwater from the former Armidale Gasworks. Funding allocated to Shoalhaven and Bathurst councils has kick-started the remediation of both Nowra and Bathurst gasworks sites.

In January 2006, DEC sought public comment on a Regulatory Impact Statement for the proposed **Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation**. The Regulation seeks to reduce the risks to human health and the environment from leaking underground petroleum storage systems, by making it compulsory to comply with the existing industry standard. This requires all underground petroleum storage system sites to have a leak detection system, an environmental management plan and groundwater monitoring, while new sites must also be designed to contain leaks. DEC has valued the quantified benefits from the Regulation at around \$70–80 million over five years.

DEC has **proposed amendments to the CLM Act**, based on feedback from extensive public consultation and DEC's day-to-day experience of working with the Act, that will:

- enable stronger application of the 'polluter pays' principle
- help remove the unwarranted stigma associated with some contaminated sites and avoid unnecessary alarm by replacing the term 'significant risk of harm' with a reference to 'contamination which requires regulation under the Act'
- enable more timely regulatory action
- introduce more objective and clearer criteria for the duty to notify DEC of contamination that requires regulatory intervention.

## 2.1.7 Pesticides and chemicals

Following changes in 2005 to the Pesticide Regulation 1995, public authorities, including DEC and local councils, have been preparing plans to inform the general public before pesticides are used outdoors in public ovals, parks and playgrounds. The changes recognise that people have a right to know when pesticides are being used to treat public places so they can choose to avoid those sites. DEC's notification plan is expected to be finalised by late 2006.

During 2005–06 DEC assisted other authorities and councils with, and helped them to develop, their plans. DEC developed print and web-based guidance, and held ten information seminars, including five in regional NSW, for staff required to prepare and implement plans.

From 1 February 2007, it will be compulsory for managers of multi-occupancy complexes to notify residents when pesticides are used in common areas. Printed guidelines will be widely distributed to the pest control industry and to property and strata managers.

During 2005–06, DEC worked with the Department of Primary Industries, the Department of Education and Training, and the Australian Pesticides and Veterinary Medicines Authority to ensure the success of the **Bilingual Liaison Field Officer Program**. This program provides practical on-farm advice and assistance to crop, fruit and vegetable growers from Arabic, Chinese and Khmer backgrounds. Under the program, three bilingual liaison field officers are working in the Sydney Basin to assist growers to undertake or renew their training in the safe use and handling of pesticides, and to help them implement their training and skills on their farms. The program has been well-received by growers.

### Pesticide control orders

Under the national registration scheme the Australian Pesticides and Veterinary Medicines Authority (APVMA) evaluates and registers pesticides for use in Australia. DEC's role is to control the use of restricted chemical products as determined by APVMA by specifying in pesticide control orders how they can be used and who is authorised to use them in NSW.

During 2005–06, DEC reviewed its pesticide control orders for **sodium fluoroacetate (1080)** which is used to control wild dogs, foxes, pigs and rabbits and has issued new and amended orders for the use of new products recently registered by the APVMA.

DEC also began developing a new pesticide control order for the use of **copper chrome arsenate (CCA)** pesticides by timber treatment facilities after APVMA announced they would declare CCA a restricted chemical product. APVMA released its final report on arsenic timber treatment products in July 2005 in which it recommended restrictions on future use of CCA, including the banning of use of treated timber in decking, hand rails, children's play equipment and other structures frequently used by children. The new order providing for restricted use of CCA in NSW will be gazetted later in 2006.

## National Chemicals Working Group

During 2005–06, the Environment Protection and Heritage Council's National Chemicals Working Group, chaired by DEC, developed a discussion paper on proposals for developing a national framework, known as NchEM, to provide consistent management and to improve key environmental outcomes in chemicals management. There is a focus on industrial chemicals as 38,000 out of the approximately 40,000 industrial chemicals available for use in Australia were introduced before the National Chemicals Notification and Assessment Scheme was established in 1990. While most have been used for years without apparent adverse consequences, many have never been assessed for their environmental or health impacts.

As part of the discussion paper's development, DEC consulted national, state and territory agencies in the health, occupational health and safety, primary industries and trade sectors, as well as key industry and environment stakeholders.

New online information resources have been delivered by the working group as part of the national reforms. The **National chemical reference guide** contains data on environmental standards and guidelines in Australia for over 600 chemicals, and includes environmental criteria for chemicals in the air, water, soil, sediment and biota.

## Household chemicals

A prototype Household Chemicals Education Program known as **Safer Solutions** is being developed by the Total Environment Centre in partnership with DEC, and will be made available for use by other states and territories as well as NSW. The focus of the program is the safe use of chemicals in the home and garden, and in 'do it yourself' renovations. The development of the program follows social research that was undertaken at the end of 2005, and is being funded by an Environmental Trust grant as part of Our Environment – It's a Living Thing: Integrated Sustainability Education Program.

### 2.1.8 Radiation and dangerous goods

The **Radiation Control Act 1990**, administered by DEC, aims to protect people and the environment from the harmful effects of radiation. This is achieved via legislation that:

- regulates radiation users, equipment and premises
- specifies safety requirements in workplaces where radiation is used
- provides powers for DEC to deal with dangerous situations.

#### ■ CASE STUDY

### CleanOut encourages responsible disposal of chemicals

CleanOut is the NSW Government's household chemical collection program. Run by DEC with local councils in the Illawarra, Hunter and Sydney, the program encourages householders to hand over poisonous or potentially dangerous chemicals to DEC on collection days. CleanOut prevents chemicals being dumped in bushland and creeks or contaminating stormwater and sewerage systems, and aims to recycle as many of the materials collected as possible. For example, poisonous mercury is extracted from disused fluorescent tubes and returned to industry before the glass and metal casing is recycled.

During 2005–06 18,850 people surrendered 663 tonnes of material at 43 collection days in the Illawarra, Hunter and Sydney. In addition, collection days were held in local government areas across rural and regional NSW. Common materials collected included leftover paint, oils, batteries and gas bottles, with NSW households having handed over more than a million kilograms of household chemicals since 2003.



*CleanOut encourages householders to safely dispose of chemicals by handing them over to DEC on collection days.*

Vince Scollen, photo courtesy of Chemsal

The CleanOut webpage at [www.environment.nsw.gov.au/education/spd\\_chem\\_cleanout.htm](http://www.environment.nsw.gov.au/education/spd_chem_cleanout.htm) provides a list of materials that will be accepted, drop off dates and venues, and information on how to safely transport chemicals.

DEC licences 11,719 individual radiation users, 760 companies, 7592 pieces of radiation equipment, and 290 radiation premises.

In 2005–06, DEC:

- conducted 45 site inspections and eight audits as part of its radiation compliance program
- issued five penalty infringement notices for minor radiation-related offences
- conducted a training exercise to test the ability of radiation operations officers and equipment to respond to radiological incidents
- responded to four radiological incidents, including one in Auburn in which chemicals, firearms, explosives and radioactive materials were found in a property after an explosion.

In response to the recommendations of the NSW parliamentary inquiry into the transportation and storage of nuclear waste, DEC negotiated a pollution reduction program with Sydney Water Corporation requiring a risk assessment of radioactivity emission levels in the effluent at the Cronulla sewerage outfall, to which the Australian Nuclear Science and Technology Organisation (ANSTO) discharges from its Lucas Heights facility. The assessment showed that the sewage treatment plant discharge had very low and safe levels of radioactivity.

DEC provides secretariat support to the **NSW Radiation Advisory Council (RAC)**, which met nine times during 2005–06. A separate annual report for the RAC's activities is available at [www.environment.nsw.gov.au/radiation/radiationpubs.htm](http://www.environment.nsw.gov.au/radiation/radiationpubs.htm).

DEC administers the *Road and Rail Transport (Dangerous Goods) Act 1997*, which adopts uniform national requirements for the **transport of dangerous goods** including the requirements of the Australian Dangerous Goods Code. The Act and its Regulations ensure that dangerous goods, which present a significant risk to people, property and the environment if not handled appropriately, are properly classified, packaged, labelled and transported. To ensure that goods are transported safely, DEC and WorkCover NSW conduct enforcement campaigns, audits and education activities.

During 2005–06 DEC completed a successful prosecution of Patrick Distribution Ltd following a dangerous goods vehicle accident that closed the Great Western Highway at Mt Victoria for over two days (see Appendix 8).

## 2.1.9 Emergency preparedness

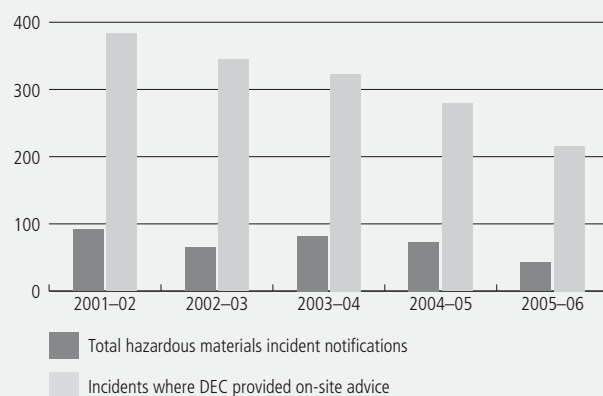
DEC maintains a 24-hour **emergency response and hazardous materials advice service** linked to its Environment Line and the regional after-hours incident response services. DEC staff attend many significant incidents, usually to oversee clean-up or to investigate potential breaches of environmental legislation. Significant incidents in 2005–06 included:

### ■ PERFORMANCE INDICATOR

#### Number of hazardous material incidents where DEC provided technical or clean-up advice

**Definition:** This indicator measures pollution incidents where DEC assisted response agencies with technical advice on environmental clean-up both on-site and by telephone.

##### Hazardous materials incidents where DEC provided on-site advice



**Interpretation:** In 2005–06, DEC provided advice on 216 hazardous materials incidents. For 42 (19.4%) of these incidents, advice was provided on-site.

The total number of notifications from the NSW Fire Brigades has been steadily declining over recent years. However, until this year the proportion of notified incidents requiring the attendance of DEC officers at incidents has consistently been at around 25%. This year there has been a decrease to 19.4%. DEC has been providing training to NSW Fire Brigades' Hazmat Technicians. An increased awareness and knowledge of environmental protection issues may have resulted in a more effective response by the fire fighters and less need for DEC attendance.

- a major fire in Bankstown, on 26 May 2006, at premises that manufacture soy-based food products. Chemicals stored on-site made the fire-water running off the site caustic enough to affect aquatic life in Salt Pan Creek and the Georges River. DEC worked with NSW Fire Brigades to minimise the amount of water used on the fire, and with the owner to collect over 415,000 litres of fire-water for proper disposal.
- a fire involving significant amounts of solvents, acids and flammable gases in an aerosol-making factory at Mulgrave near Windsor, on 19 June 2006. DEC worked with NSW Fire Brigades, the council and the owner to collect and dispose of contaminated fire-water to prevent potential damage to South Creek and the Hawkesbury River.



The NSW Government uses exercise scenarios to test emergency management arrangements and preparedness for major emergencies. DEC is a member of the NSW Counter Terrorism CEO Cluster and the State Emergency Management Committee. DEC participated in eight state and federal exercises during 2005–06, including:

- Exercise Eleusis: testing arrangements to be used in the event of an outbreak of avian influenza
- Exercise Neptune's Treasure: a major national counter-terrorism exercise based on a simulated terrorist attack on Sydney Harbour
- Exercise Clean Water: a simulated spill of hazardous materials into a major water supply
- Exercise Harbour View: a joint exercise with the navy looking at potential issues involved in a major fire on a ship at Garden Island.

During 2005–06, staff specialising in Hazmat and emergency response management ran training courses for approximately 60 operational staff to maintain and improve DEC's responsiveness to potential emergencies.

## 2.1.10 Science planning

During 2005–06, DEC finalised its **Science Investment Management Plan**. This plan is based on five principles:

- relevance of the science
- excellence in science and research
- collaborative science
- timeliness
- effective communication.

The plan includes a framework for making economic assessments of environmental research, including building economic assessments into the experimental design of future research.

The plan encompasses all science carried out in DEC, including economic, social and cultural heritage research and ensures that DEC's investment in science:

- supports current NSW Government priorities (including the coordination of research)
- addresses the issues raised by the *NSW State of the environment* report and targets DEC's achievements
- supports the implementation of major strategies including the Biodiversity Strategy, the Reserve Establishment Plan, Action for Air, the Aboriginal Culture and Heritage Action Plan, and the Waste Avoidance and Resource Recovery Strategy.

This year DEC also participated in the Office for Science and Medical Research program review of the science programs of the Natural Resource and Environment Cluster agencies.

## 2.1.11 Regulatory reform for improved compliance

DEC's regulatory reform program delivers better environment protection and more resource recovery by simplifying and clarifying regulatory requirements and strengthening the regulatory framework.

### Protection of the Environment Operations Act and Regulations

Changes to the **Protection of the Environment Operations Act 1997** (POEO Act) commenced on 1 May 2006. These changes constitute the biggest overhaul of pollution laws in almost 10 years. DEC now has greater powers to pursue polluters and the courts can issue a wider range of penalties.

The changes mean:

- authorised officers can order an excessively loud alarm in a building or car that has been making noise beyond a reasonable time to be turned off
- council officers can issue notices to stop chimneys from smoking excessively
- a new offence of land pollution has been created
- DEC can stop operators from obtaining an environment protection licence if they have been convicted of fraud, dishonest offences or insolvency
- industry can use environmentally-friendly offset programs to mitigate impacts from polluting activities
- DEC can refuse a request from a licensee to surrender a licence if there will be an environmental impact after the licensee has left the site
- if taken to court, directors and managers of corporations can no longer argue that they personally had no knowledge of an offence
- courts can issue a greater range of penalties, including requiring attendance at training programs, and ordering money to be paid to third parties such as the Environmental Trust to fund clean-up or restoration projects
- maximum fines for the most serious pollution offences have increased from \$1 million to \$5 million for companies, while maximum fines for individuals have increased four-fold to \$1 million.

The changes also led to the repeal of the **Clean Waters Regulation 1972** and the Classified Waters Scheme. These have been replaced by the requirement for authorities regulating licences (such as the EPA) or issuing prevention notices (councils, EPA and other regulatory authorities) to consider the environmental values of water affected by the activity, and the practical measures that could be taken to maintain or restore those environmental values.

DEC has updated or developed guidelines to help clients understand their rights and responsibilities under the amended legislation. Guidelines are all available online and include:

- *Powers of authorised officers* ([www.environment.nsw.gov.au/licensing/powersao.htm](http://www.environment.nsw.gov.au/licensing/powersao.htm))
- *Guide to notices* ([www.environment.nsw.gov.au/licensing/guidetonotices.htm](http://www.environment.nsw.gov.au/licensing/guidetonotices.htm))
- *Guide to licensing* available August 2006 ([www.environment.nsw.gov.au/licensing/licenceguide.htm](http://www.environment.nsw.gov.au/licensing/licenceguide.htm))
- *Considering the environmental values of water when issuing prevention notices* ([www.environment.nsw.gov.au/mao/envwater.htm](http://www.environment.nsw.gov.au/mao/envwater.htm))
- *Woodsmoke resource kit for councils* ([www.environment.nsw.gov.au/woodsmoke/resourcekit/index.htm](http://www.environment.nsw.gov.au/woodsmoke/resourcekit/index.htm)).

Significant amendments to the **Protection of the Environment Operations (Clean Air) Regulation 2002** commenced on 1 September 2005. These amendments included:

- incorporating requirements from the now repealed Clean Air (Plant and Equipment) Regulation 1997 into the 2002 Regulation
- introducing a framework to review old emission standards that still apply to existing industry, and performance requirements for equipment used to control toxic air
- introducing new air emission standards for:
  - future industry
  - non-standard fuels
  - when equipment undergoes modification
  - when equipment is replaced in the Sydney Metropolitan Region, the Central Coast, the Lower Hunter and the Illawarra.

It is estimated that, due to this Regulation, over the next 20 years 26,727 tonnes of solid particles, 366,062 tonnes of nitrogen oxides (NO<sub>x</sub>) and 94,316 tonnes of sulphur oxides (SO<sub>x</sub>) emissions will be avoided.

*Approved methods for the modelling and assessment of air pollutants in NSW* and *Approved methods for the sampling and analysis of air pollutants* have also been updated to support the new amendments. Copies of these documents, and guidelines to assist industry in implementing the Regulation's new requirements, are available on [www.environment.nsw.gov.au/air](http://www.environment.nsw.gov.au/air).

The **Protection of the Environment Operations (Waste) Regulation 2005** commenced on 1 March 2006. Key features are:

- streamlined waste storage and transport provisions
- clear, practical and enforceable tracking requirements that mesh with DEC's new online waste tracking system
- strengthening of the bonds between the national system for interstate tracking specified under the Controlled Waste National Environment Protection Measure and the NSW tracking system.

DEC's **new online waste tracking system** provides DEC with real-time data on waste movements. This enables DEC to monitor trends in hazardous waste movements and analyse the data to identify illegal operators, including those engaged in illegal dumping. There has been strong industry support for the system as it reduces paperwork and reporting requirements, and protects legitimate businesses from unfair competition from illegal operators.

DEC and the NSW Department of Primary Industries collaborated on the **Protection of the Environment Operations (Waste) Amendment (Residue Waste) Regulation**, introduced in late 2005 to prevent potentially harmful wastes from being applied to land under the guise of 'fertilisers'. The NSW Government encourages beneficial use of wastes rather than disposing of them, but only where such use would not harm the environment, human health or agriculture. The Regulation prohibits 'residue wastes' (industrial byproduct wastes) from being applied to land for the purpose of growing plants, unless they are exempted by DEC.

## ■ CASE STUDY

### Exemption of foundry sand from the Residue Waste Regulation

In mid-2005, the foundry industry approached DEC for an exemption from the Residue Waste Regulation for foundry sands used in compost or artificial soils. Together, DEC and industry negotiated an exemption which facilitates the reuse of certain foundry sands which do not harm the environment. This exemption has enabled the industry to re-use the material and deliver good pollution prevention and resource recovery outcomes, and is an excellent example of the Government's waste reuse commitments in practice.



*Foundry sand for recycling in compost or artificial soils.*

*Provided courtesy of Centre for Organic & Resource Enterprises and Peats Soil and Garden Supplies*

DEC released a guidance note on assessment of residue wastes in July 2005 and provided a six-month lead time for industry to work with DEC before the changes commenced in December 2005. As at June 2006, DEC has issued six general and three specific exemptions under the Residue Waste Regulation.

The Government has acted to deliver the legislative tools for the NSW City and Country Environment Restoration Program reforms. On 15 May 2006, the ***Protection of the Environment Operations Amendment (Waste Reduction) Act 2006*** commenced. This Act enables:

- regulations to be made regarding performance payments to councils under City and Country Environment Restoration Program reforms (see page 6)
- changes to be made to waste and environment levy rates
- more effective management of levy paying facilities
- arrangements for paying the Local Government Performance Improvement Payment to be specified.

## Licence reviews

With the establishment of the POEO Act in 1999, licences issued under pollution control and waste legislation were converted to 'environment protection licences'. Section 78 of the POEO Act required that all environment protection licences be reviewed every three years. These reviews provided an excellent opportunity to assess whether the environment controls on each licence were consistent with contemporary standards and environmental conditions at each site. DEC completed the first round of reviews in December 2003 at a cost of approximately \$2.9 million, significantly improving older licences that had not been subject to environmental impact assessment.

The frequency of this review cycle created a significant administrative burden while adding progressively less value with each subsequent review. To address this, the *POEO Amendment Act 2005* changed the review period to five years. This change took effect for most licences on 1 May 2006. However, some licence reviews still under the old provisions had not been completed within the original three-year period.

DEC had 789 licences due for review in 2005–06. Of these, 601 (76%) were completed on time, 114 (14%) were completed late, and 74 (9%) were not completed.

The reviews not completed related to low risk licences, as available resources were directed toward licences in the higher risk categories. DEC reported the results of the licence review process to the EPA Board, as required under section 78(3).





## 2.2 Improving community wellbeing

### 2.2.1 Corporate plan priorities 2004–06

#### Promoting 'liveability' concepts

*Establish and promote new 'liveability' concepts, such as linking improvements in health and air quality and by promoting 'healthy parks and healthy people'*

During 2005–06, DEC continued to work with NSW Health to provide regular air quality information to the public, including health alerts on the three days over the summer that high air pollution was forecast in Sydney, the Central Coast, the Lower Hunter and the Illawarra. In April 2006 DEC released a study estimating that the health cost of ambient pollution in the GMR is between \$1 billion and \$8.4 billion each year (page 24).

DEC continued to support the NSW Healthy Parks, Healthy People program in 2005–06 to promote the mental and physical health benefits of visiting parks and gardens (page 37).

DEC also contributed to state and regional planning strategies promoting environment protection, sustainability, cultural heritage and conservation goals (page 75).

#### Aboriginal participation in conservation management

*Increase the active participation of Aboriginal communities in conservation management, on and off reserved land*

During 2005–06, DEC entered co-management agreements with traditional Aboriginal owners for the recently handed-back Gulaga and Biamanga national parks (page 39).

DEC led the development of a NSW Culture and Heritage Action Plan, under the 10-year NSW Aboriginal Affairs Plan, Two Ways Together, to increase Aboriginal community access to and control of Country, knowledge and cultural material, and cultural expression by Aboriginal communities and individuals (page 38).

DEC continued support for 'culture camp' programs which provide young Aboriginal people with an opportunity to connect with Country and learn about cultural issues (page 39).

#### Odour mitigation

*Complete the development of a NSW odour mitigation policy*

During 2005–06, DEC completed the *Technical framework for the assessment and management of odour from stationary sources in NSW*, which clarifies approaches for reducing odours and reducing land-use conflicts. Although not a regulation, the framework is guided by key odour-related provisions of the POEO Act.

The framework aims to provide industry, odour specialists, consent authorities and environmental regulators with up-to-date information and guidance for assessing and managing activities that emit odour.

#### Noise mitigation

*Develop a noise mitigation policy framework to guide development within the state*

During 2005–06, DEC continued extensive consultation regarding new construction noise guidelines and prepared for public consultation on a new POEO (Noise Control) Regulation. This work will continue in 2006–07 (page 37).

DEC continued to regulate construction noise at a number of major infrastructure projects, including focusing project managers on improved community communication and handling of complaints (page 37).

## ■ PERFORMANCE INDICATOR

### Percentage of general terms of approval for integrated development assessment processes issued by DEC to consent authorities within statutory timeframes

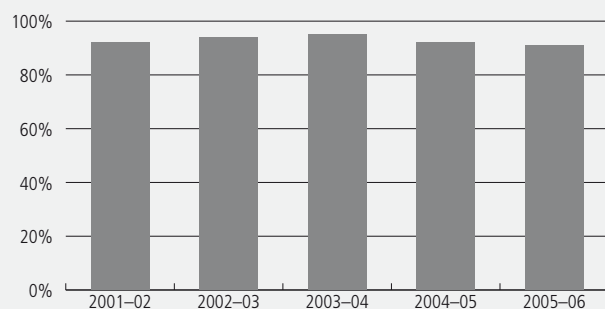
**Definition:** As part of the integrated development assessment process, DEC approves development applications made under Part 4 of the *Environmental Planning and Assessment Act 1979* when:

- the proposed development also requires an environment protection licence or a variation of a licence issued under the POEO Act
- DEC has responsibilities for species protection under the *Threatened Species Conservation Act 1995*
- the proposed development requires consent to knowingly destroy, deface or damage, or knowingly cause or permit the destruction or defacement of, or damage to, an object or Aboriginal place under the *National Parks and Wildlife Act 1974*.

Where the integrated development assessment requires an environment protection licence, DEC determines the necessary requirements called 'general terms of approval'. DEC must inform consent authorities, such as the Department of Planning or local councils, of these general terms of approval within prescribed timeframes, generally 60 days. This may take longer if insufficient information is provided. Any subsequent planning approval and environment protection licence must not be inconsistent with these requirements.

Amendments to the planning legislation, especially the establishment of a new category for major projects (Part 3A), mean that in 2006–07 a new indicator of DEC's timeliness will be presented.

#### Percentage of general terms of approval for integrated development assessment processes issued by DEC within statutory timeframes



**Interpretation:** DEC continued to perform well in issuing general terms of approval, reflecting efficient internal procedures. DEC issued 99 general terms of approval in 2005–06, compared to 96 in 2004–05, with a slight drop in the percentage issued on time (from 92% to 91%).

## 2.2.2 Protecting liveability

### Environmental Planning and Assessment Act

On 1 August 2005, amendments to the ***Environmental Planning and Assessment Act 1979*** (EP&A Act) commenced. The planning reforms have changed aspects of DEC's operations, especially for major project assessments under Part 3A of the Act. Under these reforms, rather than directly approving development, DEC advises the Department of Planning on issues relating to environment protection licences, Aboriginal heritage permits, and consultation or concurrence requirements for development that will affect critical habitat or threatened species, populations or ecological communities.

DEC helped develop Part 3A guidelines for environmental assessment requirements for threatened species and Aboriginal heritage, and a protocol that outlines the consultation the Department of Planning will undertake with relevant public authorities (including DEC) for Part 3A project applications.

DEC continues to play an important role in the environmental assessment of Part 3A applications. Internal procedures have been developed to help ensure DEC provides appropriate and consistent advice to the Department of Planning and proponents within the timeframes established by the Part 3A process. DEC also assesses development approvals under other parts of the EP&A Act.

DEC provided extensive input into the drafting of the **Standard Instrument (Local Environment Plans) Order 2006**, gazetted on 31 March 2006. All councils are now required to use the standard instrument to prepare a new principal local environmental plan (LEP) for their local government area within the next five years. DEC will continue to work with the Department of Planning to ensure as far as is practical that all relevant environmental and conservation issues are addressed consistently through LEPs.

### Metropolitan Strategy and coastal strategies

DEC has participated in developing the Metropolitan Strategy for Sydney and the new coastal strategies, which seek to plan for sustainable developments, balancing population growth, liveability, biodiversity and cultural heritage over the next 25 years (see page 75).

## Noise control

During 2005–06, DEC continued to improve ways in which noise is controlled. DEC developed a new construction noise guideline, for which there has been extensive consultation to date, with further consultation to be carried out later in 2006. In addition, the automatic statutory repeal of the existing POEO (Noise Control) Regulation 2000 was postponed for a year to give the public enough time to consider the **new draft POEO (Noise Control) Regulation**. The draft Regulation, Regulatory Impact Statement and supporting documents and systems will be finalised for public consultation in 2007.

DEC also continues to regulate the construction of major and transport infrastructure to **minimise the impact of construction noise** through environment protection licence requirements. In relation to this, DEC is working to ensure that constructing authorities implement a communication and complaints procedure to respond to community concerns.

During 2005–06, a major construction company, Hochtief AG, was fined \$44,000 for two offences relating to the emission of excessive noise during construction of underground railway tunnels between Epping and Chatswood. Hochtief's environment protection licence limited the tunnelling methods that could be used on weekends and public holidays. Twice during a long weekend, a contractor used rock hammering, contrary to the licence. Nearby residents were kept awake or otherwise affected by the persistent hammering and vibrations for many hours. The Land and Environment Court ordered Hochtief to place a notice in the *Sydney Morning Herald* and the *Financial Review* publicising the offences.

During 2005–06, DEC also worked with the rail sector to develop new guidelines for **managing rail noise** from operation of the rail network.

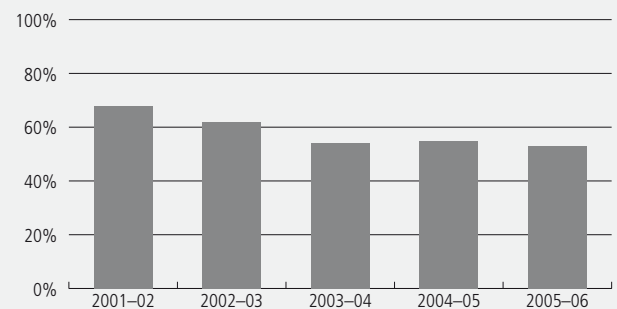
In April 2006, DEC issued **Assessing vibration: a technical guideline** to provide updated vibration values, in keeping with Australian and international advances, for use in assessing human responses to vibration. The guide provides recommendations for measurement and evaluation. DEC has referred to the guideline in environmental assessment policies, and has used it to investigate the vibration impacts of a quarry and a new railway line. Acoustic consultants are now using the guideline for projects that could have vibration impacts.

### ■ PERFORMANCE INDICATOR

#### Percentage of Environment Line pollution incident reports about issues relating to air quality, odours or noise from regulated premises

**Definition:** DEC's Environment Line receives reports from the public and industry on pollution incidents (see Appendix 12). This indicator measures the percentage of those reports relating to dust, smoke or other airborne particulate emissions, odour and noise where DEC is the authority responsible for action or has an overarching responsibility to try to resolve the issue.

#### Environment Line incident reports about issues relating to air quality odours or noise from regulated premises



**Interpretation:** When combined, air and noise pollution incident reports show a small but steady downward trend, but still account for over 50% of total incident reports to Environment Line each year. The percentage of reports reflects the public's concern about lifestyle and amenity. The decrease in reports over the years indicates improvements in the management of major sources of pollution on-site, including the implementation of stricter odour guidelines. In some cases weather conditions may also influence the level of reporting.

## 2.2.3 Linking environmental and human health

**Healthy Parks Healthy People** was established in NSW in 2003 by the Sydney Urban Parks Education and Research Group (SUPER) to encourage people to visit Sydney's parks and gardens by highlighting the mental and physical health benefits of visiting parks. DEC participates in SUPER with Centennial Parklands, the Botanic Gardens Trust, Parramatta Park Trust, Sydney Olympic Park Authority and the Sydney Harbour Federation Trust.

On Wednesday 5 April 2006 during **Seniors Week**, DEC, working with the Department of Ageing, Disability and Home Care, provided free entry for NSW seniors to all fee-charging parks and reserves other than the Sydney Harbour National Park islands.

DEC staff assisted the National Parks Association with their annual **Great Australian Bushwalk**. This national event fosters environmental awareness and protection, develops community spirit and encourages a healthy lifestyle. The event, held on 16 October 2005, consisted of numerous bushwalks in different locations across the state, many within national parks. Participants were offered free park entry with registration.

## 2.2.4 Improving Aboriginal community wellbeing

### Two Ways Together

**Two Ways Together** is the NSW Government's 10-year plan to improve the lives of Aboriginal people and their communities. DEC is contributing to Two Ways Together through participating in:

- the Chief Executive Officer Group on Aboriginal Affairs which is primarily responsible for leading Two Ways Together

- the Two Ways Together Coordinating Committee which manages and coordinates Two Ways Together
- Two Ways Together Cluster Groups comprising key government agencies and Aboriginal peak bodies – these groups are developing state-wide strategies to improve outcomes for Aboriginal people. Four cluster groups have been established: Justice; Economic Development; Families and Young People; and Culture and Heritage. DEC is the lead agency for the Culture and Heritage cluster.

In 2005, DEC developed an agency-wide plan to achieve Two Ways Together objectives (see pages 89–90). DEC is also represented by senior staff on groups to implement Two Ways Together regionally.

DEC is leading the development and implementation of a **Culture and Heritage Action Plan 2005–07**, which includes 13 joint NSW Government agency actions to achieve increased Aboriginal community access to and control of Country, knowledge and cultural material, and increased cultural expression by Aboriginal communities and individuals.

### ■ CASE STUDY

#### Completion of Harbour to Hawkesbury Walking Track

The Harbour to Hawkesbury Walking Track was completed during 2005–06. This track combines pre-existing tracks with new sections of walkway to link Manly Wharf with Berowra Railway Station. The walk is approximately 47 km long, and includes existing walkways in bushland reserves and urban streets managed by Manly, Ku-ring-gai and Hornsby councils, and tracks in Garigal, Ku-ring-gai Chase and Sydney Harbour national parks, and Berowra Valley Regional Park. The track provides links to other regional trails in Sydney's northern suburbs such as the Taronga to Balmoral Track and the Great North Walk.

The upgrade of a section of track at Bantry Bay in Garigal National Park marked the completion of the final link of the Harbour to Hawkesbury Walking Track. In 2004, DEC and Manly Council gained an \$85,000 grant under the Sharing Sydney Harbour Access Program to improve the track's amenities and the track itself. Funds were used to upgrade the Timber-getter's Walking Track and install a shelter shed, bike racks, seating and an interpretive sign at the interface of the timber-getter's track and Seaforth Oval.

Landscaping improvements were also made to the foreshores of Middle Harbour to make Bantry Bay more attractive. These improvements will also help to manage water runoff and weed invasion in the natural bushland around Seaforth Oval. An initiative of Manly Council, the project involved Manly, Ku-ring-gai, Hornsby and Warringah councils, DEC and the Department of Lands.



*New stairs for the Timber-getters Walking Track*

B Conroy, DEC



Significant achievements during 2005–06 included:

- the return to Aboriginal ownership of Gulaga and Biamanga national parks (see case study below)
- the development of a draft NSW whole-of-government cultural resource use framework
- increased recognition of Aboriginal rights in land and natural resource management through the negotiation of Indigenous Land Use Agreements
- commencement of an Environmental Trust-funded project to increase and build the capacity of two Aboriginal communities to engage in land, water and heritage management
- training of 50 Aboriginal people in joint management of national parks
- new memoranda of understanding for co-management of reserves negotiated between DEC and Aboriginal communities – Pilliga Nature Reserve, Goobang National Park and Snake Rock Aboriginal Area
- the declaration of seven Aboriginal Places under the *National Parks and Wildlife Act 1974*
- the establishment of a whole-of-government NSW Repatriation Program to coordinate the return of ancestral remains to NSW Aboriginal communities.

Helping Aboriginal peoples to re-establish their relationship with the landscape is one of DEC's key areas of work. A major disadvantage for Aboriginal people has been the loss of a sense of place (Country) and spiritual connectedness (identity) that followed European settlement. The recognition, promotion and practice of culture and maintaining or renewing the links between people and Country are central to overcoming many issues facing Aboriginal communities in NSW.

In 2005–06, DEC began developing park management policies covering Aboriginal partnerships and access to parks (see also page 46). The objectives of this process included involving Aboriginal people in park management and enabling them to maintain their connection with Country through activities such as culture camps in parks. It is expected that the policies will be completed in 2007.

In January 2006, DEC commenced a three-year research project into Aboriginal wellbeing and its relationship with the protection and practice of cultural heritage. The research aims to investigate how cultural and heritage activities can be measures of wellbeing.

## Culture camps

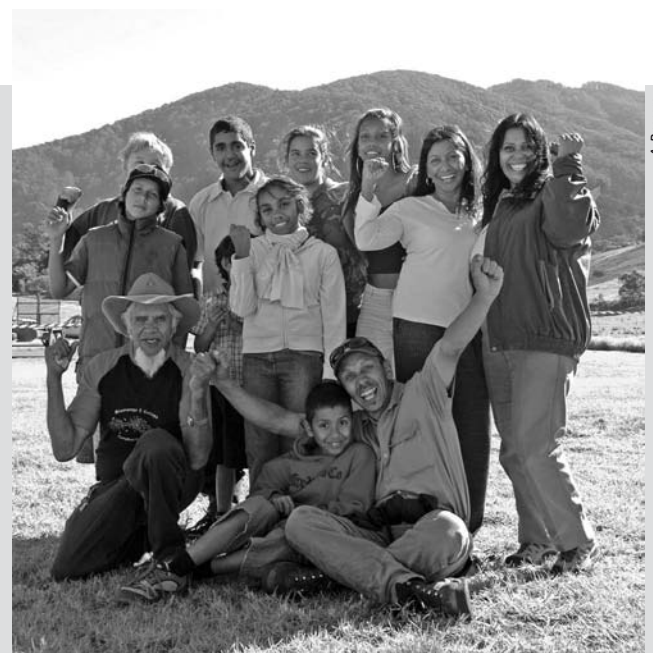
**Culture camps** enable young Aboriginal people to connect with Country and learn about cultural issues from Elders in their communities. In 2004, DEC established the Pilliga Nature Reserve Aboriginal Consultative Committee in partnership with Aboriginal Elders of the Narrabri, Coonabarabran, Gunnedah and Baradine communities of north-west NSW. Since then, annual culture camps have taken place in the nature reserve. The 2006 culture camp was held in April and May and was hosted by the Coonabarabran local Aboriginal community with assistance from DEC. At the camp, the community celebrated, shared and developed cultural knowledge and traditional language, and engaged in activities such as making boomerangs, story telling and learning about bush tucker.

A culture camp in Dubbo in October 2005 for Aboriginal children was managed by a newly established local Aboriginal consultancy company. The activities, undertaken over two weeks at Anarla, west of Dubbo, fostered leadership skills, capacity building and identity recognition through traditional tool making, dance and story telling, and were designed to raise self-esteem.

### ■ CASE STUDY

#### Gulaga and Biamanga national parks handed back to the Yuin people

On 6 May 2006, the Gulaga and Biamanga national parks were handed back to their traditional Aboriginal owners, the Yuin people. These parks include the Mumbulla and Gulaga mountains. The hand-back ceremony, held at Tilba Tilba, was a celebration of the spirit of the Yuin people and the strength of their attachment to these two mountains. It also recognised the hard work of generations of Aboriginal people to protect these lands for their children and future generations.



*Celebrating the hand-back of Gulaga and Biamanga national parks to their traditional owners in May 2006. The Yuin people will now co-manage these lands with DEC.*



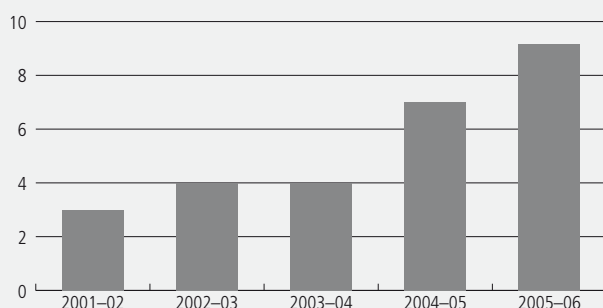
## ■ PERFORMANCE INDICATOR

### Number of formal agreements with Aboriginal communities for co-management of protected areas

**Definition:** DEC works with Aboriginal communities to incorporate cultural practices into the management of parks and reserves under co-management arrangements. These agreements are guided and formalised under the *National Parks and Wildlife Act 1974*. This indicator shows the number of formal co-management agreements in place with Aboriginal communities, including Indigenous Land Use Agreements and memoranda of understanding.

DEC also engages in informal joint management arrangements. However, given the localised nature of many of these, they are difficult to measure accurately and have not been included in this indicator.

#### Formal agreements with Aboriginal communities for co-management of protected areas



**Interpretation:** In May 2006 the Gulaga and Biamanga national parks were handed back to their traditional owners.

Three culture camps for the Ngiyampaa people were held at Yathong Nature Reserve. Participants were involved in site surveys and recordings, traditional art and story telling, and language and bush skills. They also prepared a Statement of Joint Intent, an agreement between DEC and the Ngiyampaa people for the future conduct of these culture camps.

DEC officers also held meetings with local Aboriginal custodian groups to reach agreement on the development of a culture camp at Limeburners Creek Nature Reserve south of Crescent Head.

In May 2006, DEC hosted a **Traditional Indigenous Games (TIGs) Day** at Talbragar Mission, Dubbo, in conjunction with NSW Sport and Recreation. Aboriginal education assistants from various schools around Dubbo were trained in teaching students about TIGs. TIGs are games that were played by Aboriginal children on reserves and missions, and those researched by the Australian Sports Commission in 2000. The day was attended by prominent Aboriginal Elders and Aboriginal and non-Aboriginal students from schools in the Dubbo area.

## Increasing Aboriginal participation in conservation management

**Co-management** arrangements enable Aboriginal people to manage parks or advise DEC on its management of parks. Formal co-management options include:

- DEC returning a protected area to its Aboriginal owners and leasing it back to be jointly managed under Part 4A of the *National Parks and Wildlife Act 1974*
- Indigenous Land Use Agreements with native title holders under the *Native Title Act 1993*
- memoranda of understanding between DEC and Aboriginal communities.

At June 2006, there were nine co-management arrangements in place with Aboriginal communities across NSW: for the Mutawintji, Kinchega, Arakwal, Mungo, Biamanga and Gulaga national parks; the Mount Grenfell Historic Site; the Pilliga Nature Reserve; and a memorandum of understanding covering both Goobang National Park and Snake Rock Aboriginal Area.

Negotiations are being undertaken for Indigenous Land Use Agreements with the Githabul people in northern NSW, the Gundungurra people in the Blue Mountains and the Arakwal people in Byron Bay.

During 2005–06, DEC continued negotiations with the Stockton Bight Aboriginal Negotiating Panel and Worimi Local Aboriginal Land Council for the creation of a new Aboriginal-owned reserve at Stockton Bight. Projects during the year to support the negotiations included an Aboriginal and Historic Cultural Heritage Significance Assessment, Stages 1 and 2 of a Business Planning Project, and the Worimi community employment skills project. Three newsletters were distributed to inform stakeholders and the wider community about the negotiations.

In April 2006, the second statewide **Aboriginal co-management conference** was held at Mungo National Park. Over 140 people, including representatives from 19 Aboriginal communities and staff of DEC, Department of Lands, Department of Aboriginal Affairs and Parks Victoria participated in the event. The conference was hosted by the three traditional tribal groups – the Mutthi Mutthi, Ngiyampaa and Barkindji people – and the Mungo National Park Joint Management Advisory Committee. It included a field trip to Mungo National Park and a Discovery tour led by the three groups.

The gathering enabled people from NSW and Victoria to share their experiences, and identify issues that would improve joint management arrangements in NSW.

Workshops were held on:

- the transition from negotiation to co-management
- support for co-management boards and committees
- plans of management for co-managed parks
- the connection to land and cultural heritage
- cultural practice – development of DEC policy on culture camps and cultural resource use in parks
- employment and training and business development.

# Conserving natural and cultural values across the landscape

Strategic focus area	Outcomes
Biodiversity protected and restored	Improvement in the conservation of biodiversity, including threatened species, on public and private lands
Aboriginal cultural heritage protected	Conservation of Aboriginal objects, places and landscapes of cultural value
Reserve system managed and improved	Improved conservation of natural, heritage and cultural values in terrestrial and marine reserves
Public use of reserve system sustainable	Visitors enjoy the reserve system with minimal impact on its conservation value

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## 3.1 Protecting and restoring biodiversity

### 3.1.1 Corporate plan priorities 2004–06

#### Reforming threatened species conservation

*Lead the process of reforming NSW threatened species conservation laws, systems and approaches*

The *Threatened Species Conservation Act 1995* was amended in 2004, with changes commencing in October 2005. These changes included granting biodiversity certification to new native vegetation management plans on private land, and enabling the Minister to certify local environmental planning instruments which improve or maintain biodiversity (pages 43–44).

Other changes included the preparation of the Threatened Species Priorities Action Statement to recover threatened species and mitigate threats (page 49); simplifying the 8-point test which assesses impacts of developments on threatened species; and introducing an accreditation system for those undertaking threatened species assessments (page 45).

Clear requirements for nominating threatened species for listing and for the Minister and the Natural Resources Commission to advise the Scientific Committee about listing priorities have been added, along with improvements to compliance measures.

During 2005–06, DEC negotiated further offsets to minimise impacts of development on biodiversity (page 45), and began developing a Biodiversity Banking and Offsets Scheme to conserve biodiversity and simplify development assessment. The scheme is being designed with extensive input from stakeholders, scientists and future participants (page 44).

#### NSW Biodiversity Strategy

*Review, develop and lead implementation of the next stage of the NSW Biodiversity Strategy, 'Living NSW'*

DEC has continued developing the second NSW Biodiversity Strategy during the past year, to reflect the Government's legislative reforms over the past three years that deal with natural resource management and threatened species. The strategy is being developed in consultation with other agencies, particularly the Department of Primary Industries, which has a joint role in preparing the strategy in accordance with the *NSW Fisheries Management Act 1994*.

#### Supporting catchment management authorities and councils

*Provide tools and knowledge to support catchment management authorities and councils in their protection of the natural and cultural values of biodiversity*

During 2005–06, DEC provided staff and assistance to the 13 catchment management authorities (CMAs), to assist with catchment action plan preparation and other biodiversity, water quality and cultural heritage programs (page 52).

DEC continued work on biodiversity aspects of native vegetation and property vegetation planning tools and on Coastal Lakes Sustainability Assessments (page 50). DEC also trained approximately 120 CMA staff on using Biometric (page 53).

DEC published guidelines to help CMAs and local councils to use water quality objectives in decision making (page 26) and to incorporate Aboriginal cultural values in natural resource management (page 52).

## Addressing climate change

### *Work to address the impacts of climate change on biodiversity*

Some impacts on NSW biodiversity from climate change are already being observed and adaptation planning is vital to reduce the vulnerability of biodiversity to the likely impacts. In early 2006, DEC commenced research that will examine the impacts of climate change on bushfires, biodiversity, invasive species and aquatic ecosystems. DEC is also updating conservation planning tools to accommodate climate change projections.

## Off-reserve conservation

### *Develop and implement off-reserve programs and initiatives for conservation as part of building a comprehensive, adequate and representative protected area system*

By June 2006, there were 624 Wildlife Refuges gazetted and 200 Voluntary Conservation Agreements signed, giving formal protection to areas of private and unreserved land containing natural and cultural heritage of high conservation value. This has brought the total area of private and unreserved land in NSW managed for conservation purposes to 1,947,934 hectares (page 45).

DEC also began a number of regional conservation plans, which identify regional conservation priorities and provide strategies to conserve biodiversity. These strategies include reserving land, BioBanking and rezoning (page 44).

## Improving wetland system protection

### *Develop and implement a strategy for improved protection of NSW wetland systems*

In August 2004 DEC finalised its Wetland Initiative, a five-year strategy to deal with the significant challenges of protecting wetlands, focusing initially on the Macquarie Marshes and the Gwydir Wetlands. During 2005–06, DEC began to implement the strategy by purchasing water licences from willing sellers in these water markets, drafting environmental management plans and undertaking a number of ecological character assessments of NSW Ramsar sites (pages 50–51).

During the year, DEC worked with the Yarrahapinni Wetlands Group and Great Lakes Council to acquire significant areas of coastal wetlands for rehabilitation (page 51), and with the Baakandji and Budjiti groups to nominate the Paroo River wetlands for recognition under the Ramsar Convention (page 50).



*Brush-tailed rock wallaby in Oxley Wild Rivers National Park.*

P. Thomas, DEC

## 3.1.2 Threatened species reform and management

DEC has achieved much over the past two years in developing and implementing **threatened species reforms** and new approaches for protecting biodiversity. Achievements in 2005–06 included implementing new legislative requirements, negotiating on the final stages of the Native Vegetation Regulation, consulting on the Priorities Action Statement and BioBanking scheme, and solving problems relating to major development proposals.

One milestone was the first major overhaul in 10 years of the state's threatened species laws. Most of the *Threatened Species Legislation Amendment Act 2004* and remaining parts of the *Threatened Species Conservation Amendment Act 2002* commenced in October 2005 and instituted a range of reforms.

These reforms better integrate threatened species conservation with rural and land use planning, natural resource management and development assessment.



They are designed to ease pressure on conservation values on land being cleared in urban and coastal areas, and to provide incentives for landholders to retain and protect threatened species so they become a valuable asset, not an impediment. The reforms signal an end to ad hoc, site-by-site assessment in the late stages of planning by creating strategies that consider planning, development and threatened species conservation before development commences, and that protect threatened species in areas of most need. Key actions arising from the reforms include:

- assessing new land-use plans for biodiversity certification
- introducing new laws that make it easier for farmers in rural areas to ensure they protect native plants and animals while running productive farms
- better protecting ecological communities such as rare forests and heaths which are facing extinction
- developing a Threatened Species Priorities Action Statement (see page 49)
- developing a BioBanking scheme.

On Threatened Species Day, 5 September 2005, the Minister for the Environment unveiled a new DEC **threatened species website** providing detailed ecological information, maps, drawings and photos of 962 of the state's most vulnerable native plants, animals and ecological communities. The website drew on the knowledge of more than 60 scientists and experts from DEC, and includes profiles of aquatic species and communities (listed as threatened under the *Fisheries Management Act 1994*) provided by the Department of Primary Industries. There are also links to the NSW Native Vegetation Map and the BioNet website where users can search and map wildlife data collected by other NSW agencies. The new website is at [www.threatenedspecies.environment.nsw.gov.au](http://www.threatenedspecies.environment.nsw.gov.au).

## BioBanking scheme

DEC is developing a **Biodiversity Banking and Offsets Scheme** (BioBanking scheme) to protect biodiversity while simplifying development assessment. In June 2006, a Bill on the scheme was introduced in Parliament.

## ■ CASE STUDY

### Regional conservation plans to protect biodiversity

During 2005–06, DEC began preparing regional conservation plans (RCPs) to complement the regional planning strategies for coastal areas (see page 75). RCPs will focus on maintaining or improving biodiversity in new development areas.

DEC is preparing draft RCPs for the Lower Hunter and the Far North Coast (which cover the area from the Queensland border to Evans Head). Both RCPs:

- identify priority regional conservation areas and propose actions to conserve these areas, such as identifying land that could be incorporated into DEC reserves or private conservation agreements, BioBanking, or rezoning land for environment protection
- provide a framework for biodiversity investment to offset the impacts on biodiversity and loss of threatened species habitat resulting from proposed development
- guide councils on areas which should be zoned for environment protection and help councils seeking biodiversity certification of their new local environmental plans (LEPs).

In the Illawarra, the biodiversity conservation actions in the draft regional strategy do not rely on the preparation of a regional conservation plan, but build on the work DEC has already carried out in preparing the Illawarra Escarpment Management Plan. Councils in the Illawarra will review their LEPs in the next few years, to plan to maintain and enhance biodiversity, Aboriginal heritage, and environment protection.



Kurri sand swamp woodland, which will be protected under the Lower Hunter Regional Conservation Plan

T. Hogbin, DEC



The Bill proposes to:

- establish 'biobank sites' on land through an agreement between the Minister for the Environment and landowners
- create biodiversity credits for actions that improve or maintain biodiversity on biobank sites
- trade credits once they are created and registered
- enable the credits to be used to offset the impacts of development on biodiversity
- determine the number and class of credits that are needed to offset the impact of a development and ensure that it improves or maintains biodiversity.

For more information visit [www.environment.nsw.gov.au/threatspec/biobankscheme.htm](http://www.environment.nsw.gov.au/threatspec/biobankscheme.htm).

### 3.1.3 Protecting biodiversity

Biodiversity conservation is becoming more important as population growth and resource consumption escalate, increasing pressure on the natural environment. DEC has worked on important measures to protect biodiversity in 2005–06, including developing the BioBanking scheme, continuing work on the NSW Biodiversity Strategy, monitoring wildlife abundance, encouraging conservation on private land, working with developers on biodiversity offsets, caring for and managing wildlife, and controlling pests and weeds.

In April 2006, DEC publicly exhibited a **draft accreditation scheme** to establish a professional standard for ecological assessment. The scheme will give planning authorities greater certainty by improving the quality of unbiased and objective information used in biodiversity certification, assessments of significance and species impact statements. The scheme, due to be finalised in late 2006, will be voluntary.

### Biodiversity offsets

DEC negotiates with landholders and developers to minimise the impact of development on biodiversity. During recent development on the Wallarah Peninsula, the developer recognised that biodiversity was an asset to the area and worked with DEC to establish an environmentally sensitive residential development, setting aside high conservation land for a nature reserve.

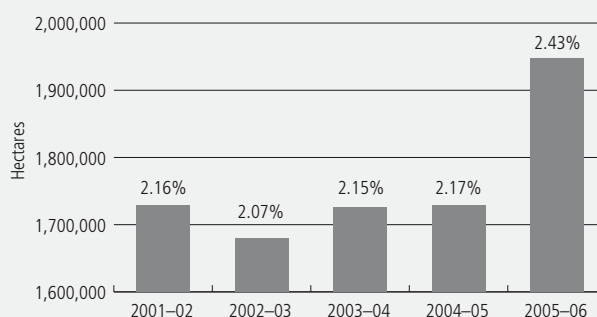
If impacts are unavoidable, **biodiversity offsets** can be implemented. A biodiversity offset is one or more actions that are put in place to counterbalance the impacts of development on biodiversity. In the case of the Karuah Bypass, the Roads and Traffic Authority (RTA) acknowledged that it could not avoid impacts on biodiversity on-site. The RTA therefore purchased 89 hectares of compensatory habitat from private owners to add to Karuah Nature Reserve to offset the loss. In the Federal Highway upgrade project, the RTA purchased land with a population of striped legless lizards and protected it from development, to offset impacts on a smaller population at another location. (See BioBanking on page 44.)

#### ■ PERFORMANCE INDICATOR

#### Private and unreserved land in NSW managed for conservation under DEC-managed programs

**Definition:** This measure indicates the percentage of the total land area of NSW protected and managed by landholders of private and unreserved public land for conservation outcomes under the *National Parks and Wildlife Act 1974*, through Voluntary Conservation Agreements (VCAs) and Wildlife Refuges, and the total number of hectares this land covers.

#### Hectares (percentage) of private land managed for conservation outcomes



**Interpretation:** In 2005–2006, the total area of private and unreserved public land managed for conservation increased by more than 200,000 hectares to almost 2 million hectares or 2.43% of private land managed by landholders for conservation purposes. Twenty-two new VCAs were signed, protecting 3446 hectares of high natural and cultural heritage significance. A highlight in March 2006 was the signing of the 200th VCA, which covers a significant area of land in northern NSW. In addition, 14 new Wildlife Refuges were created covering 216,267 hectares, and 1.27 hectares were added to an existing wildlife refuge. A highlight has been the proclamation of seven wildlife refuges through the West 2000 Plus Program undertaken in partnership with the Western Lands Commission, Department of Primary Industries and the Department of Natural Resources. These refuges cover more than 200,000 hectares, with more than 50,000 hectares to be managed solely for conservation. This sizeable increase is not expected to be repeated in future years.

### Conservation on private lands

Through the **Conservation Partners Program**, DEC establishes long-term partnerships for protecting and conserving private and other public lands under the *National Parks and Wildlife Act 1974* (NPW Act). Conservation is achieved by landholders entering into legally-binding agreements with DEC to conserve land in perpetuity under a Voluntary Conservation Agreement or as a Wildlife Refuge. The program also coordinates non-statutory property registration schemes, including Land for Wildlife.

Throughout the year, landholders were supported in maintaining and improving natural and cultural heritage values identified in their agreements. A regional landholder gathering was held at Chakola Wildlife Refuge on the south coast; two *Bush Matters* newsletters were published for more than 1500 conservation partners; and the Conservation Partners Program web pages were updated to include more information and new technical management notes.

A comprehensive review of DEC's programs for conservation on private land was completed in December 2005. The review examined the efficiency and effectiveness of DEC programs, particularly the Conservation Partners Program. The review recommended reinvigorating the Conservation Partners Program and targeting areas for priority investment to use limited resources more efficiently.

## Research and monitoring

DEC and the University of NSW coordinate an annual **aerial survey of wetlands and waterbirds throughout eastern Australia**, covering Queensland, NSW, Victoria and South Australia. Results of the 2005 aerial survey found waterbird numbers in wetland areas were below average across eastern Australia. This disturbing trend is ongoing, with total waterbird numbers on Macquarie Marshes the lowest ever recorded for the second year running. Waterbirds averaged 30,000 in the 1980s, and were never below 100, but this year less than 10 birds were counted. Severe drought in northern NSW and Queensland, together with river regulation, continues to affect the health of waterbird populations in key wetlands.

In the **third annual shorebird survey**, DEC staff and Hunter Bird Observers counted and identified migratory and non-migratory shorebird habitats in Port Stephens. A total of 3000 waterbirds was recorded including 1403 migratory waders and 124 domestic waders.

**Fauna surveys** were conducted, many with volunteers, for threatened species such as the osprey, sooty owl, powerful owl, Hastings River mouse and brush-tailed rock wallaby. A survey undertaken in Werrikimbe National Park showed that there has been an increase in the number of rufous scrub birds, probably due to better fire management initiatives.

## Cultural resource use

DEC coordinates an inter-agency working group which during 2005–06 developed a draft **Whole-of-Government Framework for Aboriginal Cultural Resource Use**. The draft framework sets out principles for Aboriginal people's cultural use of natural resources on public lands and waters, and policy statements to implement these principles. Each agency will develop operational and plain English guidelines for cultural resource use on lands they manage.

## Wildlife management on land

DEC is responsible for caring for and **protecting wildlife** in NSW by providing custodianship, managing wildlife populations and human–wildlife conflict, and ensuring sustainable use of wildlife resources. In 2005–06, DEC worked on policies relating to protecting marine turtle nests, reducing harm to flying foxes by inappropriate netting, and managing a sustainable native flora industry.

DEC also continued to support councils and other land managers in implementing policies on managing aggressive native birds, possums, snakes and other wildlife. Advice, fact sheets and sign templates were provided to local councils, schools and the general public. In northern NSW, a Dingo Management Strategy is being developed to reduce the risk of attacks on humans around high visitation areas of Myall Lakes and Booti Booti national parks.

Wildlife disease is a growing area of concern. DEC has recently developed a policy and protocol for identifying and managing wildlife disease outbreaks.

In its role as wildlife custodian, DEC responds to incidents such as marine mammal strandings, oil spills, wildlife disease outbreaks, and dealing with sick and injured wildlife, aggressive birds and snakes. DEC trains staff in specialised tasks such as treating oil-affected birds. DEC acknowledges the considerable efforts of volunteer wildlife carer groups, and the important role they have in assisting with injured and orphaned wildlife.

There is an increasing interest in pets such as reptiles and amphibians and in learning more about our environment and wildlife. In 2005–06, 19,845 licences were issued by DEC for keeping, breeding and trading native animals; research into wildlife; wildlife rehabilitation; taxidermy; pest bird control; damage mitigation; kangaroo management; and the commercial use of plants and flowers.

For the first time, in 2005–06 DEC provided financial support (\$15,000) to the recently-formed NSW Wildlife Council, which represents parties involved in wildlife rehabilitation in NSW. The council coordinates and helps to set standards for licensed voluntary individuals and groups representing wildlife carers.

## Managing whales, dolphins and seals

In October 2005, the Natural Resource Management Ministerial Council (NRMMC) approved the **Australian National Guidelines for Whale and Dolphin Watching 2005**. The NRMMC also agreed that the guidelines would be adopted by all jurisdictions. On 2 June 2006, the national standards were adopted in NSW through the introduction of the **National Parks and Wildlife Amendment (Marine Mammals) Regulation 2006**. The Regulation provides more stringent measures to protect marine mammals while allowing people to appreciate them in the wild. To introduce the Regulation, a fact sheet and sticker were printed and distributed to commercial boat operators. Over May and June 2006, training on the Regulation and on enforcement procedures was provided to staff from DEC, NSW Maritime, NSW Water Police, Marine Parks Authority and Department of Primary Industries.

In June 2006, working with the Commonwealth Department of the Environment and Heritage, DEC staff demonstrated techniques for disentangling whales from nets to the Federal and New Zealand ministers of the environment at a public display in Sydney's Darling Harbour.

In 2005–06, DEC responded to at least 12 stranding events involving whales or dolphins including helping to successfully disentangle a humpback whale calf off the coast of Coffs Harbour in October 2005.

Over 100 people participated in the sixth annual **Port Stephens Community Dolphin Census**, including DEC staff, the general public (some of whom have been involved since 2001), and commercial operators. Approximately 60 dolphins were recorded in 120 locations around the port, which is consistent with records from previous years and with usage patterns identified through Macquarie University's research over the past seven years.

DEC manages **visits by seals** such as New Zealand and Australian fur seals to Sydney's beaches and rock platforms in winter. DEC staff work with vets from Taronga Zoo to continually monitor the seals' condition. The community also constantly check on the seals, armed with educational leaflets from DEC.



W Reynolds

DEC helps to protect marine mammals through advising government and the community on issues such as disentangling whales from nets.

## ■ CASE STUDY

### Saving the southern corroboree frog

The strikingly-coloured yellow and black southern corroboree frog is one of Australia's best known frogs, and also one of its most endangered. This species has experienced a 99% decline over the past 25 years and without intervention is likely to become extinct in the wild within five years.

DEC's recovery program is mitigating the impact of amphibian *chytrid fungus*, which kills many frogs and is their main threat. DEC is taking eggs from the wild, hatching and rearing the young in captivity and, in 2006 for the first time, releasing the fully-grown three-year-old frogs back into the wild. DEC is also trialling hormone stimulation and climate-controlled artificial bogs to breed the frogs in captivity. In 2006, a new captive facility was opened at Taronga Zoo.

This is one of the most comprehensive amphibian recovery programs in the world and is at the cutting edge of techniques for captive rearing and release. With the support of dedicated staff and program partners including Murray Catchment Management Authority, the Amphibian Research Centre, Taronga Zoo, CSIRO, Snowy Hydro and the Foundation for National Parks and Wildlife, DEC is striving to ensure this species will be secure in Kosciuszko National Park in the future.



M McFadden and J Alcock, Taronga Zoo.



This tiny frog does not have webbed feet so moves like a lizard. It is severely threatened by drought conditions that prevent its tadpoles from hatching.



## Kangaroo Management Program

The goal of the **Kangaroo Management Program** is to ensure that viable populations of kangaroos are maintained throughout their range. The program includes monitoring and research to ensure this goal is being met. The commercial harvest of kangaroos is limited by an annual quota, based on population estimates.

In 2005, only 69% of the available statewide quota was harvested. More kangaroos were taken in the east and north than in the far west of NSW. This is related to market forces as well as seasonal conditions.

As a result of drought impacts on kangaroo populations, quotas were reduced for the 2006 calendar year. Strong demand for kangaroo products combined with lower quotas means that the harvest will be closer to the approved quota in 2006.

In 2005–06, DEC commenced seven charges in local courts for offences involving illegally harming, selling and possessing kangaroos. In one case, Mr Andrew Neville Smith was fined \$2200 by Tamworth Local Court after pleading guilty to unlawfully harming and selling 11 eastern grey kangaroos. At the time of the offences, Mr Smith's trapper's licence had expired and he had not renewed it.

## Pest animal and weed control

Pest animals and weeds are among the greatest threats to biodiversity in Australia. DEC spends approximately \$18 million per year on **pest animal and weed control**. As many pests are widely established across Australia, eradication is not possible in all reserves. DEC therefore focuses on areas where impacts on biodiversity are greatest. Priorities for pest management are identified in the draft Priorities Action Statement (see page 49), threat abatement plans (TAPs) and regional pest management strategies.

Prevention, early detection and eradication are the most cost-effective ways of reducing new and potential pests. A program of systematic monitoring to measure the effectiveness of control has been undertaken in some areas. In 2005–06, over 40 staff were trained to identify pest and native animal tracks in sand plots.

The **Fox TAP** identifies the 34 threatened species which are most endangered by fox predation and the 73 sites at which fox control is most critical. Under the TAP, in 2005–06 DEC undertook intensive fox control in 59 reserves.

The **yellow crazy ant** (*Anoplolepis gracilipes*) is one of the world's worst 100 invasive species. DEC has worked with the Department of Primary Industries, Clarence Valley Council and the NSW Maritime Authority since 2004 to eradicate yellow crazy ants on Goodwood Island off the north coast. A detailed survey of the island in February 2006 did not detect any ants. Monitoring of this site will continue for several years to ensure that this outbreak has been eradicated.

In north-western NSW during early 2006, DEC worked with the Narrabri, Moree and Northern Slopes rural lands protection boards to cull more than 680 **feral pigs** and 1950 **feral goats**. This multi-agency program protects agricultural lands and DEC reserves such as Mt Kaputar National Park, which is an important refuge for the threatened brush-tailed rock wallaby. On the Queensland border, DEC worked with the Northern Slopes and Moree rural lands protection boards in June 2006 to cull over 3000 feral pigs.

During 2005–06, DEC continued to **control wild dogs** to reduce their impacts on farmland bordering parks and reserves, working with surrounding farmers and land managers. DEC also continued to research the effectiveness of wild dog control. Recent studies using satellite and GPS tracking technology have yielded important information on wild dog behaviour and movements, and the effectiveness of new control techniques.

In other research, aerial baiting with 1080 to control foxes and dogs has had little impact on the spotted-tailed quoll (*Dasyurus maculatus*). It was feared that this native animal would eat the baits but this has largely not happened. In response to this research, DEC has expanded the use of 1080 in some areas.

The **pandanus planthopper** (*Pandanus tectorius*) is an insect pest which causes dieback in the coastal pandanus palm. Dieback in pandanus trees in NSW was first detected in March 2004. A working group was formed at that time, including members from DEC. During 2005–06, the working group acted to control this threat. A recent survey of treated areas found that almost all infestations had been removed. Those that remained were treated immediately.

In far north-western NSW, DEC is working with the Department of Primary Industries and **weed control** authorities to eradicate infestations of the woody weed, *Parkinsonia aculeata*, one of 20 weeds of national significance. An outbreak along a 20-km section of the Narran River, upstream from Narran Lake, was detected in 2004 and an eradication program was implemented. A survey of Narran Lake Nature Reserve in November 2005 by DEC and local control authorities did not find any parkinsonia.

The *Coastal weeds strategy for Moonee Beach Nature Reserve and Coffs Coast Regional Park* was implemented during 2005–06 by DEC, Coffs Harbour City Council, contractors and 12 community groups. Actions included bush regeneration, aerial and ground-based spraying, and planting of local native species. These actions are helping to protect nine threatened species, four endangered ecological communities, sites of highly significant Aboriginal cultural heritage and important social assets.

DEC staff from the Nowra office controlled weeds in the Yalwal area of Morton National Park in 2006. Staff camped in the national park for extended periods so they could weed intensively. The staff treated 70 hectares of weeds including blackberry, moth vine, briar and black locust. The Yalwal area was burnt in a bushfire in 2002 so weed control is helping regenerate native vegetation in burnt areas as well as in areas that used to be grazed by cattle.

During 2005–06, DEC contracted the Forster Local Aboriginal Land Council to undertake bush regeneration and weed control around Seal Rocks. The project developed the Council's capacity to take on future works.

### 3.1.4 Restoring biodiversity

DEC has acted to restore biodiversity in NSW in 2005–06 by acquiring, maintaining and enhancing wetlands; increasing river flows; and developing the Priorities Action Statement and recovery plans for threatened species, populations and ecological communities.

#### ■ CASE STUDY

#### Regenerating montane peatlands and swamps in Kosciuszko National Park

Montane peatlands and swamps in Kosciuszko National Park are an endangered ecological community, and are important for maintaining water quality and flow in the alps. Some 2200 ha, or 80%, of these areas were burnt by the 2003 bushfires. About 400 ha of land were completely burned, and recovery will depend on natural re-establishment and accumulation of organic matter over hundreds of years. In 2005–06, rehabilitation commenced at 25 of the remaining 72 bogs that are most likely to recover. These included Pengilley's bog, Prussian Creek, Guthrie's Creek, Wragges Creek, and other sites near Mt Tate and Mt Jagungal: the Cup and Saucer, and Valentine's Creek. Workers have:

- reduced the possibility of erosion causing runoff by placing logs across slopes
- resaturated the peat by placing sterilised hay bales in the stream channels that formed after the fire, to slow water flow
- hand planted sphagnum and empodisma sods to initiate regeneration – planting was necessary as the natural recovery of sphagnum is extremely slow.

Further works are scheduled for the summer of 2006–07.

### Priorities Action Statement

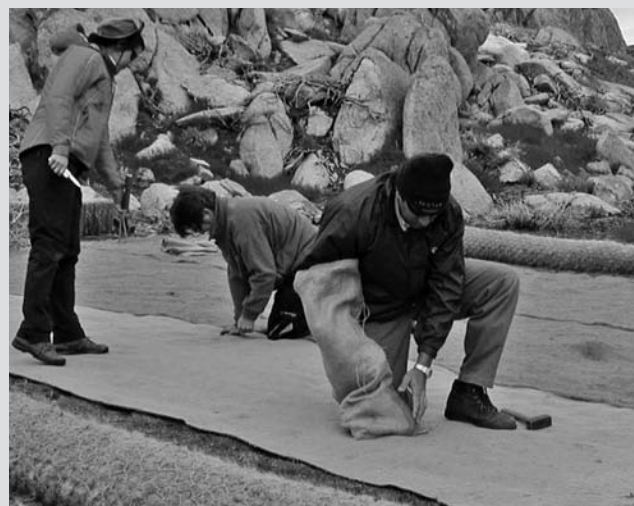
Consolidating individual recovery plans (see page 52), threatened species are now managed through the **Threatened Species Priorities Action Statement (PAS)**. The PAS specifies conservation strategies and actions to recover all threatened species and reduce the threats they face. The PAS contains approximately 10,000 actions, including those previously included in recovery plans, with some actions targeting specific species or geographic areas. Strategies and actions are prioritised. There are also performance indicators to determine the PAS's effectiveness in recovering threatened species.

The draft PAS was placed on public exhibition in May 2006, and submissions will be received until August 2006. Once the PAS is finalised, DEC will work with councils, catchment management authorities, landholders, and environment and community groups to implement the strategies and actions. For more information, visit [www.threatenedspecies.environment.nsw.gov.au](http://www.threatenedspecies.environment.nsw.gov.au).



Photo: K McDougall, DEC.

*Eyebright (Euphrasia sp.) grows among sphagnum moss (Sphagnum cristatum) in a pristine alpine bog.*



G Wright, DEC

*Coconut coir fibre materials are being used in swamps and bogs in Kosciuszko National Park to stabilise soils.*



## Wetlands

In May 2005, the NSW Government announced a five-year \$13.4 million **NSW Wetland Recovery Plan**. The first stage of the plan will fund water recovery and efficiency projects to deliver long-term benefits to the Macquarie Marshes and Gwydir Wetlands, and NSW has sought funding from the Australian Water Fund to support this work.

DEC has continued to work on its **Wetland Initiative** which covers inland and coastal wetlands. The objectives are to maintain and enhance wetlands, improve environmental flow, manage DEC water licences, influence planning decisions affecting wetlands, and improve information on NSW wetlands' ecological character and cultural significance. In 2005–06, the initiative began with projects to increase efficient water use, purchase water and improve knowledge of wetlands. In the Macquarie Marshes and the Gwydir Wetlands, water licences have been purchased from willing sellers to increase water flows into the wetlands. Environmental management plans are being drafted and ecological character assessments are progressing.

A review of the draft **Macquarie Marshes Nature Reserve Plan of Management** was undertaken during 2005–06.

A public consultation meeting was held so the public could find out more about the issues to be addressed in the plan, and the public and other stakeholders could discuss what they expected the plan to achieve.

Ecological assessments have been undertaken of Ramsar sites including Macquarie Marshes, Paroo, Wollumbulla, Broadwater, Lake Pinaroo, Blue Lake, Kooragang and Myall Lakes. Other scientific studies on inland wetlands in 2005–06 have included those on the effects of disturbance on wetland plant communities; waterbirds on the Bulloo, Paroo and Warrego rivers; and the effects of climate change on inland aquatic ecosystems.

During 2005–06, DEC contributed to the **Coastal Lakes Sustainability Assessments** being managed by the NSW Department of Natural Resources. DEC commenced work on related projects to assess the risk of eutrophication (enrichment of an ecosystem with chemical nutrients, typically compounds containing nitrogen and phosphorus) invading NSW estuaries and coastal lakes. The projects, which build on previous work by DEC, involve:

- measuring selected lakes and estuaries
- laboratory studies
- developing mathematical models to simulate coastal catchments and estuaries
- estimating the nitrogen and phosphorus loads likely to be delivered from a particular catchment
- discovering how estuaries and coastal lakes react to variable loads of nutrients
- developing suitable monitoring methods for tracking the eutrophic status of estuaries
- integrating this work into a computer-based system that will allow non-specialists to test development scenarios in coastal catchments.

DEC collected data on the **economic worth of the natural values of Merimbula Lake and Back Lagoon** and their catchments in southern NSW. The highest economic value for Merimbula Lake was from recreational fishing, and for Back Lagoon from urban amenity by increasing property values. Local government planners and other natural resource managers will use this information to assess the potential ecological, economic and social impacts of different coastal developments on the two lakes. The methods developed in these projects can be applied to assessments of other coastal lakes in NSW.

### ■ CASE STUDY

#### Ramsar Convention nomination for Paroo

In November 2005, DEC officer Alison Curtin and three Aboriginal Elders from the Baakandji and Budjiti groups of the Paroo in western NSW attended the Convention on Wetlands of International Importance (Ramsar Convention) in Uganda. They presented a case study on the Aboriginal values of the Paroo River Wetlands, which highlighted DEC's role in Ramsar management and its process in engaging traditional owners of Country.

A consistent message ran through all the presentations from Australia and around the world – 'culture is an integral part of wetlands, and wetlands of culture'. The outcomes were that there would be an increased focus on wetlands and their cultural values, which will be incorporated into fields 21–29 of the Ramsar information sheets and into Ramsar management plans.



Talking about Country on the Paroo River – Phillip Eulo, Ruby Eulo, Katie Eulo and Lorna McNiven.

A proposal to nominate the Paroo wetlands for Ramsar status has been supported by the NSW Government and forwarded to the Australian Government for consideration.

The **Tomago Wetland Rehabilitation Project** aims to reinstate tidal flows to restore shorebird habitat and enhance fish nursery habitat by using rainwater drainage off neighbouring properties. Environmental assessment and site preparation were completed in 2005–06. The site incorporates Kooragang Nature Reserve and contains one of the most important coastal shorebird habitats in NSW.

In late 2005, DEC conducted preliminary **cultural value assessments** of the Macquarie Marshes Nature Reserve and a wetland near Dandaloo in central western NSW. The preliminary assessments identified Aboriginal values and provided recommendations for further work to be done.

## Wetland acquisitions

Wetland areas were added to the reserve system in 2005–06 with the purchase of Everlasting Swamp on the north coast, and the settlement of the Yanga Station acquisition. In addition, in September 2005, the Tuggerah and Colongra Swamp nature reserves were established. The Tuggerah Reserve consists of 350 hectares on the western side of Tuggerah Lake. Colongra Swamp consists of 125 hectares on the western shore of Lake Munmorah, part of which was donated by Delta Electricity. Both reserves will provide important habitat for many birds, including threatened species such as the regent honeyeater and swift parrot.

Significant areas of coastal wetlands were also acquired at Yarrahapinni and Frogalla Swamp under the **Coastal Wetlands Land Acquisition Program**. DEC is working with the Yarrahapinni Wetlands Group and Great Lakes Council on rehabilitating these important wetlands.

During 2005–06, the wetland conservation area in Narran Lake Nature Reserve was increased from 5538 hectares to 14,614 hectares. This reserve is a Ramsar-listed wetland located at the end of the Narran River in north-west NSW.

## RiverBank

**NSW RiverBank** is a new \$105 million program managed by DEC, set up to buy water for our most stressed and valued rivers and wetlands over the next five years. The program is part of the broader NSW City and Country Environment Restoration program (see page 6) and will be funded through the Environmental Trust.

Many of the state's rivers and wetlands are suffering the effects of too much water being taken from them. RiverBank will work with catchment management authorities, landholders and others groups to reverse unsustainable levels of extraction over time without compromising the rights of water users. RiverBank will buy water licences from willing sellers within the existing water sharing and water management framework, to restore water flows in river systems for the benefit of wetlands that depend on them. Such wetlands include the Macquarie Marshes, the Lowbidgee and Gwydir wetlands, and the Narran Lakes, all of which are declining in area and health. In June 2006, the first water licence was purchased in the Lachlan Valley and other licences are being negotiated for purchase early in 2006–07.



*The Macquarie Marshes.*

A special Environmental Water Subcommittee, chaired by DEC's Director General, was established to advise the Trust on the development and implementation of a RiverBank Business Plan and Charter. The subcommittee includes experts in ecology, water markets and environmental water management. During 2005–06, the Business Plan was prepared, which:

- outlines how RiverBank will be managed
- establishes the vision, objectives and expected outputs of the program
- sets out investment targets for particular valleys
- outlines activities that will be undertaken in 2006–07
- identifies wetlands for which RiverBank will purchase and manage water licences over the next five years.

The plan has been approved by the Environmental Trust and the program is ready to commence from 1 July 2006.

## Recovery of species and communities

DEC uses a number of actions to protect biodiversity (see pages 45–49). Many of these actions also assist in recovering threatened species, populations and ecological communities. Recommended actions to recover threatened species are primarily coordinated through the PAS (see page 49), but recovery and threat abatement plans are still being prepared when necessary.

Twelve **recovery plans** were approved during 2005–06 for:

- the bush stone curlew
- *Persoonia nutans*
- *Pimelea spicata*
- Gould's petrel
- *Diploglottis campbellii*
- *Elaeocarpus williamsianus*
- *Endiandra floydii*
- *Endiandra muelleri* subsp. *Bracteata* and *Endiandra hayesii*
- the Hastings River mouse
- *Quassia species B*
- *Randia moorei*
- *Uromyrtus australis*.

Draft recovery plans were placed on public exhibition during 2005–06 for three plant species: *Prostanthera askania*, *Zieria involucreta* and Wollemi pine. A draft recovery plan was also placed on public exhibition for the brush-tailed rock wallaby.

The total number of recovery plans prepared as at June 2006 is 73, covering 84 threatened species, populations and ecological communities. Threat abatement plans covering two key threatening processes, the red fox and the plague minnow, have been finalised. The draft threat abatement plan for bitou bush will be finalised in 2006.

The **bush stone curlew** has declined precipitously over the last few decades due to fox predation and loss of favoured habitat. DEC prepared a recovery plan in consultation with committed landholders, particularly in the Riverina, to ensure the bird's continued survival by protecting breeding pairs on private property. The plan was published in February 2006. DEC staff received an award from the National Trust in recognition of their work in recovery planning.

Results from the annual **Gould's petrel survey** reveal that breeding has increased on Cabbage Tree and Boondelbah islands. DEC staff banded 245 chicks and 50 adult birds on three separate trips to the islands throughout the year, and counted 825 nesting pairs and 420 fledglings. Following the previous translocation of 100 fledglings to Boondelbah Island from Cabbage Tree Island, 13 birds have now returned as adults to breed on Boondelbah Island.

The threatened **pied oystercatchers** on South Ballina beach completed their breeding season with ten birds between South Ballina and Bundjalung National Park successfully reaching fledgling stage. Baiting has reduced fox numbers, giving the birds a chance to breed successfully. This baiting is conducted annually by DEC in conjunction with the Tweed–Lismore Rural Lands Protection Board and the Department of Lands.

**Rainforest rehabilitation programs** costing \$25,000 were undertaken at 14 sites in Myall Lakes, Booti Booti, Woko and Barrington Tops national parks; Snapper Island Nature Reserve; and Glenrock State Conservation Area. All the sites contain either an endangered ecological community or threatened plant species. On some sites, community volunteer groups, including the Friends of Booti Booti National Park and the Bush Ticks Community Group, assisted with control works.

### 3.1.5 Support for catchment management authorities and local government

Support for catchment management authorities (CMAs) and councils continued in 2005–06 with DEC developing BioMetric (see page 53) to help CMAs manage natural resources on private land.

DEC continued to second one staff member to each of the 13 CMAs. The secondees worked on biodiversity, water quality and cultural heritage programs, and some assisted the CMAs with preparing catchment action plans. DEC staff also worked on projects that drew on their specific skills and knowledge, such as threatened species management, stormwater management and GIS modelling.

DEC continued its program of allocating a senior liaison or contact officer to each CMA. These officers coordinate the relationship between DEC and the CMA, liaising with the CMA Chair and General Manager and advising them on DEC matters.

During 2005–06, DEC developed guidelines for CMAs on **incorporating Aboriginal cultural values into natural resource management**. The guidelines drew on the newly released Natural Resource Commission's *Standard for quality natural resource management*, and were distributed to CMAs with other advice from DEC on biodiversity certification and threatened species, water quality and wetlands.



## 3.1.6 Addressing climate change

Impacts on biodiversity from climate change are already being observed. DEC is working to address, and find out more about, the effects of climate change, such as the effects of rising temperatures and water levels on threatened species, pests and the incidence of fire. A pilot to model climate change impacts in two coastal reserves (Kooragang Nature Reserve and Bundjalung National Park) commenced in 2006. Results of this research will be available in early 2006–07.

The **NSW Greenhouse Plan** (see page 25) has provided \$2 million for a Climate Change Impacts and Adaptation Research Program. DEC scientists are leading five projects under this program that commenced in early 2006 and will run for the next three years. Four of these projects examine the impacts of climate change on bushfires, biodiversity, invasive species and aquatic ecosystems. The fifth project aims to develop effective conservation planning tools. DEC is also coordinating the NSW strategy to manage the impact of climate change on biodiversity, as part of the National Biodiversity and Climate Change Action Program.

Because of DEC's skills in grants administration, the NSW Greenhouse Office asked DEC to manage the **Climate Action Grants Program** on behalf of the NSW Government. Nineteen grants were awarded by the program, on time, during 2005–06.

Under the NSW City and Country Environment Restoration Program (see page 6), NSW RiverBank (see page 51) and the development of two new marine parks (see page 63) will help to protect rivers, wetlands and marine environments against projected climate change.

### ■ CASE STUDY

#### BioMetric boosts action for the environment

Under the *Native Vegetation Act 2003*, landowners can only clear native vegetation on their properties if they can show that their other property management activities will improve or maintain the environment.

DEC has developed BioMetric to help CMAs assess whether landowners' overall activities are improving the environment. BioMetric, which went into operation in December 2005, is a computer-based tool for assessing biodiversity in patches, paddocks or on an entire property.

An assessor can stand in a paddock with a laptop and identify the types of native vegetation on a property. After some field data collection, they can use BioMetric to calculate the property's biodiversity values, and its importance for the neighbouring landscape and region. This gives a good measure of the impact of the proposed land clearing. It also allows the assessor and the landowner to negotiate actions for long-term biodiversity gains, such as planting trees, or fencing off an area of bushland to protect it from grazing.

BioMetric is based on exhaustive ecological research. It was developed by DEC scientists and other government agencies around NSW. For more information, visit [www.nationalparks.nsw.gov.au/npws.nsf/content/biometric\\_tool](http://www.nationalparks.nsw.gov.au/npws.nsf/content/biometric_tool).



DEC staff member takes part in a BioMetric training session



## 3.2 Protecting Aboriginal cultural heritage

### 3.2.1 Corporate plan priorities 2004–06

#### Building effective relationships

*Lead other government agencies in building effective relationships with Aboriginal peoples and communities to protect cultural heritage and to deliver the Government's Culture and Heritage Cluster Action Plan*

Two Ways Together is the NSW Government's 10-year Aboriginal Affairs Plan to improve the lives of Aboriginal people and their communities, across seven priority areas: health, housing, education, justice, economic development, families and young people, and culture and heritage. As the lead agency for culture and heritage, during 2005–06 DEC began to implement a new Culture and Heritage Cluster Action Plan (page 38).

DEC also provided leadership for other government agencies by establishing the Aboriginal Cultural Heritage Advisory Committee (page 55), which will have a crucial and innovative role in DEC's relationship with Aboriginal peoples and communities.

#### Reviewing approaches to protection

*Review legislation and approaches for the protection of Aboriginal cultural heritage*

During 2005–06 DEC continued to investigate ways of improving and updating the provisions of the *National Parks and Wildlife Act 1974* (NPW Act) that regulate and protect Aboriginal cultural heritage.

DEC consulted other state government agencies involved in Aboriginal heritage and planning, Aboriginal peak stakeholder bodies and Aboriginal communities, to review ways in which these provisions, largely unchanged since 1974, can be brought more into line with the major changes that have occurred in the planning system (see also page 36).

#### Returning Aboriginal cultural heritage

*Progress the return to Aboriginal communities of ancestral remains, cultural materials and knowledge, including working with Aboriginal communities and the Australian Museum*

In June 2006 DEC established the Keeping Place, in its Hurstville office, for the viewing, preparation, cataloguing and temporary safekeeping of Aboriginal cultural material and ancestral remains in transit to Country for repatriation.

During 2005–06 DEC coordinated the return and reburial of over 20 NSW Aboriginal ancestral remains (the majority previously held by the University of Sydney) to the Metropolitan, La Perouse and Ulladulla Aboriginal communities, as part of the NSW Repatriation Program (page 55).

To better enable valuable information and knowledge to be progressively returned and shared with local Aboriginal communities, DEC scanned the complete collection of 47,000 Aboriginal site recording cards held in the Aboriginal Heritage Information Management System (page 57).

#### Protecting places of significance

*Identify, assess and protect places of significance to Aboriginal people in NSW*

Seven more Aboriginal Places were declared during 2005–06, all protecting burials of Aboriginal ancestral remains repatriated from Australian and overseas museums. In addition 12 Aboriginal communities were assisted with Aboriginal Place nomination investigations (page 57).

In 2005, DEC also assessed the cultural heritage values of other areas across NSW for declaration as Aboriginal Places, including Mount Yengo in the Hunter Valley and Bagnalls Beach and Soldiers Point at Port Stephens.



## 3.2.2 Improving approaches to Aboriginal cultural heritage

During 2005–06, DEC continued to investigate ways of improving and updating its processes for protecting Aboriginal heritage. The NPW Act requires people who are undertaking activities that might impact on Aboriginal objects and declared Aboriginal Places to seek the consent of the Director General of DEC. DEC has been looking at ways in which its approach can be brought more into line with the major changes that have occurred in the planning system. This has involved consulting with other state government agencies involved in Aboriginal heritage and planning, Aboriginal peak stakeholder bodies and Aboriginal communities.

In March 2006, the Minister for the Environment appointed 11 members to the **Aboriginal Cultural Heritage Advisory Committee**. The members, who come from across NSW, are listed in Appendix 5. The Minister, supported by DEC, hosted a two-day induction workshop at Parliament House, Sydney, on 11 and 12 May 2006. The workshop provided committee members with an opportunity to learn about the role and function of DEC and the Minister's expectations of the committee. DEC regards the committee as its principal advisory body on Aboriginal cultural heritage in NSW. The committee will contribute to the development of statewide policies, programs and approaches to Aboriginal cultural heritage management.

## 3.2.3 Return of Aboriginal cultural heritage

During 2005–06, DEC built on existing work to establish a **NSW Repatriation Program** in partnership with the Department of Aboriginal Affairs, the Australian Museum and the Ministry for the Arts. The program coordinates the return to Aboriginal communities of ancestral remains and cultural materials that are held by NSW institutions.

In 2005–06, DEC helped to return over 20 NSW Aboriginal ancestral remains to the Metropolitan, La Perouse and Ulladulla Aboriginal communities. Most of these had been held by the University of Sydney. Representatives from Ulladulla Local Aboriginal Land Council travelled to the University of Sydney in May 2006 for an informal handover ceremony in which the remains of eight people, formerly held by the Australian Museum under the NPW Act, and the University of Sydney, were transferred to the community. With the assistance of a DEC Aboriginal Cadet Ranger, the repatriation resulted in a reburial ceremony for the eight individuals in Narrawallee Nature Reserve.

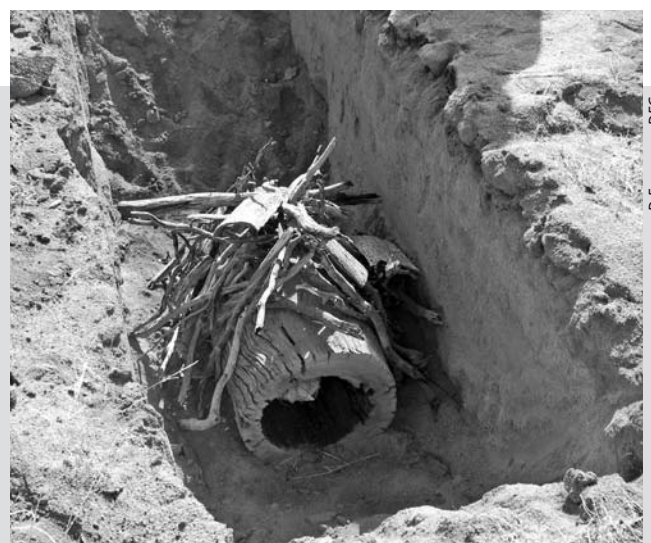
## 3.2.4 Protecting Aboriginal cultural heritage

DEC protects Aboriginal cultural heritage under the Aboriginal Heritage Conservation Program, records cultural heritage items and sites in its Aboriginal Heritage Information Management System, and works with Aboriginal communities to protect cultural heritage in parks and on private land.

### ■ CASE STUDY

#### Reburial of Aboriginal ancestral remains

Ancestral remains, which were discovered eroding at 'Yeronga', a property near Young, were reburied on the property on 22 June 2006. The remains had been temporarily stored by the National Museum of Australia until reburial could occur. The ceremony was attended by the local Aboriginal community, the property owner and DEC staff, and involved several speakers, including the property owner who supported the reburial occurring on his land. The Young Local Aboriginal Land Council thanked all involved.



The grave site at 'Yeronga' near Young

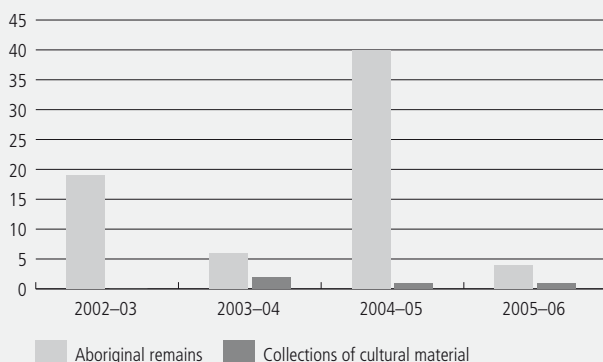
## ■ PERFORMANCE INDICATOR

### Number of Aboriginal remains and collections of cultural material held under the *National Parks and Wildlife Act 1974* repatriated to Aboriginal communities

**Definition:** This indicator measures the number of Aboriginal ancestral remains and collections of cultural material held under the NPW Act repatriated by DEC to NSW Aboriginal communities. DEC also works with the Australian Museum and community groups to facilitate repatriation under other Acts.

A 'collection' is more than two and up to 200 items. The repatriation process involves extensive consultation with Aboriginal communities to ensure cultural property is returned appropriately and according to Aboriginal community protocols.

#### Aboriginal remains and collections of cultural material repatriated to Aboriginal communities



**Interpretation:** DEC has made it a priority to return Aboriginal remains and collections to Aboriginal communities. In 2005–06, DEC repatriated fewer remains held under the NPW Act than the previous year. Instead, DEC focused on assisting the return of almost 20 remains held by the University of Sydney, but not held under the NPW Act, to three Aboriginal communities across the state.

## Aboriginal Heritage Conservation Program

The **Aboriginal Heritage Conservation Program** (AHCP) is one of DEC's key tools for the delivery of Aboriginal heritage conservation outcomes, including its obligations under the NSW Government's Two Ways Together Action Plan.

The priorities for AHCP are:

- assessing and documenting cultural heritage objects and places to improve understanding of their nature and distribution
- conserving, protecting and restoring culturally significant objects and places
- returning Aboriginal remains, cultural materials and knowledge to Aboriginal people and communities
- declaring Aboriginal Places
- promoting Aboriginal management of Country
- cultural renewal, focusing on working with Aboriginal communities to conserve their cultural heritage.

In 2005–06, the AHCP comprised 55 projects that targeted the above priorities and included:

- seven ongoing repatriation projects across NSW
- a Traditional Indigenous Games Day (see page 40)
- Aboriginal Place assessments at Mount Yengo, Soldiers Point and Bagnalls Beach
- the Northern Rock Art Project involving a three-day field survey of escarpments in the Wombat and Punchbowl Creek areas of the NSW north coast
- training community members and DEC staff in rock art conservation (see case study below)

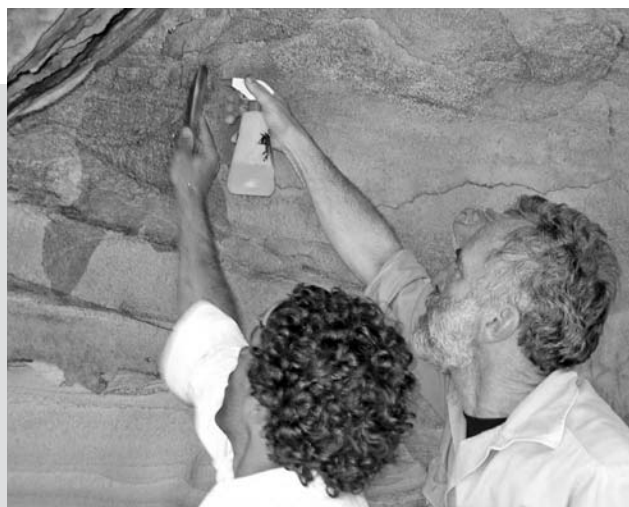
## ■ CASE STUDY

### Rock art conservation

During 2005–06, eight community members and seven DEC staff participated in training and experience in **rock art conservation** and management. The training was developed by DEC's Rock Art Conservator and supported by the AHCP. Training included:

- finding out about pigment types, how they break down, and the effect of weathering
- site monitoring at Dunn's Swamp
- removing graffiti from and managing visitors at the Livery Stable site in Wollemi National Park
- removing graffiti from three painting sites in the Blue Mountains near Lithgow.

During the year, graffiti was also removed from the Devil's Hand site west of Nowra by DEC and Nowra Local Aboriginal Land Council, and as part of this project an education program was developed for rock climbers who use the site.



DEC staff Mark Simon and Dave Lambert remove graffiti from the Livery Stable site in Wollemi National Park.

C Pavich, DEC

- the Boobera Lagoon Aboriginal Place Fencing Project, which fenced off part of an Aboriginal Place to rehabilitate local plants of cultural significance and an area of the lagoon's foreshore that was under threat from livestock. The Aboriginal Place is managed by the Boobera Lagoon Trust Board, and the project also involved members of the local Toomelah Aboriginal community who were employed under the Community Development Employment Projects scheme
- the Terry Hie Hie Tree Protection Project, which involved constructing a shelter to protect a rare Aboriginal carved tree.

## Assessing and recording cultural heritage

DEC is developing a range of tools for **Aboriginal heritage regional assessment** in NSW. During 2005–06, DEC conducted an extensive review of previous studies relating to regional assessment and condensed current methodologies into a publication, *Aboriginal cultural heritage regional studies: an illustrative approach*, which will be available in the second half of 2006.

DEC's **Aboriginal Heritage Information Management System** (AHIMS) contains archaeological reports and site records that are unique and, in many cases, irreplaceable. AHIMS has operated for more than 30 years, and 48,228 items and locations are now registered. The register is used by government, industry and heritage professionals who need the information for land use planning, regulation and conservation management. It is also used by local Aboriginal communities to help them manage, conserve and protect local sites and heritage.

During 2005–06, 2459 new items and locations were registered, and 2770 searches of the AHIMS were undertaken for external users.

In June 2006, DEC completed a major project to audit and digitise 47,000 AHIMS site cards and 8000 archaeological reports. The new digitised service will ensure the AHIMS collection is protected, whilst providing a consistent and more streamlined approach for external clients accessing digitised AHIMS documents.

In a partnership between Northern Rivers CMA and DEC, seven local Aboriginal people were employed for six months to be trained in natural resource management and cultural heritage assessment. The skills learned in this training program were then used to survey sites on Dorrigo Plateau and update site records in the AHIMS.

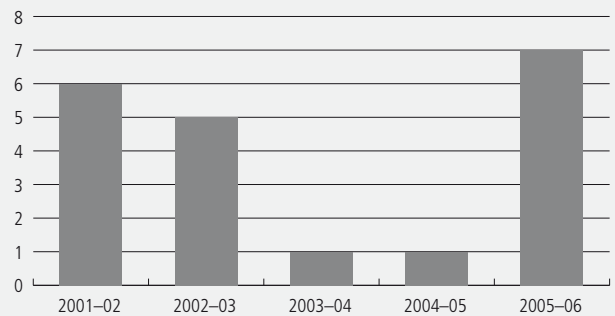
In 2005, DEC also assessed the cultural heritage values of other areas across NSW for declaration as Aboriginal Places, including Mount Yengo in the Hunter Valley and Bagnalls Beach and Soldiers Point at Port Stephens.

### ■ PERFORMANCE INDICATOR

#### Number of Aboriginal Place declarations (for sites of Aboriginal cultural significance) made under *National Parks and Wildlife Act 1974*

**Definition:** This indicator measures the number of sites across NSW that were declared as Aboriginal Places under the *National Parks and Wildlife Act 1974* following recognition of their special significance to Aboriginal culture.

##### Aboriginal Place declarations



**Interpretation:** Seven Aboriginal Places were declared in September 2005, all protecting burials of Aboriginal ancestral remains repatriated from Australian and overseas museums. The return of the remains and the Aboriginal Place declarations were the result of collaboration between the NSW Government and the La Perouse and Metropolitan Local Aboriginal Land Councils. The declarations recognise the significance of those resting places, in parks and reserves in the Sydney region, to the Dharawal and Guringai Aboriginal communities.

As at June 2006, a total of 50 Aboriginal Places has been declared and 14 Aboriginal Place nominations are being investigated. The number of declarations does not always reflect the level of ongoing investigative work as investigations may not be completed in a single reporting year, or investigators may find that a nominated place does not meet legislative requirements for declaration.

Six positions with the titles of **Aboriginal Community Partnership Facilitator, Heritage Information Officer and Aboriginal Heritage Conservation Officer** have been established as part of the creation of the Brigalow/Nandewar Community Conservation Area (see page 60). These positions establish and maintain links with landowners, CMAs and Aboriginal communities to encourage conservation of cultural heritage on private and other publicly-owned lands. For example, in the Baradine area adjacent to the Pilliga Nature Reserve, an Aboriginal Heritage Conservation Officer successfully negotiated with a private landowner to allow DEC staff and local Aboriginal women to access the property to record a site significant for women's heritage.

During 2005–06, DEC Aboriginal rangers taught trainee Aboriginal site surveyors map reading, use of GPS, and identification and recording of Aboriginal sites. DEC then employed three of the trainees to survey Aboriginal sites in Pilliga Nature Reserve, which contains marked trees, grinding grooves, rock engravings, art sites and bush tucker.

Around 50 sites were formally recorded as a result of the survey. The work increased DEC's knowledge of, and enabled DEC to better protect and manage, these important cultural sites.

The **Mapping Cultural Landscapes – Bundjalung Country Project** was a pilot project undertaken in partnership with a local Elder, which recorded sites and places of significance in Bundjalung country, building a picture of the cultural landscape and the manner in which the Aboriginal community used natural resources. The project provided valuable insight into managing Aboriginal heritage as part of a broad cultural landscape.

In April 2006, around 70 people attended the opening of a new information display that reflects the long **Aboriginal history of Iluka Bluff in Bundjalung National Park** and contemporary links to the local Yaegl People. The panels were funded through a World Heritage grant, and involved members of the Yaegl Aboriginal community, Iluka Land and Dune Care group, students of Iluka Primary School and DEC staff.

During the year, interpretative signage about the **Mt McKenzie Massacre** was installed in the Gloucester River camping area in Barrington Tops National Park.

Site protection was completed on three sites along the Northern Rivers in response to concerns raised by the Aboriginal community about the sites' condition. DEC was invited by the Mungindi Aboriginal Community to visit the **Boomi Midden**. The Midden is a rarity as it is on the river whereas most inland middens are on lakes. DEC staff advised on erosion problems, helping Namoi River Catchment officers to conserve the Midden.

An Aboriginal burial protection project was carried out at **Thegoa Lagoon** in south-western NSW. Aboriginal remains which had been exposed in a pit that was being used for sand extraction were permanently protected by shade cloth, sand bagging and fencing. The works were undertaken by DEC and Aboriginal community representatives from the Wimbajia/Mulindjii Cultural Centre and Keeping Place.

The remote **Mossgiel Cemetery** in the central part of far western NSW, which contains the shared history of Aboriginal and non-Aboriginal people, was fenced and enhanced. These conservation works were strongly supported by private landholders, the Central Darling Shire Council, staff from the Mungo Joint Management Area and local Aboriginal people. The works involved Aboriginal staff from the Mungo Joint Management Area who will now regularly maintain the cemetery, supported by the Ivanhoe Correctional Centre.

A management plan for **Jubullum Flat Camp Aboriginal Area** was gazetted in June 2006. This area holds great significance for the various family groups and Elders living in Tabulam, as it was managed independently by the local Aboriginal people as a cemetery until the mid-1900s. Local Bundjalung Elders have had valuable input into the management plan, which will protect the area's cultural values and identify a teaching place for local Aboriginal children to learn about their heritage.

## Recording oral histories

DEC completed **Aboriginal women's heritage: Walgett and Collarenebri** and **Aboriginal men's heritage: Walgett and Collarenebri** in April 2006. These collections of oral history were gathered in partnership with the Walgett Aboriginal Medical Service as part of their 20-year celebration. Under this project, Aboriginal community members were given oral history training based on DEC's publication *Talk to print*, so they could record the oral histories of the 30 interviewees.

The collected stories detail the working lives of Aboriginal people around Walgett. They refer to the big pastoral station camps at Dungaleer, Bangate and Tucki and the stock routes that stretched up to Queensland.

The latest booklet in the Aboriginal women's heritage series features **Aboriginal women's stories from the Wagga Wagga area** on the south-western slopes of NSW. The stories describe Aboriginal people's lives when there were very few opportunities for Aboriginal people. The Aboriginal Elders who contributed to the booklet are members of the Wagga Wagga Ashmont Resource Centre, where they talk to schoolchildren and the wider community about their lives and the knowledge they have gained.

During 2005–06, a group of Githabul women and girls met at Toonumbar Dam to plan the **Githabul Aboriginal Women's Heritage Project**, documenting local women's histories and stories. The Githabul people's country is in the north-western part of the Northern Rivers Region. Local DEC officers assisted the group to collect oral histories.

## Aboriginal Discovery Program

The **Aboriginal Discovery Program** aims to enhance community appreciation and understanding of Aboriginal cultural heritage. The program employs Aboriginal people, who share their stories through guided walks, talks and tours.

In 2005–06, 63 Aboriginal Discovery Rangers delivered 879 guided activities state-wide and 26 Aboriginal volunteers were involved with training and assistance. In addition, DEC worked with school students on curriculum-based Aboriginal cultural activities. Students visited parks and Aboriginal Discovery Rangers visited schools.

In the Hunter Region, a new partnership was built between DEC and the Department of Education and Training Awabakal Environmental Education Centre, whereby Aboriginal Discovery Rangers assisted with school education programs at the centre. This included NAIDOC celebrations, delivered to 400 students over two days.

In the Northern Rivers region, Aboriginal Discovery activities included a school program connected with the Bundjalung Art Exhibition at the Lismore Regional Gallery. Children participated in workshops with Aboriginal artists over four days.





## 3.3 Managing and improving the reserve system

### 3.3.1 Corporate plan priorities 2004–06

#### Planning to build the reserve system

*Develop and implement a strategy to build and finance the reserve system, with emphasis on under-represented areas such as central and western NSW and marine environments*

DEC acquires land to conserve and protect natural and cultural heritage values under the provisions of the *National Parks and Wildlife Act 1974* (NPW Act). In 2005–06, there were 149 additions to the reserve system comprising 420,000 hectares in 82 new reserves and 67 additions to existing reserves. These included 53 new reserves and six additions to existing reserves in the under-represented Brigalow Belt and Nandewar bioregions (page 60). DEC also settled the acquisition of Yanga Station near Balranald. Yanga is expected to be gazetted into the reserve system in 2006–07 (pages 61–62).

During 2005–06, the area of reserves managed by the Marine Parks Authority, of which DEC is a member, more than doubled, due to the addition of the Batemans and Great Lakes–Port Stephens marine parks (page 63).

#### Assessing the reserve system

*Systematically assess the natural and cultural values of the reserve system*

In December 2005, 200 km of the Brogo, Forbes, Hastings and Kowmung rivers and Washpool Creek were gazetted as the state's first wild rivers (page 62). DEC also completed assessments of the values of four rivers as the first stage towards declaring them as wild rivers in national parks (page 62).

DEC completed broadscale biodiversity assessments for NSW's two new marine parks. These assessments included mapping and assessing marine biodiversity and identifying areas with important biodiversity values (page 63).

Other work on assessment of natural and cultural values included regional assessments of Aboriginal heritage (page 68), ecological characteristics of Ramsar wetlands (page 50), biodiversity values in regional conservation plans (page 44) and wilderness (page 62).

#### Improving management of the reserve system

*Develop and implement an approach that promotes excellence in management of the reserve system, including the State of Parks program and plan of management review*

DEC uses plans of management for each park and reserve to contribute to better planning and decision-making. By June 2006, 339 national parks, historic sites and nature reserves were covered by an adopted or exhibited plan of management (page 65). Specific management strategies are adopted for particular issues, including fire management (pages 66–67), pest animals and weeds (pages 48–49), cultural heritage and visitors. During 2005–06 DEC also spent time reviewing this planning framework to identify opportunities for improvement, including consistency between plans.

The National Parks and Wildlife Advisory Council, regional advisory committees, and the new Aboriginal Cultural Heritage Advisory Committee all provide essential advice and assistance to DEC in managing the reserve system.



## Managing cultural heritage within the reserve system

### *Develop and implement a strategic framework for cultural heritage management and interpretation within the reserve system*

DEC works closely with Aboriginal people to manage and interpret Aboriginal heritage in national parks and reserves, often as part of co-management arrangements (see page 40).

During 2005–06, DEC continued to target historic heritage maintenance and conservation work, worth about \$2 million, through the Historic Assets Maintenance Program (pages 67–68).

As part of its obligations under section 170 of the *Heritage Act 1977*, in December 2005 DEC prepared a Heritage Asset Management Strategy. This strategy sets out general directions for the management of DEC's historic heritage assets within a total asset management framework. The strategy commits the agency to reviewing its register of heritage assets and producing a revised register by 2009. As part of these requirements, DEC has commenced the drafting of a history of its heritage collection which is designed to put those assets and their management needs in a broad context. This history should be completed in 2006–07.

## 3.3.2 Building the reserve system

DEC acquires new land for reserves to build a comprehensive, adequate and representative system. In 2005–06, DEC acquired significant new reserves in bioregions which were under-represented in the reserve system, and two new marine parks (see page 63).

During 2005–06, DEC prepared submissions on behalf of the NSW Government to respond to the Commonwealth Senate's inquiries into Australia's national parks, conservation reserves and marine protected areas, and into the national reserve system. Significant points raised in the NSW Government's submission included:

- the important role reserves play in the long-term conservation of biodiversity and cultural heritage, noting that the NSW Government's commitment to developing a world-class public reserve system is complemented by conservation efforts on private and other public lands
- the range of benefits reserves can provide in addition to conservation, such as environmental services, recreational opportunities and economic benefits
- the need for national and state governments to work together to create and manage a comprehensive protected area system.



S Garland

*Intricately-shaped tree trunk in the newly reserved Brigalow Belt/ Nandewar Community Conservation Area*

## Additions to the reserve system

In 2005–06, there were 149 additions to the reserve system comprising 420,402 hectares of land. This meant 82 new reserves were established, and there were 67 additions to existing reserves.

The ***Brigalow and Nandewar Community Conservation Area Act 2005***, which commenced on 1 July 2005, established 53 of these new reserves. This Act created a Community Conservation Area with four management zones to protect the largest woodland and forested remnants in the Brigalow Belt South and Nandewar bioregions of northern and central NSW, which contain highly fragmented and under-reserved landscapes.

On 1 December 2005, 328,372 hectares were reserved under three of the four management zones:

- Zone 1 (121,302 hectares comprising 27 reserves) was gazetted as 'national park' for conservation and recreation
- Zone 2 (21,618 hectares comprising 5 reserves) was gazetted as 'Aboriginal area' for conservation and Aboriginal culture
- Zone 3 (185,452 hectares comprising 19 reserves) was gazetted as 'state conservation area' for conservation, recreation and mineral extraction.

An additional 2,833 hectares in two nature reserves, Dhinna Dthinnawan and Taringa, were reserved under the Act. Zone 4 (274,113 hectares) remains reserved as 'State Forest' under the *Forestry Act 1916* and Regulations for the purposes of forestry, recreation and mineral extraction.

Twenty-one new reserves were established in **north-east NSW** under stage 3 of the Regional Forest Agreement. These included Scone Mountain and Bridal Veil Falls national parks, Fladbury and Bulahdelah state conservation areas and Watchimbark, Alma and Woolooma nature reserves.

Land was also added to link disparate reserves. Examples include **additions** to Severn River (1452 hectares), Brimbin (12 hectares), Dangelong (464 hectares), Bogandyera (425 hectares) and Bees Nest (1032 hectares) nature reserves; Barakee (1669 hectares) and Maryland (1392 hectares) national parks; and Illawarra Escarpment State Conservation Area (172 hectares).

**Wetland ecosystems** were also enhanced with the addition of 688 hectares to Macquarie Marshes Nature Reserve, 6230 hectares to Narran Lake Nature Reserve, 66 hectares to Seven Mile Beach National Park and 2.1 hectares to Eurobodalla National Park.

In **Sydney** metropolitan area, remnant bushland was protected with the addition of 16 hectares to Agnes Banks Nature Reserve and the establishment of the Maroota Ridge National Park (260 hectares).

Two new **Aboriginal Areas** were declared. They were Jubulum Flat Camp Aboriginal Area, a seven-hectare area in the Clarence Valley protecting an important Aboriginal graveyard; and Snake Rock Aboriginal Area, a 60-hectare area west of Peak Hill, in the traditional lands of the Wiradjuri people, which features rock art.

The **National Parks and Wildlife Amendment (Jenolan Caves Reserves) Act 2005** was proclaimed on 17 March 2006. This Act transfers the care, control and management of four **Karst Conservation Reserves** from the Jenolan Caves Reserve Trust to DEC, in two stages. In stage one, commencing on 1 July 2006, the Borenore, Wombeyan, and Abercrombie reserves, and the non-commercial area of the Jenolan reserve will be transferred to DEC. The remaining area will transfer to DEC once a revised leasing and licensing package is implemented and a new plan of management is adopted by the Minister.

A draft plan of management has been prepared for the Jenolan Caves Karst Conservation Reserve in consultation with the National Parks Association and the Australian Speleologist Federation.

## Future additions to the reserve system

In 2005–06, 24 areas totalling 96,259 hectares were acquired under Part 11 of the NPW Act for future additions to existing reserves, and three areas were acquired for new reserves.

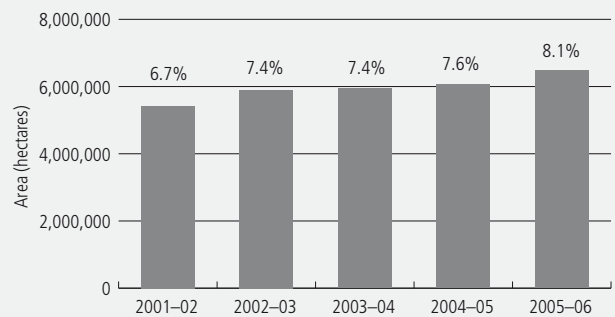
**Yanga Station** near Balranald in south-western NSW was acquired because of its significance values. This acquisition was settled in November 2005. The property has extensive Murrumbidgee River frontage and holds a rich array of natural, European and Aboriginal cultural heritage.

### ■ PERFORMANCE INDICATOR

#### Area of land managed by DEC for conservation outcomes

**Definition:** This indicator measures the area of reserves managed by DEC to achieve conservation outcomes (shown in hectares and as a percentage of NSW), the area in hectares of marine parks jointly managed by DEC as part of the Marine Parks Authority and the percentage of each NSW Interim Biogeographic Regionalisation of Australia (IBRA) bioregion managed by DEC.

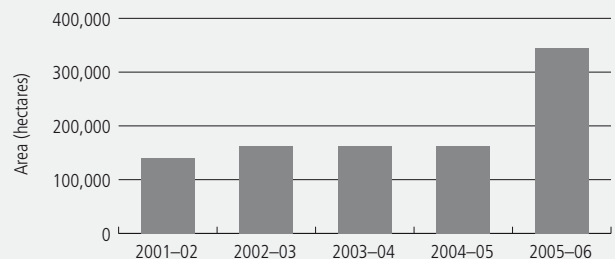
##### Land and percentage of NSW managed by DEC



##### Proportion of NSW bioregions protected in the NSW reserve system

NSW IBRA Bioregion	% protected
Australian Alps	81.8
Brigalow Belt South	8.2
Broken Hill Complex	2.0
Channel Country	9.3
Cobar Peneplain	2.4
Darling Riverine Plains	1.7
Mulga Lands	3.2
Murray–Darling Depression	5.6
NSW North Coast	23.7
NSW South Western Slopes	1.9
Nandewar	3.6
New England Tableland	8.9
Riverina	0.8
Simpson Strzelecki Dunefields	11.1
South East Corner	42.7
South Eastern Highlands	14.6
Sydney Basin	37.1
<b>Total NSW landscape</b>	<b>8.1</b>

##### Marine areas jointly managed by DEC as part of the Marine Parks Authority



**Interpretation:** During 2005–06, over 420,000 hectares of land was formally added to the reserve system. DEC now manages almost 6.5 million hectares of land in NSW, which represents 8.1% of the state's total area. DEC also jointly manages 345,000 hectares in marine parks as part of the Marine Parks Authority. The area of marine park has more than doubled in the past 12 months due to the addition of Batemans and Great Lakes–Port Stephens marine parks.

Being located on the Sturt Highway between Adelaide and Sydney, as well as being readily accessible from Melbourne, it is anticipated that Yanga will become a major tourism attraction in south-western NSW.

Yanga will be managed to protect one of the largest areas of river redgum ecosystems in NSW and other floodplain ecosystems. In 2005–06, a new DEC Area Office was established at Hay to manage Yanga and another recent addition, Kalyarr National Park.

Two new **wetland reserves** will also be established. North of Kempsey, 157 hectares of important coastal wetland were purchased for a major new reserve to protect the Yarrahappini Wetlands. Near Forster, 125 hectares was acquired at Minimbar for a major new reserve to protect the Wallis Lake Tributary Wetlands.

Significant acquisitions in 2005–06 which will be **added to existing reserves** included:

- 11,503 hectares to be added to the western side of Culgoa National Park to protect saltbush and bristolow communities, and Aboriginal sites associated with the Nebine Creek; and to link the national park with Culgoa Floodplain National Park in Queensland
- three wilderness properties totalling 3600 hectares, to be added to Guy Fawkes National Park
- a wilderness property totalling 1568 hectares, to be added to Oxley Wild Rivers National Park
- 660 hectares to be added to the Greater Blue Mountains World Heritage Parks
- two rainforest and wilderness areas totalling about 1300 hectares, to be added to the Central Eastern Rainforest World Heritage Parks in Washpool and Goonengary national parks.

## Declaration of wild rivers

Section 61 of the NPW Act provides for the declaration of **wild rivers** in national parks. Wild rivers are in a near-pristine condition in terms of animal and plant life and water flow, and free of unnatural rates of siltation or bank erosion that affect many of Australia's waterways. All the wild rivers can be used as benchmarks for environmental monitoring and scientific study. Recreation will be managed in some wild rivers.

In November 2005, the Minister for the Environment announced 200 km of wild rivers comprising:

- Washpool Creek (east of Glen Innes), where it flows through Washpool National Park
- the Upper Brogo River (east of Cooma), where it flows through Wadbilliga National Park
- the Kowmung River (south-east of Oberon), where it flows through Kanangra–Boyd National Park
- the Upper Hastings and Forbes rivers (west of Wauchope), where they flow through Werrikimbe National Park.

Washpool Creek and the Upper Hastings and Forbes rivers are located in World Heritage areas. Kowmung River has been popular with bushwalkers for more than 100 years. The Upper Brogo River forms part of the rugged mountainous upper reaches of the Great Dividing Range, which still contain original geomorphic features and freshwater plants and animals.

Further assessments were completed for four more rivers – the Colo, Grose, MacDonald and Maria rivers. Reports are currently being finalised so a panel of experts can determine whether these rivers meet the biological, hydrological and geomorphological conditions required for declaration under the NPW Act.

## Wilderness

**Wilderness** is a large natural area of land which, together with its native plant and animal communities, is in a relatively natural state, and has not been substantially modified by human activity or can be restored.

Under section 7 of the *Wilderness Act 1987* anyone may nominate an area of land to be considered as wilderness. DEC can also assess an area for wilderness values independently of any proposal. In 2005–06, one new wilderness area covering 10,883 hectares was declared in Chaelundi National Park. This brings the total area of declared wilderness to almost 1,900,000 hectares, which represents 29.5% of the total DEC estate and 2.39% of the total land area of NSW.

During 2005–06, approximately 193,000 hectares in the Yengo area were assessed with 134,900 hectares identified as containing wilderness values. The Yengo wilderness assessment report was publicly exhibited and a recommendation on Yengo wilderness is being finalised for consideration.

The assessment of the Murruin wilderness was completed in 2005–06 and an assessment report has been prepared. This report will be publicly exhibited in 2006–07.

The **Dunphy Wilderness Fund** (DWF) acquires and protects private and leased land with identified wilderness values. As at June 2006, \$10.6 million has been spent since the inception of the fund on buying 56 properties containing over 75,000 hectares of land. The DWF is overseen by the DWF Reference Group which includes representatives from DEC, the Nature Conservation Council, Colong Foundation for Wilderness and the National Parks and Wildlife Foundation (NPW Foundation). In late 2005, the NPW Foundation helped fund the acquisition of a 1800-hectare property adjoining Morton National Park. There have also been significant acquisitions at Guy Fawkes River and Yengo national parks that will protect wilderness, old growth forest and rainforest.



## Marine parks

The Marine Parks Authority, comprising representatives from DEC, the Premier's Department and Department of Primary Industries, conserves marine biodiversity by establishing a representative system of marine parks in NSW.

In November 2005, two new marine parks were announced – Batemans and Port Stephens–Great Lakes marine parks. These parks have been established through the NSW Government's City and Country Environment Restoration Program (see page 6). The addition of these parks more than doubles the total area of NSW marine parks from 162,000 hectares to 346,000 hectares. There are now six marine parks in NSW.

**Port Stephens–Great Lakes Marine Park** was declared on 1 December 2005. It includes approximately 98,700 hectares of oceanic and estuarine waters from Forster to Port Stephens in the Manning Shelf bioregion. A draft zoning plan was released in May 2006 for public comment over three months. The draft plan proposes that 20.6% of the marine park will be fully protected in sanctuary zones, and \$10 million has been allocated to buy back commercial fishing licences so the plan can be implemented. A final zoning plan is expected in late 2006.

**Batemans Marine Park** was declared on 7 April 2006, and covers an area of approximately 85,000 hectares between Brush Island and Wallaga Lake in the Batemans Shelf bioregion. The park includes:

- important breeding sites for birds along the Murramarang coastline
- many coastal lagoons typical of the NSW south coast, including Durras and Brou lakes



*Great Lakes–Port Stephens Marine Park.*

- key sites for grey nurse shark protection including the Tollgate Islands, areas of Montague Island and other important areas around Batemans Bay
- the largely undeveloped Clyde River.

A draft zoning plan is due for release on 15 July 2006 for public comment over three months. The draft plan states that 19% of the marine park will be fully protected in sanctuary zones, and \$8.5 million has been allocated to buy back commercial fishing licences in the park so the plan can be implemented. A final zoning plan is expected in late 2006.

During the assessment processes for the new marine parks, DEC led a major socio-economic analysis on their likely economic impact. The analysis showed that no adverse impact was to be expected from declaring these parks.

### ■ CASE STUDY

#### Sonar mapping in marine parks

The state's marine parks are divided into zones that permit different activities and provide different levels of environment protection. But how are these zones decided on, to ensure that all types of marine habitat are properly conserved?

This was a dilemma for the newly created Port Stephens–Great Lakes and Batemans marine park staff. Scientific knowledge of the park's marine environments was limited, particularly in deeper waters. Detailed habitat maps were needed so accurate draft zoning plans could be prepared.

DEC scientists used state-of-the-art swath sonar technology, which bounces ultrasonic energy off the sea floor. By analysing the 'acoustic signature' of the sea bed, the researchers generated a 3D map of the underwater landscape.

They also took underwater video footage, to see what types of marine habitats – such as seagrass beds, kelp forests and sponge gardens – were found on different types of sea floors. This allowed them to turn their



*DEC staff map underwater habitat in Batemans Marine Park off Montague Island, in the good ship Glaucus.*

3D map into a detailed picture of the underwater environments found in the new marine parks.

This habitat mapping greatly assisted the marine park's planners in developing a draft zoning plan with the broader community. It will also provide vital information for future monitoring of protected marine ecosystems.

The **Cape Byron Marine Park zoning plan** was finalised on 1 May 2006. The marine park covers approximately 22,700 hectares in the Tweed–Moreton bioregion, with 6105 hectares (27.5%) protected in sanctuary zones. Approximately \$4.4 million is currently being spent to buy back commercial fishing licences to implement the zoning plan.

Studies at **Jervis Bay Marine Park** included comparing rocky reef communities in zones with different levels of environment protection, investigating the impacts of recreational fishing and scuba diving, looking at changes in estuarine wetlands, examining the newly established Steamers Head seal colony, and researching the acoustic behaviour and effects of noise on bottlenose dolphins.

Research projects undertaken in **Lord Howe Island Marine Park** included habitat mapping, hydrodynamic modelling, studies on reef fish, marine pest studies, and examining the life history and ecology of the bluefish.

Research projects in the **Solitary Islands Marine Park** included mapping and classifying seabed habitats; assessing the condition of reef habitats; investigating the status and representation of reef fish and benthic organisms; and studying human activity patterns, mud crab abundance and the impacts of recreational fishing competitions on the marine environment.

### 3.3.3 Managing the reserve system

To effectively manage its network of reserves, DEC uses the assistance and advice of statutory councils, committees and volunteers, the strategies in plans of management and fire control techniques. DEC also controls pest animals and weeds to protect the values and biodiversity of the reserve system and neighbouring agricultural lands. A separate report on pests and weeds has been completed for release in 2006. DEC's pest animal and weed control activities are addressed on pages 48–49.

## National Parks and Wildlife Advisory Council

The **National Parks and Wildlife Advisory Council** is constituted under the NPW Act to advise the Minister on issues such as park management, wildlife protection, conservation agreements and declaration of wilderness areas. The 18 members of the council during 2005–06 are listed in Appendix 5.

The council met four times in 2005–06 and also worked through its three subcommittees: Management Planning, Research and Policy, and Reservation and Conservation Planning.

Significant work performed by the council over the past year included:

- raising with the Minister for the Environment concerns over reduced water flows to wetlands and, in particular, the plight of the Macquarie Marshes
- commenting on *Future directions for protected areas and wildlife management*
- commenting on the wild dogs and wild rivers draft policies.

Under the Act, the council must advise the Minister on plans of management and any submissions received from the public on these plans. During 2005–06, the council reported on 16 plans of management for 21 DEC-managed areas including Kosciuszko National Park.

## Regional advisory committees

There are 19 **regional advisory committees** across NSW. Members are appointed on a voluntary basis for a four-year term, with members' current term expiring on 30 June 2008. Regional advisory committees provide recommendations to the National Parks and Wildlife Advisory Council and to DEC on measures to improve the care, control and management of DEC-managed parks and reserves. To keep abreast of issues affecting park management, committee members regularly visit parks and reserves in their region, and meet regularly with DEC staff.

Advisory committees ensure ongoing community and neighbourhood involvement in the management of parks and reserves. As representatives of the local community, committee members maintain contact with other groups and organisations such as local government, Aboriginal communities, tourism associations, conservation groups, neighbours and outdoor recreation groups.

Each year, a statewide advisory committee conference is conducted so members can network, discuss issues affecting all NSW and talk with DEC management and staff. The 2006 conference was held in Griffith on 17–19 March, the theme being 'Connectivity: landscape, people and park management for the future'. Delegates visited the old homestead in Oolambeyan National Park and learnt about the habitat of the endangered plains-wanderer.

Branch conferences are also regularly held to examine issues of local significance. In August 2005, the Northern Rivers Community Advisory Committee hosted a conference at Byron Bay for community representatives from northern NSW, which focused on tourism in national parks and wilderness, and planning for the future.

As part of Seniors Week 2006, the Chair of the National Parks and Wildlife North Coast Region Advisory Committee, Barbara Fahey, was presented with an Education/ Lifelong Learning Achievement Award by the NSW Minister for Ageing, John Della Bosca. Mrs Fahey was nominated by DEC in recognition of her contribution to regional advisory committees, and her role in raising awareness of and respect for the natural and cultural heritage of the Clarence Valley.



## Volunteers in parks

**Volunteers** work for many hours each year on conservation activities across NSW, both in and outside parks. During 2005–06, DEC and Conservation Volunteers Australia worked together to engage the community in practical and educational conservation projects in 19 national parks and nature reserves. Over 1046 days, volunteers:

- planted 3166 trees
- propagated 500 plants
- repaired 2210 metres of tracks
- removed 3500 metres of fences
- removed exotic weeds from 27 hectares of land.

In 2005–06, DEC staff embarked on a project involving Aboriginal Elders, Shoalhaven Heads Primary and Shoalhaven High schools, Shoalhaven Heads Landcare Group and Progress Association, Aboriginal mentoring students and a shorebird conservation group. Shoalhaven City Council contributed funding. The project aimed to protect the Shoalhaven Crookhaven Estuary that is recognised as a wetland of national importance for its mangroves, seagrass and saltmarsh that provide habitat for migratory birds. Work included planting, landscaping, building pathways, constructing interpretive signs for Coolangatta Mountain and creating shorebird protection zones. A mural of the area's birds was built by students and the Aboriginal Elders' hands were imprinted in clay to depict birds' wings. This project won the Australian Government Regional Landcare Award.

A dune planting day with the Tuncurry Dune Care volunteers and Green Corps was conducted at Yagon in Myall Lakes National Park, while the Friends of Booti were rewarded with a Keep Australia Beautiful award for dune rehabilitation at Shelly Beach in Booti Booti National Park.

Ten young people from Green Corps completed six months conservation work in the Gloucester area, supported by local organisations including the Gloucester Soldiers Hospital, Landcare, the Jilli Gubrang Aboriginal organisation and Gloucester Shire Council. Work included a \$23,000 upgrade to Mountain Maid Walking Track in Copeland Tops State Conservation Area which involved clearing the track and laying down 220 metres of steps and handrails. The group also removed cape ivy from Woko National Park, and revegetated DEC's depot in Gloucester to provide additional habitat for the threatened grey-crowned babbler.

## Plans of management

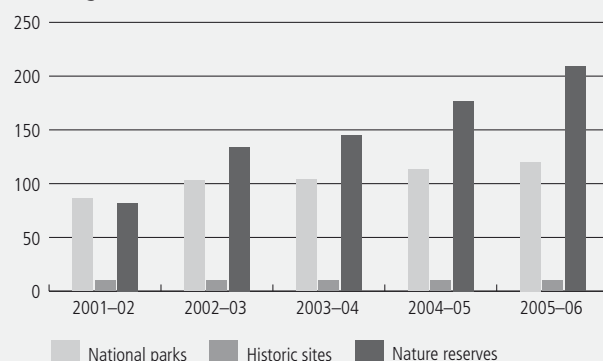
DEC is required by the NPW Act to prepare a plan of management for each park and reserve. Plans of management lead to better understanding of important natural and cultural values, and incorporate strategies for planning and decision-making, including management of fire and visitor impacts and consultation with Aboriginal groups and the community. At the end of June 2006, 387 reserves, covering over 5 million hectares and representing 79% of the reserve system, were covered by an adopted or draft plan of management.

### ■ PERFORMANCE INDICATOR

#### Number of national parks, historic sites and nature reserves covered by a plan of management or where a draft plan has been on exhibition

**Definition:** This indicator measures the cumulative total of national parks, nature reserves and historic sites with adopted or exhibited plans of management.

#### Parks and reserves with adopted or exhibited plans of management



**Interpretation:** In 2005–06, 39 plans of management for national parks and nature reserves were either adopted or exhibited, showing a continuing steady increase in the reserves covered by plans of management. In addition to the categories of reserve in this indicator, plans of management covering 11 state conservation areas were also adopted or drafted in the year. The numbers of historic sites, Aboriginal areas and regional parks covered by plans of management have not increased.

Plans of management which were adopted in 2005–06 include those for:

- Werrikimbe National Park
- Oxley Wild Rivers National Park and State Conservation Area
- Abercrombie River National Park
- Mount Kaputar National Park (replacement plan)
- Kosciuszko National Park (replacement plan).

In late 2001, DEC commenced a review of the 1982 plan of management for **Kosciuszko National Park**. At 673,542 hectares, this is the largest national park in NSW and one of the most complex reserves in Australia.

The comprehensive consultation process included:

- an independent scientific committee which advised on the condition of and threats to the natural, cultural, recreational, economic and social values of the park
- a community forum with 21 members representing local government, Aboriginal communities, the alpine resorts, Snowy Hydro Limited, recreational user groups, conservation groups, tourism authorities, local communities, NSW Farmers Association, Kosciuszko Huts Association and DEC regional advisory committees, which met 16 times over two years to discuss key management issues and solutions

- an Aboriginal working group consisting of members and Elders who have connections with the mountains, which met nine times during the plan preparation period to resolve Aboriginal heritage issues.

Following many written submissions, an amended plan was adopted by the Minister for the Environment in June 2006. The new plan:

- provides for greater recognition of the cultural values of the park, community involvement in park management, and environment protection
- introduces a simple zoning scheme and management strategies that ensure sustainable use
- acknowledges the importance of the park's cultural and social values and the need to protect these from key threats such as inappropriate fire regimes, climate change, introduced plants and animals, and inappropriate development.

See page 71 for information on the Towards Centenary upgrade of the park.

## Fire management

DEC manages some of the most rugged and remote bushfire-prone country in the world. Under the NPW Act and the *Rural Fires Act 1997*, DEC is responsible for protecting human life, property, and natural and cultural heritage values from bushfires on lands that it manages.

DEC has approximately 900 trained firefighters, hundreds of trained incident management staff, and a full range of vehicles, plant, equipment and aircraft for fire management operations, particularly in remote areas. DEC cooperates, and coordinates its firefighting operations, with the NSW Fire Brigades, NSW Rural Fire Service, Forests NSW and the Sydney Catchment Authority. DEC is a member of the NSW Bush Fire Coordinating Committee and its various sub-committees, and the Australasian Fire Authorities Council. DEC is represented on nearly all the bush fire management committees in NSW.

DEC's task-based assessment program, which all firefighters must pass before the beginning of each fire season, is based on national and international standards and consists of an annual medical assessment and fitness test. The objectives of the program are to improve employee safety and performance and ensure firefighters are only assigned tasks they can medically and physically carry out. During 2005–06, 1069 staff attempted the assessment, with a success rate of over 97%.

DEC is a Registered Training Organisation (RTO) for delivering fire and incident management training under the Public Safety Training Package. As an RTO, DEC also assesses competencies of firefighters and incident managers in DEC. These programs ensure that firefighters remain highly skilled and meet national competency standards. In 2005–06, 860 front line firefighters, plus over 150 other staff in management and support roles, undertook fire management training.

DEC develops **reserve fire management strategies** and uses these as the basis for fire suppression schedules and maps.

During 2005–06, the amount of **hazard reduction burning** undertaken by DEC was limited by the prevailing weather conditions. Many scheduled burns were seriously hampered by:

- very dry weather conditions across NSW until June 2006
- heavy rainfall in June across central and southern NSW, with cooler winter temperatures.

Over the past year DEC undertook hazard reduction burning on over 27,000 hectares of parks and reserves, and approximately 1700 hectares of lands next to parks. In addition, hazard reduction through means such as slashing was carried out on over 1000 hectares in parks, making the total area treated over 30,000 hectares. Over 8600 km of DEC fire trails were regularly maintained.

### Hazard reduction burns over five years conducted by DEC

Fire year	Number of burns conducted by DEC staff	Total hectares of treated area burnt
2001–02	103	31,703
2002–03	173	42,827
2003–04	340	65,451
2004–05	148	41,037
2005–06	162	27,400

During the 2005–06 fire season, there were approximately 6,753 **wildfire incidents** statewide, of which 202 (approximately 3%) affected DEC parks and reserves. Almost 27,000 hectares (0.4%) of DEC land was burnt as a result of wildfires. DEC firefighters also assisted with 67 fires outside reserves, including interstate fires.

### Origin and movement of wildfires affecting parks and reserves in 2005–06

Fire origin	Fire movement	Number of fires	Percentage of NSW fire
On-park	Controlled on-park	138	2.0%
On-park	Moved off-park	15	0.2%
Off-park	Moved on-park	49	0.7%
Off-park	Burned entirely off-park	6,551	97.0%



M Lauder, DEC

Hazard reduction burning in Bouddi National Park.

DEC is committed to **recovering and rehabilitating its lands** after fire. Appropriate measures are undertaken as early as possible, often commencing before a fire has been fully extinguished and generally during the 'mop-up' phase. Rehabilitation strategies can be included in the Incident Action Plan, which details the objectives and strategies for controlling a fire. Following the fire, rehabilitation strategies are used to continue to implement and monitor recovery actions.

During 2005–06, DEC continued to employ measures to ensure that disturbed areas were given enough support to recover. Measures included:

- using fire suppression strategies with minimum environmental impact
- rescuing wildlife with the assistance of volunteer groups such as WIRES (Wildlife Information and Rescue Service)
- rehabilitating temporary fire control lines (temporary bulldozer trails and hand constructed trails and fire breaks)
- removing dangerous tree limbs and trees from visitation areas
- controlling weeds.

### 3.3.4 Managing and presenting cultural heritage

DEC works closely with Aboriginal people to manage and interpret Aboriginal heritage in national parks and reserves, often as part of co-management arrangements (see page 40).

DEC also manages one of the largest holdings of historic heritage sites in NSW. Each year, DEC manages major planning, works and maintenance projects to ensure that significant historic heritage is conserved.

Much of this work is funded through the **Heritage Assets Maintenance Program (HAMP)**. The priorities for the allocation of HAMP funding include the heritage significance of the place or landscape, the ability of the place to contribute to regional and rural economies and communities, and the potential use of the place.

In 2005–06, over \$2 million was allocated to 59 projects at 44 locations. These projects included:

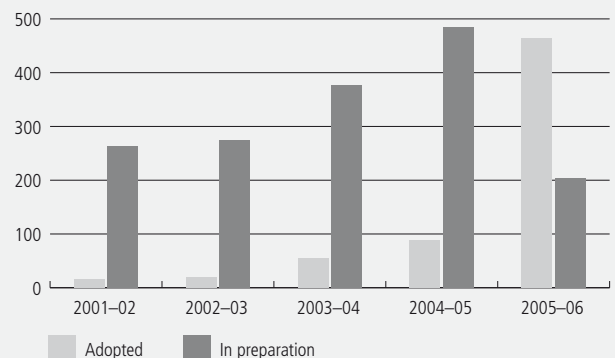
- preparing conservation management plans and heritage action statements for historic places including Youdales Hut, Oxley Wild Rivers National Park, Walcha; Mount Maid Goldmine, Copeland Tops State Conservation Area, Gloucester; and Nielsen Park, Sydney Harbour National Park
- undertaking major conservation works in places such as Hartley Historic Site; Hill End Historic Site; and Sugarloaf Point Lighthouse, in Myall Lakes National Park, at Seal Rocks

#### ■ PERFORMANCE INDICATOR

##### Number of reserves covered by a fire management strategy (adopted or in preparation)

**Definition:** This indicator measures the number of reserves covered by a fire management strategy that have been adopted under the NPW Act, or were in preparation (either out for public comment, awaiting formal adoption or in preparation) at 30 June 2006.

##### Reserves covered by fire management strategies



**Interpretation:** DEC works with District Bushfire Management Committees across the state to ensure that strategies are compatible with each district's bushfire management plans. DEC has prioritised the development of fire management strategies across the reserve system, resulting in a significant increase in the number of reserves covered by an adopted fire management strategy since 2004. During 2005–06, fire management strategies covering 375 reserves were adopted, and those covering a further 203 reserves were being finalised (either out for public comment or awaiting formal adoption). Already, 464 reserves covering more than 4.5 million hectares have an adapted strategy.

- undertaking emergency stabilisation and maintenance works at places such as Mungo Woolshed, Mungo National Park; the Old Great North Road, Dharug National Park; and the National Pass Walking Track, Blue Mountains National Park
- assessing the Ninia Homestead for its historical significance as one of the original settlers' homesteads in the Macquarie Marshes Nature Reserve.

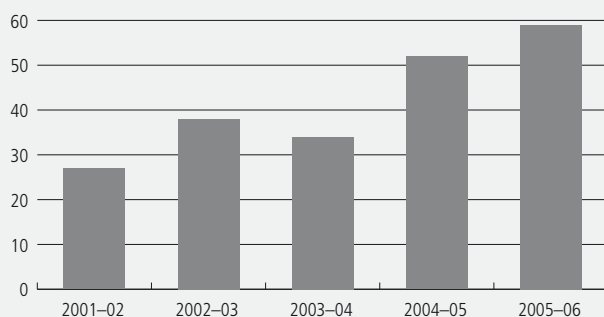
HAMP also funded stage 2 of a project to identify and help prioritise management of major moveable heritage collections. This project involved conducting workshops around NSW to gather information and raise staff awareness of management issues associated with such collections.

## ■ PERFORMANCE INDICATOR

### Number of historic heritage projects undertaken as part of the Heritage Assets Maintenance Program

**Definition:** This indicator measures the number of historic heritage conservation projects undertaken on DEC parks and reserves under its Heritage Assets Maintenance Program (HAMP).

Historic heritage conservation projects undertaken as part of HAMP



**Interpretation:** Fifty-nine projects worth more than \$2 million were completed in 2005–06, an increase of seven projects from 2004–05.

The widespread bushfires in 2003 damaged or destroyed 19 high country huts in **Kosciuszko National Park**. As a result, park managers prepared a strategy to manage these iconic sites, which involved six meetings with stakeholders, a web-based survey to determine community attitudes to hut management, and public exhibition of the proposed actions. The final strategy, completed in 2005–06, recommends rebuilding seven huts and provides practical guidelines for managing huts in the high country.

A related project focused on the historic homestead at Currango in the north of Kosciuszko National Park. The development of the Currango Conservation Management and Interpretation Plan was a three-year project involving stakeholder meetings, recording of oral history, archaeological surveys, and review of 60 submissions from the public exhibition of the draft plan. The final plan provides a practical works program and guidelines for the future management of Currango Homestead.

A buried cannon and carronade at **Bare Island** in Botany Bay National Park were restored in 2005–06 and this restoration was celebrated as part of Heritage Week on 17 April 2006.

**Dalmorton Camping Area** in Guy Fawkes River State Conservation Area was officially opened in August 2005 and enables visitors to explore the rich cultural history of the Dalmorton district. Once a favoured campsite of the local Gumbainggirr People, Dalmorton became a flourishing township of 800 people during the gold rush of the 1860s. Interpretive panels at the village site and in the camping area tell the stories of the Aboriginal people, the gold miners, graziers and townspeople who lived along the historic Grafton–Glen Innes Road.

DEC has delegated authority under the *Heritage Act 1977* to determine certain applications under the Act and to endorse conservation management plans (CMPs) for State Heritage Register (SHR) listed items under the Act. These delegations relate to land managed under the NPW Act and by the Botanic Gardens Trust. The delegations under sections 57 and 60 relate to exemptions and approvals for works on SHR-listed items. Delegations under sections 137 and 140 relate to exceptions and approvals for excavation of non-Aboriginal heritage. The following table summarises all permits issued under delegation and CMPs endorsed by DEC during 2005–06:

#### Decisions made under delegation

Section 60 applications approved	4
Section 140 applications approved	4
Section 57 exemptions approved	4
Section 137 exceptions approved	4
<b>TOTAL</b>	<b>16</b>
<b>Conservation management plans endorsed under delegation</b>	<b>1</b>

In 2005–06, two areas of reserved land were added to the National Heritage List, a Commonwealth list established under the *Environment Protection and Biodiversity Conservation Act 1999*. Kurnell Peninsula Headland was listed in recognition of its place in Australia's history, with 400 hectares of Kurnell Peninsula on the southern shores of Botany Bay, including Captain Cook's Landing Place, being included in the list. The Quarantine Station in Sydney Harbour National Park was listed for values associated with its use since colonial times, and the fact that it is the oldest quarantine station in Australia.

## Cultural landscapes: connecting history, heritage and reserve management

A current research project entitled *Cultural landscapes: connecting history, heritage and reserve management* aims to improve the management of cultural heritage at a landscape level in NSW reserves.

Over the last 40 years, cultural heritage sites have been conserved as individual entities. A landscape approach to heritage conservation will recognise the connectivity between sites and the importance of old fences, pathways, stockyards and culturally modified land such as plantations, grazing areas and timber harvesting areas. Many of these features have left physical traces in the reserves and shaped today's reserve environments.

The new approach aims to integrate the management and conservation of natural and cultural values in reserves. By understanding the historical, present day and ecological connections between objects, places and landscapes, DEC can better manage the unique cultural landscape of each reserve and better interpret its heritage.





## 3.4 Sustainable public use of the reserve system

### 3.4.1 Corporate plan priorities 2004–06

#### Sustainable and appropriate use of national parks

*Develop a policy and strategic planning framework for sustainable and culturally appropriate use of national parks*

In March 2006, DEC released the Living Parks Sustainable Visitation Strategy, following extensive consultation with key stakeholders, and has begun to implement the strategy through branch visitation management plans across NSW.

In 2005–06, DEC commenced a review of commercial tour operators' licensing arrangements, to ensure that community, visitor and operator expectations are better met while continuing to focus on the conservation of natural and cultural heritage values in reserves. This work will continue in 2006–07 and lead to services that are more effective and that build on the cooperative relationships between DEC and commercial tour operators.

#### Total asset management

*Put in place a total asset management approach for reserves*

As part of its total asset management plan, DEC continued to develop the asset maintenance system for reserves. During 2005–06, DEC reviewed the outcomes of total asset maintenance system pilots in four areas, and from 2007 will begin to roll out the system to all areas, building in the improvements identified, including standardising business rules across the state and better integrating the system with the other corporate information systems.

### 3.4.2 Living Parks strategy

In March 2006, DEC launched **Living Parks** which is the state's first visitation strategy for all lands reserved under the NPW Act. The strategy aims to:

- encourage visitors to national parks while ensuring native plants, animals and lands are conserved
- enhance the experience of park visitors and improve their awareness of parks' natural and cultural heritage values
- improve visitor management, facilities and services
- encourage new partnerships between DEC, the private and public sectors, Aboriginal communities and the general community
- provide a framework for sustainable investment in NSW parks, to benefit local and regional economies and involve Aboriginal people in visitor management.

*Living Parks* outlines 34 priority actions which DEC will implement in coming years, including through development of branch visitation management plans.

### 3.4.3 Enhancing visitor experiences

#### National Parks Discovery Program

The National Parks Discovery Program provides educational experiences through walks, talks and tours in parks and through outreach activities. It fosters understanding and appreciation of the diversity of natural, Aboriginal cultural heritage and historic heritage values in reserves, and encourages behaviour that helps sustain the environment. DEC employs local people with appropriate backgrounds as Discovery coordinators and rangers to deliver programs to local communities, visitors and schools.

About 4386 Discovery programs were conducted across NSW in 2005–06 and, for the first time, the number of participants exceeded 117,000. Community interest and participation continued throughout the year, with many popular activities held during school holidays, including spooky night tours, lighthouse tours, bush tucker and bush art workshops, and various junior ranger kids' activities.

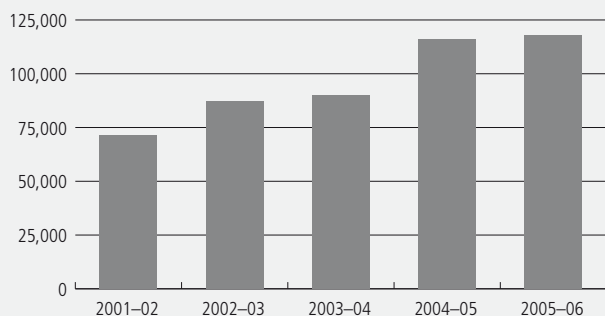


## ■ PERFORMANCE INDICATOR

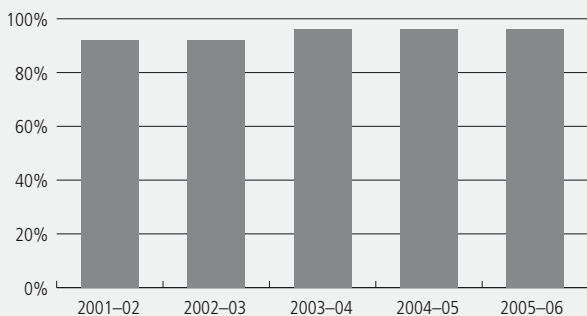
### Number of participants in Discovery education programs and percentage satisfied

**Definition:** This measure indicates the number of participants taking part in all activities of the Discovery program. It also indicates the percentage of a surveyed sample of participants satisfied with their experience. DEC surveys at least 10% of participants in each regional program over the year.

#### Participants in Discovery education programs



#### Participants satisfied with Discovery education programs



**Interpretation:** The Discovery Program continues to attract more participants across the state, particularly in school programs. The level of satisfaction of surveyed participants remains high, demonstrating that the program remains engaging and enjoyable.

In addition, guided tours and activities were aligned with key community events including Heritage Week, World Environment Day and other regional festivals.

Involvement in the **Discovery for Schools** program remained strong and more programs were developed during the year. A new 'In-School Program' was launched in the Hunter Region in 2006 incorporating themes such as Aboriginal cultural heritage, state and national parks, rainforest and biodiversity. This program promotes learning through fun and first-hand experiences that are linked to the school syllabus.

During 2005–06, partnerships were developed with other environmental education providers to combine resources and coordinate the delivery of environmental education programs. Programs were conducted with the Department of Education's environment education centres, catchment management authorities, Taronga Zoo and local councils.

A favoured activity was the 'Backyard to Bush' program presented with Taronga Zoo, which travelled around NSW allowing participants to interact with native wildlife. These joint education programs will continue in 2006–07.

## The Botanist's Way

**The Botanist's Way**, which was opened at the Mt Tomah Botanic Garden in June 2006, is Australia's newest heritage-themed tourist drive. This 88-km journey, across the Greater Blue Mountains World Heritage Area along the scenic Bells Line of Road, links Windsor in north-western Sydney to Lithgow on the western side of the Great Dividing Range. This project was an initiative of Tourism Hawksbury Inc and involves DEC, Lithgow and Blue Mountains City councils, Tourism NSW and Blue Mountains Tourism. DEC provided almost \$50,00 in funding for the project.

DEC established interpretive signs at each end of The Botanist's Way to:

- promote more understanding of the values of the 1,026,044-hectare Greater Blue Mountains World Heritage Area by presenting human stories associated with the area's diverse and unique plant life
- explain the role that botanical, geological, geographic and scientific discovery played in protecting the environment, and revealing its history
- promote an understanding of Aboriginal communities' ongoing connections to Country (links to the World Heritage Living Country Project), understanding and use of plant life, and contributions to the early colony
- integrate and add value to heritage tourist attractions along The Botanist's Way
- create new marketing opportunities for the Hawkesbury/Blue Mountains precinct, the wider region and individual botanical attractions.

A highlight of the project was the support provided by four traditional tribal Aboriginal groups – Darug, Wiradjuri, Darkinjung and Gundungurra – who shared their indigenous language and greetings by allowing DEC to use them on the spectacular interpretive gateway signage.

## Muttonbird by Moonlight

Muttonbird Island Nature Reserve is the largest, most accessible wedge-tailed shearwater rookery in NSW. It is much visited by tourists, and is significant to the Gumbaynggirr Aboriginal community. In 2005–06, DEC developed an innovative wildlife tourism program for the island in partnership with Gumbaynggirr people, volunteer groups and local businesses. **Muttonbird by Moonlight** is a series of tours that showcase the lifecycle and behaviour of the shearwaters and the links between Aboriginal culture, the landscape and the plants and animals. The tours encourage a wider appreciation of the Island at night when the rookery comes to life. The program also includes an education kit with a marketing plan and information on developing other events that create economic opportunities for local businesses. Approximately 1500 visitors participated in these tours during the past year.

## Tumut visitor centre

In August 2005, the **Tumut Visitor Centre** made the NSW Tourism finals after gaining a prize in the Rhodium Canberra and Capital Region Tourism Award 2005 for General Tourism Services. The Centre is jointly operated by the Tumut Shire Council and DEC. It received the award for maintaining high standards of customer service, information provision and quality facilities that deliver a unique visitor experience.

## 3.4.4 Providing and managing park facilities

DEC's **park use fees** provide funds for maintaining and improving visitor facilities and services, conserving threatened species and their habitats, protecting cultural and heritage sites, and carrying out pest and weed control programs. Fees include day entry, annual pass and camping fees. Day entry fees apply to only 44 of over 670 parks and reserves across the state.

In 2005–06, DEC raised about \$17.2 million from these fees, including \$11.5 million in day entry and annual pass fees and \$5.7 million in camping and cabin letting fees.

## Towards Centenary

In November 2005, the NSW Government announced the biggest upgrade to infrastructure and tourism facilities in Kosciuszko National Park since its creation in 1944.

**Towards Centenary** involves investing more than \$250 million in the national park over the next 30 years. The announcement followed a lengthy investigation by the Independent Pricing and Regulatory Tribunal into the cost to NSW taxpayers of funding essential skiing infrastructure in the Perisher Range Resorts.

Upgrades will be funded by:

- a developer levy on the number of new beds for visitors in ski resorts
- a change in the rating structure for resorts and lessees
- an \$11 winter surcharge for entry to the NSW ski fields
- a \$105 surcharge for an annual pass to enter the park.

More than \$12 million will be provided for major improvements in the park. Projects currently underway are:

- the construction of a visitor entry station that will improve access to the Perisher Blue Ski Resort during the ski season
- the paving with stone of 400 metres of the Main Range Walking Track, linking Rawsons Pass to Charlotte Pass, and the construction of stone stairs using recycled stone from Jindabyne Dam.

Future projects will include undertaking a major conservation program to rehabilitate Mt Kosciuszko and Australia's other mountains, enhancing feral animal control and rebuilding essential infrastructure for water, sewage, roads, and waste at the Perisher range resorts.

## Revitalising Sydney's parks

The NSW Government has provided more than \$38 million over four years to improve Sydney's national park visitor facilities.

In 2005–06, DEC commenced the Resolute Visitor Area upgrade in **Ku-ring-gai Chase National Park**, with a detailed site survey, a landscape design and work on the Koolewong Track and lookout. When completed, the upgrade will include a new interpretive facility, construction of new 'EcoMax' toilets, new signs around the Resolute/West Head area and changes to West Head Road.

DEC is developing a conservation management plan for Bobbin Head and Appletree Bay before major upgrades begin. In drafting the plan now on public exhibition, DEC held public open days, passed out community questionnaires and consulted widely.

### ■ CASE STUDY

## Paddling with the Platypus

In September 2005, DEC received an award from the Bombala and District Development Association for the Paddling with the Platypus tourist program. Visitors and local residents taking part in this program travel up the river in canoes to see a platypus in the wild, accompanied by a ranger who gives detailed information on the lives of these reclusive animals.

The program built on the cooperative work undertaken by the Bombala Shire Council, the Platypus Conservancy and DEC in developing the Platypus Reserve 3 km south of Bombala. The award highlighted that Paddling with the Platypus successfully combined both physical activity and environmental education in a fun way that can be enjoyed by all.



*Paddling up-river to see a platypus.*

DEC has made improvements for vehicles visiting Morgans Creek, Burrawang Reach, Cattle Duffers and Fitzpatrick Park in **Georges River National Park**, including:

- improved traffic safety, sightlines and queuing at Henry Lawson Drive, and improved vehicle management
- use of efficient parking strategies and directional flow, including overflow options
- improved surface treatments.

Surveys and preliminary designs have been reviewed by the community and key stakeholders. Research is being undertaken to better understand ways in which water users, picnickers and children use the four sites. Research into visitors from non-English speaking backgrounds is being also undertaken and incorporated into the visitation plan.

During 2005–06, a plan for improvements to facilities and landscaping was prepared for Bonnie Vale in **Royal National Park**. The survey, architectural design and documentation, archaeological permits, environmental assessments and site decontamination report were completed during 2005–06. DEC has begun to build new shower and toilet facilities. Work to renew the Garie Beach precinct included upgrading and sealing the visitors' car park, creek stabilisation and stormwater works, and building demolition.

## Upgrades to visitor facilities

During 2005–06, a new viewing platform was constructed at **Kattang Nature Reserve** near Laurieton. The platform is located away from the car park to encourage visitors to get out of their cars and walk.

Miners Beach Walking Track in **Sea Acres Nature Reserve** was also upgraded, with staircases and boardwalks enabling visitors to walk safely in the coastal environment of Port Macquarie. The walk also provides an important link from Town Beach to Lighthouse Beach.

In 2005–06, work commenced on upgrades in the **Blue Mountains National Park** to the National Pass, Link Track, Queens Cascades Track (Stage 1), Fairfax Heritage Track and Coal Seam Track. Planning has commenced for upgrades to visitor facilities in the Blue Labyrinth Precinct. A conservation management plan, Tracks Into History, has been completed for the state heritage-listed walking tracks in the Blue Mountains.

An Environmental Learning Centre was upgraded in 2005–06 with the assistance of the Department of Education and various volunteer groups at **Wingham Brush Nature Reserve** near Taree. The facility promotes cooperative ventures between DEC and the Department of Education and enhances schoolchildren's appreciation of the reserve. A key outcome has been community education and acceptance of the resident grey-headed flying fox population.

## Leasing and property management

DEC has an extensive commercial property and leasing portfolio which helps to enhance facilities and services for park visitors. This portfolio generated \$12.6 million in revenue during 2005–06. Key achievements included:

- renewing the licence for the Scenic Skyway over Blue Mountains National Park
- negotiation of a new lease for Fort Denison Café which operates in conjunction with DEC's day tours of the island and evening functions
- continuation of DEC's conservation lease program at Hill End Historic Site with a number of historic cottages being successfully restored by lessees in accordance with approved conservation management plans
- selection of a new commercial operator for the accommodation at Smoky Cape Lighthouse
- leasing a number of cafes and restaurants including the cafe in the Jindabyne Visitor Centre and the Berowra Waters Tea House.

In 2005–06, DEC began a review of the administration and management of its commercial tour operators' licensing arrangements to make these services more effective and build on the cooperative relationships with commercial tour operators. The review aims to ensure community, visitor and operator expectations are better met, while continuing to focus on conservation.



# Sustainable consumption, production, resource use and waste management

Strategic focus area	Outcomes
Sustainability reflected in government and business decisions and operations	<p>Government is a recognised leader in sustainable management of its processes, operations and public assets</p> <p>Business adopts sustainability as a core value</p>
Resource conservation improved	<p>Individuals and businesses minimise resource use and environmental impacts, recover resources and appropriately dispose of harmful waste</p>

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## 4.1 Sustainability reflected in government and business decisions and operations

### 4.1.1 Corporate plan priorities 2004–06

#### Promoting sustainability in government planning

*Actively contribute to the Government's metropolitan and regional planning strategies to promote sustainability principles and environmental protection*

DEC contributed to *City of cities: a plan for Sydney's future*, the Sydney Metropolitan Strategy, which was released in December 2005. DEC contributed in areas including transport, recycled water, planning for new release areas and the building sustainability index (BASIX). DEC also participated in the development of coastal regional strategies (page 75).

DEC provided input to the NSW State Infrastructure Strategy, released in May 2006, which promotes sustainability and environment protection principles. DEC also assisted the Department of Planning (DoP) with commencement of the planning reforms (page 36).

During 2005–06, the NSW Government launched the City and Country Environment Restoration Program (page 6) that will promote local government sustainability strategies from 2007.

#### Promoting sustainability in the public sector

*Guide purchasing and resource use by government agencies towards more sustainable practices*

During 2005–06, DEC collated reports from 122 agencies on their recycling and purchasing activities under the NSW Government Waste Reduction and Purchasing Policy (WRAPP) during 2003–05 (pages 75–76).

DEC continued to work with other government agencies to improve government procurement, including through the Smartbuy online procurement system and through sustainability requirements built into computer equipment supply contracts. Key partnerships for DEC included working with the RTA to increase markets for recycled materials, and working with local government to improve the sustainability of council operations and promote community awareness of sustainability (page 76).

#### Promoting sustainability in business

*Work with businesses to move them towards sustainable practices*

DEC's successful Industry Partnership Program concluded after four years, having provided a total of \$2.7 million in matched funding to 460 NSW businesses to undertake cleaner production projects.

During 2005–06, DEC began developing voluntary agreements, called NSW Sustainability Compacts, with leading companies in NSW. Hewlett Packard and Sensis have both made commitments to promote sustainability and undertake key improvement programs (page 77).

DEC published the second *Extended producer responsibility priority statement* and DEC's Executive Director Sustainability became the chair of the National Packaging Covenant Council (page 78).

#### Minimising DEC's own environmental impact

*Minimise DEC's own environmental impact in terms of energy, water and paper consumption*

DEC continued to monitor and review operations to minimise its environmental impact. During 2005–06, DEC implemented its Fleet Environmental Improvement Plan, conducted water audits of some significant buildings and reserves, and began developing a Park Facilities Manual and the DEC Sustainability Framework. For further details of DEC's environmental performance, see pages 87–88.

## 4.1.2 Promoting sustainability

DEC works with other NSW Government agencies to ensure that development and planning for future urban expansion integrates sustainable principles, and that new developments do not threaten biodiversity and the environment.

In December 2005, the Government and the Minister for Planning released the **Metropolitan Strategy for Sydney**, *City of cities: a plan for Sydney's future*, providing the framework for managing Sydney's growth over the next 25 years.

DEC provided submissions and comments to DoP during the strategy's development, and will help implement the strategy by:

- providing advice to assist planning and infrastructure decisions to be consistent with Action for Air (see page 23)
- helping local government to develop local environmental plans that achieve biodiversity certification (see page 44)
- developing Aboriginal Heritage Assessment Protocols, in consultation with the Aboriginal community, and developing heritage permits under the Aboriginal Heritage Reforms Package
- promoting investment in alternative waste technologies and infrastructure
- promoting integration of sustainable living principles into the urban design guidelines being developed for local government by DoP.

In November 2004, the NSW Government approved the provision of approximately 90,000 dwellings in south-west Sydney and 60,000 dwellings in north-west Sydney over the next 30 years. DEC advised on urban sustainability, biodiversity, and Aboriginal heritage identification, assessment and conservation. DEC also commented on the draft state environmental planning policy, proposing the incorporation of suitable land use and development controls into environmental planning and assessment regulations, to enable neighbourhoods to be sustainable, and natural and cultural heritage to be protected and enhanced.

DEC has worked to ensure that, where appropriate, environmental targets are incorporated into the draft **regional strategies for coastal regions** prepared by DoP. These regional strategies, for the Far North Coast, Lower Hunter, Illawarra and South Coast, have been prepared to ensure that development is located to meet the regions' projected housing, employment and environmental needs over the next 25 years. In the Lower Hunter, DEC will continue to raise issues associated with air quality and noise from mining and development.

DEC is also preparing **regional conservation plans** to maintain or improve biodiversity as the coastal strategies are implemented (see page 44).

### ■ PERFORMANCE INDICATOR

#### Percentage of products with recycled content purchased by NSW agencies as reported under WRAPP

**Definition:** WRAPP plans were developed in 1998 and progress is reported biennially. The first report was submitted in May 2001, the second in August 2003 and the third in August 2005. This indicator measures changes in the percentage of paper and construction products with recycled content purchased by NSW agencies.

#### Products with recycled content purchased by NSW agencies as reported under WRAPP



**Interpretation:** NSW Government agencies continue to improve their performance in purchasing products with recycled content. The purchase of office photocopying paper with recycled content rose, but can improve further. Strong growth was seen in the purchase of recycled construction materials, representing a massive improvement on the 2001 figure of 4%. This is in part due to the availability of new products that contain recycled content. DEC continues its long-term work with business and government to open new markets, particularly in the high volume construction sector.

## 4.1.3 Sustainability in the public sector

State government agencies and state-owned corporations buy various goods and services for their operations and capital works. DEC advises these organisations on buying goods and using resources in accordance with the **NSW Waste Reduction and Purchasing Policy (WRAPP)**. This policy requires each agency to implement its own waste reduction and purchasing plans and to report to DEC on progress every two years.

In 2005, DEC received detailed progress reports from 122 agencies (95% of agencies covered by the WRAPP). DEC analysed these reports, and prepared a **WRAPP Progress Report 2006** that will be released in September 2006. The reports showed that good progress was made by government between 2003 and 2005:

- the paper recycling rate increased by 9% to 82%
- 454,000 tonnes of waste were recovered for recycling, cutting 118,000 tonnes of greenhouse gas emissions

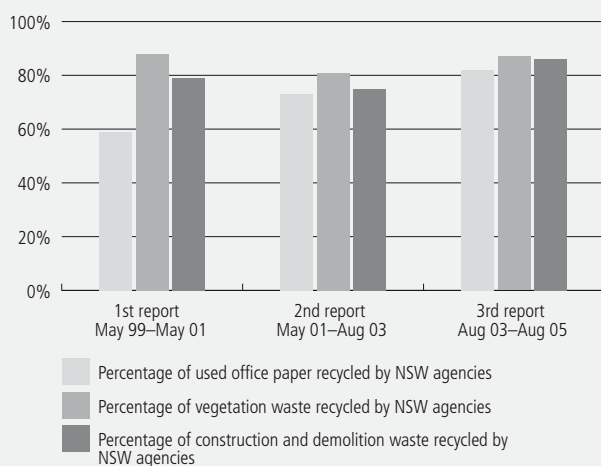
## ■ PERFORMANCE INDICATOR

### Percentage of waste recycled by NSW agencies as reported under WRAPP

**Definition:** NSW agencies are required to report biennially to DEC on the amounts of paper, and vegetation, construction and demolition waste they recycle. This indicator measures the proportion of these materials recycled by NSW agencies.

The first WRAPP report was submitted in May 2001. The second report was submitted in August 2003 and the third in August 2005.

#### Paper and vegetation construction and demolition waste recycled by NSW agencies as reported under WRAPP



**Interpretation:** The increased percentage of used paper recycled, up from 73% in 2003 to 82% in 2005, reflects a continuing steady rise in efforts by NSW agencies in response to WRAPP. The recycling rates for vegetation, construction and demolition waste have increased since 2003. Increased rates of recycling were reported in 2005 for most materials, with strong improvement in the recycling of vegetation (up 6%), asphalt (up 11%) and plasterboard (up 4%). With the exception of bricks and tiles (34%), glass (38%) and plasterboard (11%), all other materials achieved a recycling rate above 50% in 2005. The recycling rates for steel and non-ferrous metals remained very high at 95% and 99% respectively.

- the purchase of recycled content copy paper increased by 5% to 905,641 reams, or 44% of total paper purchased
- the recycling rate for construction and demolition waste rose from 75% to 89%
- there was a 42% improvement in the purchase of construction products with recycled content, including landscaping materials.

More opportunities have been identified to recycle large quantities of material, such as timber, bricks and tiles. Purchase of recycled toner cartridges, currently just 19%, could be improved. The report is available on [www.environment.nsw.gov.au/education/spd\\_wrapp.htm](http://www.environment.nsw.gov.au/education/spd_wrapp.htm).

DEC continues to work with government agencies, particularly the Department of Commerce, to incorporate sustainable practices into contracts for the supply of goods and services to government. For example, a contract to supply computer equipment, due to be tendered shortly, has presented a good opportunity to build in waste minimisation, recycling and extended producer responsibility requirements. Work also continued on improving the government's online procurement system, Smartbuy, to help buyers identify environmentally sustainable products.

## Use of recycled materials

DEC continues to work with the Roads and Traffic Authority NSW (RTA) to increase **markets for recycled materials** by using them in road-making. Recycled materials can be used in concrete and asphalt, which reduces the demand for virgin materials. DEC and the RTA are trialling crushed glass as a partial cement and sand replacement in concrete used for road pavements and related works. It is estimated that 100,000 tonnes of crushed glass is sent to landfill every year in the greater Sydney region. This year, laboratory trials demonstrated that crushed glass may be used in concrete without affecting performance. Trials will continue, with the intent of developing a new industry standard for using crushed glass in road-making concrete.

In 2004–05, the RTA trialled the use of scrap rubber tyres in asphalt. Field trials were conducted in 2005–06 which demonstrated that scrap rubber asphalt not only extends road life and enables thinner pavements to be built, but can also reduce traffic tyre noise. The RTA is now refining its specifications for asphalt to incorporate scrap rubber.

## Alliances with local government

In partnership with Local Government Managers Australia, DEC has helped councils to determine which aspects of their organisational systems are sustainable and which parts need development. Councils developed and piloted the **NSW Local Government Sustainability Health Check**, which covers asset management, protection and management of the natural environment, and the range of community and cultural services that councils offer ratepayers and residents. Training workshops for council officers on implementing the health check will be run in late 2006.

This partnership will improve sustainability outcomes for councils, and enhance their role in building and engaging community awareness and as caretakers for future generations.

## 4.1.4 Sustainability in business

DEC's **Industry Partnership Program** has concluded after four successful years. A total of \$2.7 million in matched funding was provided to 460 businesses for projects to reduce resource use (raw materials, water and energy) and to lower the volume and toxicity of waste and other emissions. Participating companies saved \$11.17 million per annum and delivered impressive environmental gains. In total, CO<sub>2</sub> emissions are being reduced by 37,000 tonnes per year (equivalent to taking 8000 cars off the road), 9800 tonnes of raw materials are being reused or recycled per year, and 7900 tonnes of materials are being diverted from landfill.

### Business alliances

Building on the success of previous initiatives, DEC has worked with businesses in geographic or sector-based clusters to achieve more efficient resource recovery and sustainability. For example, DEC brought together a group comprising leading companies in commercial property management. The group changed its waste contracting arrangements and its systems relating to water and energy. Group members have also set targets to lower energy and water use, and reduce waste being sent to landfill.

The number of business alliances with DEC is expected to increase. In addition, DEC continues to work with businesses through its licensing and compliance activities.

### Sustainability compacts

NSW **Sustainability Compacts** have been initiated by DEC. These are voluntary agreements, signed at Ministerial and CEO level, for three to five-year partnerships with leading companies in NSW. They aim to accelerate environmental improvements in operations and supply chains, while committing the company to work towards improving its industry sector. Compacts are facilitated by DEC but may also involve other NSW agencies. In some cases companies may sign a joint NSW compact and a Victorian sustainability covenant.

Compacts focus on environmental improvement in four key areas:

- sustainability leadership – integrating sustainability principles into the company's operations and key performance indicators
- sustainable products and services – enhancing the sustainability of goods and services including redesigning them, developing innovative new products and services, and product stewardship

### ■ CASE STUDY

#### DEC works with Hewlett Packard and Sensis on sustainability initiatives

In November 2005, the first sustainability compact was signed with Hewlett Packard (HP). HP has agreed to implement far-reaching initiatives including:

- developing a computer take-back program for all HP computers
- increasing printer cartridge return and recycling
- reducing water and energy use and waste generation at HP facilities in NSW
- publishing the inaugural *HP Australian sustainability report*
- conducting environmental education for staff and suppliers
- advocating for improved sustainability in the IT industry.

In March 2006, a sustainability compact was signed with Sensis, a major information provider. Sensis is committed to:

- improving the ability to search for recycling services through the Yellow Pages website and other search engines
- helping suppliers to become more environmentally sustainable
- promoting sustainability to its 590,000 Sydney customers



Bruce Akhurst – CEO Sensis, Alison Megarity – Parliamentary Secretary and Member for Menai and Lisa Corbyn – Director General DEC (standing at back) at the signing of the Sensis sustainability compact.

- educating the community and business on recycling its directories
- expanding its own Green Office Program
- producing the first *Sensis sustainability report*
- advocating for sustainability in the advertising and media sector.



- efficient production and service delivery – achieving resource recovery and other efficiencies in operations, facilities, and product and service delivery
- environmental responsibility – ensuring all aspects of the business and, where appropriate, its suppliers comply with environmental legislation.

## Extended producer responsibility

**Extended producer responsibility (EPR)** requires producers to be physically and financially responsible for the environmental impacts of their products throughout their lifecycle. This includes their choice of materials and the manufacturing processes they use, and the use and disposal of products. EPR is generally applied to post-consumer and other difficult to manage wastes.

DEC incorporated recommendations from a review of EPR progress into the *NSW Extended producer responsibility priority statement 2005–06*, which was subsequently put out for public consultation. The wastes listed for action in the statement are:

- seven top priority wastes – computers; mobile phones; office paper; paint; plastic bags; televisions; and tyres
- ten wastes of concern – agricultural and veterinary (Agvet) chemicals; Agvet chemical containers; batteries; cigarette litter; end of life vehicle residuals; other electrical products; packaging; polyvinyl chloride (PVC); treated timber; and used oil and lubricants.

DEC continues to work with each industry involved with these wastes at a state and national level, to ensure that where possible there is a coordinated effort across governments and industry. The Environment Protection and Heritage Council is focusing on waste from televisions and computers, tyres, plastic bags and packaging at the national level. NSW, through DEC, is taking the lead in developing initiatives with industry on electrical products. DEC is also leading the development of a **National Environment Protection Measure for Product Stewardship** that will provide the legislative blueprint for each state and territory. Product stewardship recognises that all stakeholders have a responsibility to manage wastes, from designers and manufacturers through to consumers.

## National Packaging Covenant

A new **National Packaging Covenant (NPC)** commenced on 1 July 2005 and will expire in 2010. The covenant is a voluntary agreement between Australian governments, including NSW, and businesses at all levels of the packaging supply chain, to minimise the environmental impacts of disposing of used packaging by re-using or recycling it. The new covenant sets a target of boosting national recycling rates for packaging from 48% to 65% by 2010, and not increasing the amount of packaging sent to landfill by that same date. Signatories must develop and abide by action plans, and report on standard key performance indicators.

Strong community support continues for **action on plastic bags** to reduce the litter they cause and the damage they do, particularly to marine mammals. The community is participating by using reusable bags. The National Environment Protection Council has recently reaffirmed its resolution to phase out lightweight plastic bags by the end of 2008. Work is progressing on nationally consistent regulatory options to support this resolution. The council called for retailers to continue to work to reduce the number of plastic bags used, and to become signatories of the National Packaging Covenant.



Plastic bag use is reduced by sustainable shopping practices.



## 4.2 Improving resource conservation

### 4.2.1 Corporate plan priorities 2004–06

#### Waste avoidance and resource recovery

*Implement the NSW Waste Avoidance and Recovery Strategy focusing on avoiding and preventing waste, increasing use of renewable and recoverable materials, and reducing roadside and railway litter and illegal dumping*

During 2005–06, DEC worked within the framework of the NSW Waste Avoidance and Resource Recovery Strategy 2003, and focused on four areas for action: avoiding waste (page 80); increasing re-use and recycling (pages 80–81); reducing litter and illegal dumping (page 23); and reducing the use of toxic substances in products (page 78).

#### Improving resource conservation through land-use planning

*Contribute early in the planning process to improve conservation and efficiency in resource use in urban and rural areas e.g. for water*

DEC contributes to land-use planning at a number of levels. During 2005–06, DEC provided environment protection input into general terms of approval for 99 individual developments through the integrated development process, and further policy advice to the Department of Planning on major developments (page 36). DEC also contributed to the NSW State Infrastructure Strategy and *City of cities: a plan for Sydney's future*, the Sydney Metropolitan Strategy, both released in 2006.

DEC has made significant contributions to development of the draft NSW Waste Strategy 2006, due for public consultation in late 2006. By supporting regional waste groups, based on regional organisations of councils, DEC also contributed to the work of local government in improving resource conservation in urban and rural areas (page 81).

#### Developing a sustainability framework

*Develop a sustainability framework for a more integrated approach to managing environmental issues*

DEC provided support, guidance and encouragement to the public, government and the business community to adopt sustainable practices through the programs outlined in this chapter.

DEC also focused on the sustainability of its own operations, starting with the development of a Water Savings Plan, which will feed into the development of the DEC Sustainability Framework. For details of DEC's environmental performance, including improvements to the sustainability of its building accommodation and vehicle fleet, see pages 87–88.

## 4.2.2 Resource conservation

DEC improves resource conservation in NSW by working with government, industry and the community on waste recovery and reuse.

### Waste Avoidance and Resource Recovery Strategy 2006

DEC reviewed the NSW Waste Strategy, developing a progress report and the **draft Waste Avoidance and Resource Recovery Strategy 2006**, scheduled for public exhibition in September 2006. The strategy:

- provides a framework for cutting waste, increasing recycling and reuse of materials, reducing toxicity in products, and stamping out illegal dumping and littering
- analyses efforts to manage waste, and sets priorities for achieving NSW's 2014 recycling targets
- provides results from the waste data system, which allows for more reliable and extensive monitoring of waste habits in the Greater Sydney Region (Sydney, the Hunter, Central Coast and Illawarra). This system, established in 2004, enables facilities to enter their data online.

Data from the new electronic waste data system shows:

- per capita, people in Sydney sent 7.2% less waste to landfill in 2004–05 compared with 2000, while people in the Central Coast, Hunter and Illawarra regions sent 1.2% more waste to landfill
- Sydney recycled 49% of its total waste in 2004–05 compared with 48% in 2002–03, while the Central Coast, Hunter and Illawarra regions recycled 50% of their total waste in 2004 compared to 47% in 2002–03
- tonnage of recyclables collected at kerbsides in Sydney increased from 125 kg per capita in 2000 to 137 kg per capita in 2004–05, with 283 kg now recovered each year per household

- 109 councils now provide kerbside recycling – a 7% increase since 2000
- Sydney households each recycle 94 kg of garden wastes through council collection systems
- Sydney's population is growing, and while as a city it is creating more total waste than in 2002–03, individuals are disposing of 94 kg less waste per capita than they did six years ago.

Information on the contribution of government agencies to recycling is on page 76.

For more details on the strategy, visit [www.environment.nsw.gov.au/education/spd\\_warr2006.htm](http://www.environment.nsw.gov.au/education/spd_warr2006.htm).

The quantity of **waste disposal in the Greater Sydney Region** has remained fairly stable in recent years. In 2005–06, there was a slight rise of 0.5% in waste disposal in the Greater Sydney Region from the previous year. Since 2000, the Greater Sydney Region has achieved a 1.1% reduction in waste disposed of to landfill, but due to population growth this represents a reduction of 5.8% on a per capita basis. The reported figures do not include tonnages of virgin excavated natural material disposed of.

To inform industry about waste, and design effective programs to reduce waste, DEC needs to know about the amount of waste generated, the movement of waste through the economy and to landfill, and the amount of waste ending up as litter. Accordingly, during 2005–06, DEC:

- conducted its annual survey of **local council recycling** – the 2004–05 results show that NSW councils are continuing to collect increasing amounts of recyclable material from the kerbside with a 12% improvement on the previous year (2005–06 data is not available until the end of October 2006)
- conducted its annual survey of packaging placed out for recycling, which identified that most brand owners were signatories to the National Packaging Covenant; non-signatories made up 13% of the items in the audit
- analysed annual returns from landfill operators who pay the waste levy.

#### ■ CASE STUDY

### Research partnerships for recycled organic material

The Greater Sydney Region currently recycles 48% of garden organic material – over 600,000 tonnes per year. DEC is researching markets for organic material, both to reduce the waste sent to landfill and to benefit the environment by using quality compost.

In partnership with the NSW Department of Primary Industries, DEC has established research plots in vegetable and wine-grape growing areas to determine the long-term cost-benefit of using recycled organic material in agriculture.

Trials and demonstration sites have been established in partnership with the Hawkesbury Nepean Catchment Management Authority to test the effectiveness of compost in catchment management and land rehabilitation.



Tony Hodgkins, DEC

*Players at Kiama golf course will benefit from improved turf quality due to top-dressing with organic compost.*

A partnership has also been established with the NSW Golf Course Superintendents Association, and four golf course trials across Sydney and the Illawarra have resulted in improved turf health.



In March 2006, DEC released a **resource recovery guide for local councils** in the Sydney metropolitan area and regional centres, to guide councils on preferred systems for kerbside recycling. The guide is based on studies that compared alternative resource recovery systems and their performance. It sets out preferred service characteristics councils should request from collecting and reprocessing suppliers when they review existing services, or enter into new contracts. These service characteristics include:

- bin-based recovery systems for dry recyclables, garden organics and garbage
- a colour standard for mobile bin lids and bodies
- a standard set of dry recyclables to be collected from the kerbside
- suggested performance outcomes
- clear guidance on when and how councils should collect garden organics.

The **benefits of recycling study**, released by DEC in April 2006, found recycling is improving the environment by reducing greenhouse gas emissions, delivering significant energy and water savings, and conserving non-renewable virgin resources. Virgin product systems were directly compared to recycled products to show the environmental benefits associated with recycling different materials. Across NSW each year, through recycling, households are saving the equivalent of 2654 Olympic-sized swimming pools of water, saving the electricity used by almost 334,000 households, and taking 55,000 cars off the road.

Together with this study, DEC has developed a **calculator** that shows at the touch of a button the amount of water and energy saved, and greenhouse gases reduced by recycling. Industry and council response has been positive and, as a result of feedback, the calculator was updated in March 2006 to show the amount of landfill space saved by recycling.

## Improving recycling by local government

DEC has been working to improve recycling in regional NSW, where local councils are responsible for waste management and may be considering new facilities. In response to the needs of regional councils, DEC has developed a **transfer station guide**. The guide covers good practice in design and operation of resource recovery facilities, occupational health and safety requirements, and local community education and engagement. With the cooperation of councils, the guide draws on a number of case studies in regional NSW.

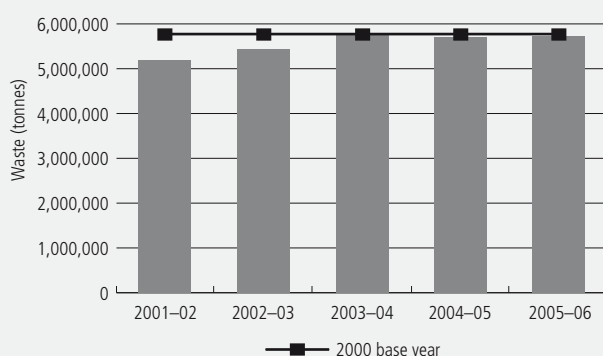
DEC's **model waste contract for councils**, released in July 2005, is a complete tendering package that allows councils to focus on the outcomes they want to achieve with less time spent in developing documents. DEC has provided full-day training packages which have ensured a positive response to the contract. It has been requested Australia-wide as well as by New Zealand. So far, 86 councils have requested the model contract, including 85% of councils in the Greater Sydney Region.

### ■ PERFORMANCE INDICATOR

#### Change in waste disposed of to landfill in the Greater Sydney Region under the Waste Avoidance and Resource Recovery Strategy

**Definition:** This indicator measures the tonnages of waste disposed of to landfill from the Greater Sydney Region (from Port Stephens to the Shoalhaven and including the Sydney Metropolitan Area). The NSW Waste Avoidance and Resource Recovery Strategy, which began in 2003 and is managed by DEC, provides a major driver for reducing waste and improving disposal practices. Achievements under the strategy rely on industry, councils and the community working to reduce targeted waste areas.

##### Waste disposed of to landfill in the Greater Sydney Region



**Interpretation:** Since 2003, the measurement of waste disposal tonnages has been greatly improved through a new electronic reporting system introduced by DEC. The system enables more accurate capture, analysis and verification of data. The increase in reported disposal tonnages reflects the inclusion of waste that was disposed of but not levied (waste used in landfills for approved operational purposes and waste that is approved as exempted from the levy, for example through community activities such as Clean Up Australia).

The refinement of the new waste data system has enabled the data to be updated from 2000 to 2005-06. The updating of the system has increased the reporting of total waste disposal by approximately 250,000 tonnes per annum.

DEC supports seven **regional waste groups** in NSW through forums, staff support and advice. This year saw the establishment of an eighth group, the South East Resource Recovery Regional Organisation of Councils. Funding from the Environmental Trust helps the groups deliver plans that address the outcomes of the NSW Waste Avoidance and Resource Recovery Strategy. The groups have calculated that, since their formation in 2002, their activities have enabled the diversion from landfill of:

- 47,000 tonnes of scrap metal
- 320,000 cubic metres of garden waste
- 1.2 million plastic bags
- 155,000 kg of household chemical waste
- 18,000 kg of farm chemicals
- 44,700 tonnes of construction and demolition waste
- 233,000 tonnes of commercial and industrial waste
- 8000 tyres.



## 4.2.3 Community education and support

### Community education

DEC plays a leading role in the community education sector. This is underpinned by conducting vital research into what the community thinks about the environment, and using the results to design the education initiatives that DEC and others carry out.

In July 2005, DEC published ***The environment and NSW ethnic communities in 2004***. The major finding was that more people from non-English speaking backgrounds (NESB) rated the environment as being very important to their lives than in a comparable community-wide survey, *Who cares about the environment 2003?* In NSW, one in five residents – almost 1.2 million people – speak a language other than English at home and the new research shows that these people care greatly about the environment. The study is available on [www.environment.nsw.gov.au/ethnic\\_community/ethniccom.htm](http://www.environment.nsw.gov.au/ethnic_community/ethniccom.htm).

***Educating the community about litter: changing knowledge, attitudes and behaviour 2000 to 2003*** was made available on DEC's website in late 2005 (see [www.environment.nsw.gov.au/resources/litterreport\\_05608.pdf](http://www.environment.nsw.gov.au/resources/litterreport_05608.pdf)). This publication contains the results of research and evaluation undertaken as part of litter public awareness campaigns in NSW from 2000 to 2003. It found there were changes in knowledge, attitudes and behaviour over that period, including a trend to connect litter to wider environmental issues of waste management, illegal dumping and recycling.

This year DEC carried out research and focus testing for **'Who cares about the environment 2006?'** This survey measures people's attitudes to, knowledge of, and skills and behaviour regarding the environment. The surveys have been conducted every three years since 1994. The report will be published later in 2006.

DEC also supports and services the **NSW Council on Environmental Education**, which during 2005–06 reviewed and developed the next NSW Environmental Education Plan for consideration by Government.

### Sustainable schools

Since 2003, DEC and the Department of Education and Training have been working together on a program for long-term **sustainability in schools**. Part of this involves developing a school environmental management plan. This has led to school environmental audits, staff training on sustainable purchasing, and new learning activities for students on reducing waste. The program is now under way in over 200 government and non-government schools.

In 2006, the Catholic school system agreed to become involved. DEC also reached agreement with the Local Government and Shires Associations to help council education officers work with schools to improve their environmental outcomes.

## Our Environment – It's a Living Thing

The **Our Environment – It's a Living Thing** (OEILT) community environmental education campaign entered its fifth year in 2006 and continues to increase environmental awareness by promoting positive behaviour in the business sector, communities, local governments and individuals.

The program encourages communities to adopt environmentally sustainable lifestyles. DEC is working with the Total Environment Centre, Australian Conservation Foundation, NSW Nature Conservation Council, NSW Council of Social Service and the Department of Energy, Utilities and Sustainability on the program.

OEILT partners have developed a number of projects, including the **GreenHome project** launched in December 2005, which has recorded great results among participating households. Collectively these households are saving 11 million litres of water, 380 tonnes of greenhouse emissions and 70,000 litres of landfill waste per year.

The **Local Council Partnership Program** is another OEILT project. This program supports councils in developing projects that track environmental outcomes, and monitor and report on behavioural change in their communities. Following the 2005–06 programs, another \$522,939 was provided for nine councils and five groups to take on 62 projects over two years.

Preliminary findings from the first year of the program indicate many projects have resulted in changes in community behaviour and environmental outcomes. These included:

- 805 kilolitres of water saved through the use of retrofitting appliances like AAA showerheads in the St George council area
- an additional 86 tonnes of material recycled and 30 tonnes less sent to landfill in Cowra.

Hurstville, Rockdale, Kogarah, Hastings, Newcastle City and Sydney City councils all reported increased use of retrofitting appliances among participating householders, and Newcastle City Council plans to implement the project in the commercial sector.

In February 2006, a **redeveloped OEILT website** went live, featuring a comprehensive update on actions people can take at home, work and play to live more sustainably. The website received over 36,000 visits in the first six months. The most popular areas were water, chemicals, energy, recycling and volunteering. The website also promotes the program's successful projects and provides resources and tools to enable the community and stakeholders to access sustainable living information.

# A credible, efficient and effective organisation

Strategic focus area	Outcomes
One integrated DEC	<p>The Department completes the transformation of constituent agencies into DEC</p> <p>DEC values and develops staff and provides a safe and healthy workplace</p> <p>The Department is recognised for the quality of its communication, service delivery and corporate governance</p>

## In this chapter

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## 5.1 One integrated DEC

### 5.1.1 Corporate plan priorities 2004–06

#### Build staff knowledge and capacity

*Build staff knowledge and accountabilities and the capacity to deliver services across the Department, emphasising conservation, environmental and cultural heritage concepts, values and practices*

During 2005–06, DEC undertook a range of training initiatives for staff, within a new Learning and Development Framework (page 85). DEC experts shared skills with other staff in historic heritage maintenance and information management, fire management and environmental auditing.

#### Cultural heritage change program

*Review and implement the Cultural Heritage Change Program and the government's 'Two Ways Together' plan*

During 2005–06, DEC adopted the Aboriginal People, Environment and Conservation Principles (APEC), to improve our business practices so DEC can interact with Aboriginal people in culturally appropriate ways and recognise their interests in the land and its resources.

#### Effective cross-divisional links

*Establish effective cross-divisional links within DEC*

During 2005–06, DEC continued inter-divisional collaboration on a number of environmental and conservation programs, including the City and Country Environment Restoration Program (page 6), wetlands recovery (page 50), the NSW Biodiversity Strategy (page 42), the Science Investment Management Plan (page 32), and reserve establishment (pages 60–62). DEC also enabled staff to work across divisions on issues affecting DEC's work, including water, sustainability, and occupational health and safety. During 2005–06, the Aboriginal Network and the Spokeswoman Program (page 90) continued to build strong networks across DEC.

#### New industrial award

*Develop and implement new industrial awards for the Department*

During the year DEC continued to work with unions to develop an appropriate award framework expected to be implemented in late 2006. Three separate awards, incorporating common conditions, will cover DEC staff; one each for staff working in:

- Cultural Heritage; Corporate Services; Environment Protection and Regulation; Policy and Science; Strategy, Communication and Governance; and Sustainability Programs divisions
- Parks and Wildlife Division
- Botanic Gardens Trust.

#### Integrating corporate support services

*Establish and implement effective integrated corporate support services across the Department, including policies, procedures, systems and infrastructure*

DEC has continued to achieve efficiencies through the ongoing development of streamlined recruitment, payroll and accounts processes through a single service centre. During 2005–06, DEC further developed a common information technology platform and extended the reach of the wide area network, allowing DEC staff to work together with greater speed and efficiency.

During 2005–06, DEC also commenced implementing employee self-service for some human resources functions and trained more than 260 staff in procurement management, to coincide with the release of a new Procurement Tool Kit (page 88).

#### Occupational health and safety

*Set and achieve challenging targets for occupational health and safety*

During 2005–06, DEC developed new procedures and guidelines on OHS risk management and injury management, and released a department-wide Occupational Health and Safety Policy (page 91). Both the number (277) and the value (\$1.7 million) of injury and illness claims declined from previous years.

## Achieving budget savings targets

*Review work priorities to achieve the Department's two-year budget savings targets while also ensuring manageable workloads for staff*

DEC achieved budget savings and implemented its revenue strategies to contribute to Government efficiencies (page 92). During 2005–06, DEC incorporated efficiency improvements into its strategic plans, including the DEC Corporate Plan 2006–2010 released in May 2006 (page 86).

## 5.1.2 Organisational development

Based on a review of its workforce profile conducted during 2005–06, DEC determined the following priorities for workforce management for 2006–08:

- increasing Aboriginal employment
- succession planning
- developing leadership/management capabilities
- attracting and retaining staff.

DEC is extending its employment programs to include a **Graduate Program** to address key attraction and retention areas. Work has also commenced on reviewing structures for progression and succession planning.

## Learning and development

A new DEC-wide **Learning and Development Framework** has been developed to enhance opportunities for cross-divisional training and the ability of divisions to meet specialist training requirements. The new framework will be implemented in 2006–07.

Key learning and development initiatives in 2005–06 included:

- conducting a training needs assessment with Swinburne University which has provided the basis for a comprehensive Aboriginal Cultural Awareness program across DEC. At June 2006, DEC was negotiating a partnership with TAFE NSW to deliver the core Aboriginal Cultural Education program
- developing new training modules for high level roles in DEC fire management, to support DEC's commitment to better protect parks and the community from fire
- developing a training package to implement new DEC grievance, bullying and harassment policies, with advice from the Anti-Discrimination Board
- piloting a Management Development Program involving 45 staff from Executive, managerial and supervisory levels. The program is being evaluated and, if successful, will be implemented across DEC in 2006–07

- conducting regional workshops for field staff who manage projects funded by the Heritage Assets Maintenance Program (HAMP) (see page 67). These workshops focused on effectively implementing the program and historic heritage management best practice
- conducting regional training sessions on the effective use of the Historic Heritage Information Management System (HHIMS) database.

In addition, 24 DEC officers were certified as provisional environmental auditors through competency-based training.

Many rangers work in remote locations and have had difficulty accessing up-to-date information and journal articles. The new **ranger alert service** introduced in 2005–06 delivers information to their desktop, so they can more easily improve their knowledge on the many aspects of their work.

## Improving DEC's website and intranet

During the year DEC commenced a major corporate project to rationalise and integrate the four former agency websites and create a single intranet for all staff. This has involved extensive consultation with users, designing new information structures, and testing and installing new software. More than 40,000 pages of information, and a number of databases, will be transferred to the new website, which will give users easier access to environmental information and DEC services. The common intranet will ensure all staff can access policies and procedures. The website and intranet are due for completion in the first half of 2007.

## Business continuity planning

DEC worked on minimising disruption of services to the public in the event of an emergency, through business continuity planning. A business impact analysis for information and communication services was used to produce a **Disaster Recovery Kit for Information Management and Communications Technology**, which can be used by emergency response coordinators. An off-site disaster recovery site, Classic Blue, has also been established. Some operational areas of DEC also have their own disaster recovery frameworks. For example, Environment Protection and Regulation Operations follows the procedures established in the NSW Government emergency response management framework, *Enviroplan*, to guide staff and allocate resources to respond to state emergencies requiring environmental clean-up.



## 5.1.3 Corporate governance

During 2005–06, DEC continued to develop its corporate governance framework. This work included establishing a three-year audit and compliance program, revising DEC's **Fraud and Corruption Prevention Strategy** and training DEC staff.

In June 2006, 48 DEC managers received corporate governance training, presented by the Independent Commission Against Corruption. This training built on DEC's Ethics Package, providing managers with practical guidance on how to prevent corruption and undertake fact-finding investigations.

### Corporate planning

In May 2006, the NSW Premier, Morris Iemma, launched DEC's **Corporate Plan 2006–2010**. The plan guides wider planning and decision-making across DEC, informing strategic, operational and functional plans in each division. The new plan will form the basis for DEC's annual report over the next four years.

### Corporate reporting

During the year, DEC continued to monitor corporate performance measures, which provide the basis of performance reports that are provided regularly to DEC management and key external stakeholders.

DEC submitted all financial statements to the Audit Office by the statutory deadline in August 2005. All content of the annual report for 2004–05, except the final Environment Protection Authority (EPA) financial statements, was prepared by the statutory deadline of 31 October 2005.

Tabling of DEC's *Annual Report 2004–05* was delayed pending receipt of an audit opinion on its financial statements. This opinion was qualified in relation to the EPA financial statements. The audit opinion related to how DEC's financial statements were presented, not to how DEC managed its finances, and it was not a reflection of financial exposure.

### Audit and review

DEC's comprehensive **internal audit program** helps to ensure the compliance, efficiency and effectiveness of DEC programs and processes. The program comprises a conservation compliance stream overseen by the Conservation Audit and Compliance Committee established under the *National Parks and Wildlife Act 1974*, and environment protection, and finance and administration streams, overseen by the Internal Audit Committee.

DEC has appointed independent auditors, the Internal Audit Bureau, to conduct its internal audits. Audits completed during 2005–06 were:

- protection of historic heritage values
- review of environmental factors
- visitor safety (management of dangerous trees)
- management of payments to creditors

- management of payroll systems and controls
- printing and publishing processes
- travel allowance payments
- management of the Environmental Trust Fund
- Ministerial information systems
- RTA Drives
- forestry regulation
- environmental licensing (after-hours incidents service).

Implementation of endorsed audit recommendations is monitored by the relevant audit committee.

**External reviews** provide DEC with an independent assessment of our probity, impact and compliance. During 2005–06, The Audit Office of NSW carried out comprehensive audits of our annual financial statements and associated accounting and financial systems.

DEC takes complaints and other performance feedback seriously, to improve service delivery and prevent problems recurring. In 2005–06, DEC received 14 significant complaints. Ten of these, together with seven complaints received but not resolved in 2004–05, were finalised during the year. Evidence of improper conduct was found in relation to three of the complaints. As a result, one person was dismissed and one matter was referred to the police. No evidence of improper conduct was found in relation to any of the remaining complaints. Some changes to systems or procedures were recommended in three matters, and these are being implemented.

### Freedom of information

DEC is committed to transparent and accountable decision-making. Members of the public can access many documents held by DEC through the website, on request or by purchasing them. Other documents can be obtained by applying under the *Freedom of Information Act 1989*.

**Freedom of information (FOI)** statistics for 2005–06 are shown in Appendix 11. DEC received 142 new FOI requests this year, a 42% increase from 2004–05, and 134 applications were processed. (See performance indicator on page 87.)

Many applications were from members of parliament, solicitors, companies, and community and political organisations. DEC received very few FOI applications from people seeking information about their personal affairs. While 26% of the FOI applications were subject to exemptions from release, in most cases these exemptions covered very few documents. Many DEC applications are complex and frequently involve documents provided by third parties such as individuals, organisations and businesses. Most FOI exemptions were made to protect those parties' personal and business affairs. Very few documents created by DEC were exempted.

There were 13 internal review decisions made during 2005–06. In three cases, the original FOI decision was varied. The other ten decisions were affirmed. Five review requests were received from third parties attempting to prevent DEC from releasing documents.

One FOI decision proceeded to the Administrative Decisions Tribunal (ADT). A third party objected to DEC's decision to release a number of documents. The applicant eventually withdrew their FOI application and the case did not proceed to a hearing.

One complaint was made to the Ombudsman's Office about a DEC decision to release a document which contained an allegation concerning the conduct of DEC officers. A third party who made these allegations objected to the release of the document. The Ombudsman's Office affirmed DEC's decision to release the document.

Due to the large scope and complexity of many FOI applications, 16 were not completed within the statutory timeframe. Some applications involved hundreds of documents, required accessing documents from a number of regional locations, and involved extensive consultation with many affected third parties.

DEC's FOI statement of affairs, which describes ways in which the public can access or amend documents held by DEC, is on [www.environment.nsw.gov.au/about/information.htm](http://www.environment.nsw.gov.au/about/information.htm).

## Privacy

DEC works to ensure the privacy of both staff and clients is protected. During 2005–06, DEC received no applications for access to personal information or complaints under either the *Privacy and Personal Information Protection Act 1998* or the *Health Records and Information Privacy Act 2002*.

## 5.1.4 Environmental performance

In 2005–06 DEC continued to improve the environmental performance of its operations.

### Reducing our energy consumption

DEC is committed to buying Green Power and during 2005–06 DEC purchased 100% Green Power at eligible sites in its Northern Directorate and 25% Green Power at its Goulburn Street office and Lidcombe laboratories.

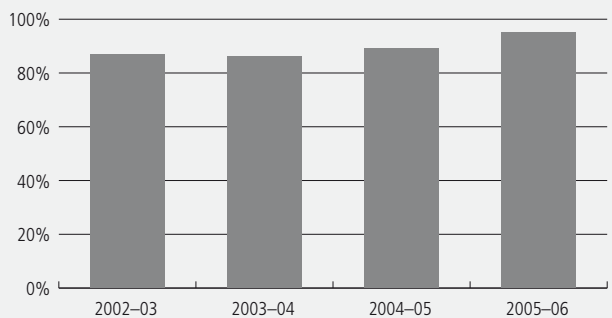
During the year DEC also **reduced energy use** in its office accommodation, transport and other areas. For its head office in Goulburn Street, Sydney, and its Hurstville office, DEC achieved the maximum 5-star rating for Greenhouse Performance of Government Office Buildings and Rental Properties. Through good building management, and changes to its vehicle fleet and usage, DEC reduced overall energy consumption by 37% from the previous year to 139,049 gigajoules for 2004–05, and reduced greenhouse gas emissions by 55% over the same period, to 16,561 tonnes CO<sub>2</sub> equivalent. Data for 2005–06 has not yet been compiled and will be reported in 2007.

### ■ PERFORMANCE INDICATOR

#### Percentage of freedom of information requests granted by DEC that provide 80% or more of requested information

**Definition:** This indicator measures the percentage of freedom of information (FOI) applications DEC processed where 80% or more of the requested documents were released.

#### FOI requests granted by DEC that provide 80% or more of requested information



**Interpretation:** DEC exempts very few of its documents requested under FOI from release. However, it is reasonable and proper that a small percentage of documents received from third parties are exempted. Third parties provide information to DEC in confidence or in response to regulatory requirements. The release of information concerning third parties' personal or business affairs may have an adverse effect on those parties. The *Freedom of Information Act 1989* provides protection in these circumstances.

## Green fleet

DEC's **Fleet Environmental Improvement Plan** contains performance strategies to achieve the targets set by the NSW Government. These targets state that each agency must achieve an 'average environment performance score' for all vehicles with a gross vehicle mass below 3.5 tonnes of:

- 10 out of 20 by 30 June 2006
- 11 out of 20 by 30 June 2007
- 12 out of 20 by 30 June 2008.

The average environment performance score is calculated through the system adopted for the NSW Clean Car Benchmarks, which measures vehicles' greenhouse gas emissions (measured as CO<sub>2</sub>) and air quality impacts (noxious emissions).

By implementing the improvement plan, DEC achieved an average score of 10 out of 20 for its commercial and passenger vehicle fleet as at 30 June 2006.

Diesel is a safer fuel to use in fire fighting activities, so many of the 950 vehicles in DEC's fleet are diesel powered. These have a much lower environmental score than equivalent vehicles using petrol.

In September 2005, DEC issued staff with 12 'top tips' to encourage the economic use of vehicles and fuel efficient driving. Tips ranged from walking or cycling or using public transport rather than the car for short trips, to better driving habits such as avoiding heavy acceleration and braking, and correct tyre pressure. Staff were also encouraged to use one of DEC's 17 hybrid vehicles when they needed to use a departmental vehicle for their work.

## Sustainable procurement

DEC staff consider energy efficiency and recycled content when buying goods, services and construction materials. DEC has developed a **Procurement Tool Kit** which includes standard forms and templates, standard DEC tender documents, and staff training material made available on DEC's intranet, and has links to all government websites dealing with sustainable procurement policy and procedures. To date, 267 staff have been trained in sustainable procurement relating to contracts and tendering. Other initiatives in 2005–06 included:

- incorporating sustainability principles into design and construction manuals
- incorporating sustainability requirements into DEC supply contracts
- trialling low-toxic chemical alternatives in DEC-managed park amenities and workshops. For example, citrus-based cleaners are being trialled in DEC's north coast parks and a lanolin-based waterproofing agent for timber in coastal parks is under development.

## Waste reduction and recycling

In August 2005, DEC prepared a **Waste Reduction and Purchasing Policy (WRAPP)** report for DEC's efforts for the preceding two years. For the 2003–05 WRAPP reporting period, DEC:

- purchased 92% of office paper containing recycled content, and recycled 61% of used office paper
- recycled 91% of vegetation waste
- purchased 67% of construction products with recycled content, and recycled 61% of construction and demolition waste.

The NSW state agency averages are reported on pages 75–76.

## Water savings

In May 2006, DEC completed a **water audit** of major buildings and some national parks in Sydney. The audit identified relatively simple and cost-effective opportunities to make valuable water savings estimated at 175 kilolitres per day as well as identifying significant damage to one water pipe.

Water savings strategies are being incorporated into all new fitouts of office accommodation wherever possible. This is a challenging task considering the age and location of many of the leased offices. DEC replaced the old plumbing at the new Hay Area Office, installing low flow valves and dual flush toilets.

## ■ CASE STUDY

### DEC's award-winning firefighters

On 29 May 2006, 29 DEC firefighters were awarded the National Medal to acknowledge more than 400 years of combined service to the community in protecting life and property. The National Medal is awarded to those who have served for 15 years, with additional clasps awarded for each additional ten-year period.

The officers receiving the awards included:

- 29 recipients for the National Medal which recognises 15 years of service
- four recipients of the 1st Clasp to the National Medal which recognises an additional 10 years of service
- one recipient of the 2nd Clasp which recognises another 10 years of service – totalling 35 years of service in the area of bushfire management.

Recipients of the medals now join the 161 DEC officers who have previously received this award.



National Medal winners with Rural Fire Services Commissioner Phil Koperberg and DEC's Director General Lisa Corbyn at the award ceremony at the Quarantine Station, Manly, on 29 May 2006.

M Edmunds, DEC

## Sustainability in parks

The **Park Facilities Manual** is being prepared to guide park managers in selecting building materials, setting consistent standards, determining access requirements, and improving building lifecycle efficiencies. The manual will help to create a consistent, recognisable DEC image for visitor infrastructure such as shelters, amenity blocks and tracks, while ensuring flexibility for particular settings. Sustainability criteria are incorporated into all stages of the lifecycle of facilities, from design to decommissioning. The new manual is planned to be launched by December 2006.

## 5.1.5 Social performance

During 2005–06, DEC worked to be credible, efficient and effective, working in and with the NSW community and valuing and developing its staff.

### Aboriginal affairs

During 2005–06 DEC adopted the **Aboriginal People, Environment and Conservation Principles (APEC)**. The principles will help DEC to adapt its business practices to work with Aboriginal people in culturally appropriate ways and to recognise their interests in the land and resources that DEC manages.

During 2005–06, DEC's Aboriginal Affairs Reference Group coordinated the implementation of **Two Ways Together** across DEC, to increase the agency's capacity to work with Aboriginal people on their environment and conservation priorities and to deliver DEC's broad responsibilities under the program. These include:

- developing committed partnerships between Aboriginal people and DEC
- improving the social, economic, cultural and emotional wellbeing of Aboriginal people in NSW
- supporting Aboriginal people in the protection, practice and promotion of their cultural heritage.

Significant achievements during 2005–06 included:

- increased representation of Aboriginal people in DEC's workforce to 6.9%, which significantly exceeds the government's target of 2% representation
- constitution of the Aboriginal Cultural Heritage Advisory Committee (ACHAC) in March 2006 (page 55)
- increased Aboriginal representation on DEC statutory boards and committees through the appointment of 10 Aboriginal members to ACHAC, appointment of an Aboriginal member to a National Parks Regional Advisory Committee, and appointment of an Aboriginal member to the Environment Protection Authority Board
- four partnership agreements with Aboriginal communities and a contribution of \$200,000 to address illegal dumping on sites owned by Aboriginal Land Councils

### ■ PERFORMANCE INDICATOR

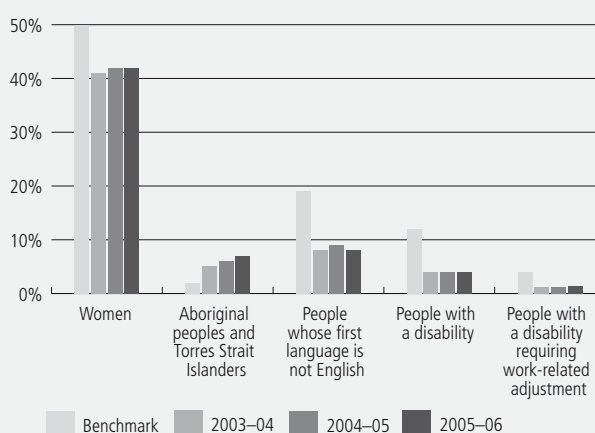
#### Percentage of DEC staff represented in equal employment opportunity groups

**Definition:** DEC tracks its performance in employing people from the equal employment opportunity (EEO) groups against the NSW Government benchmarks.

This indicator measures staff statistics according to five EEO groups: women, Aboriginal people and Torres Strait Islanders, people whose first language is not English, people with a disability and people with a disability requiring work-related adjustment. It also provides a comparison with NSW Government benchmarks.

The data includes staff in DEC and associated entities, but excludes Minister's Office staff, contractors, and board and committee members. The data is based on a headcount of staff, not full-time equivalent figures.

DEC staff representation for EEO groups



**Interpretation:** DEC substantially outperforms the Government benchmark for Aboriginal and Torres Strait Islander employees, and their overall percentage has increased slightly from 2003–04. DEC is now working to increase the number of Aboriginal people employed in professional positions, through formal employment program initiatives. DEC has also developed an Aboriginal Employment Strategy, which focuses on skills acquisition and career development.

DEC has increased the number of women employed but has not reached the Government benchmark. DEC remains below the benchmarks for people whose first language is not English, and people with disabilities.

DEC will continue to implement its Equity and Diversity Framework, with a focus on improving the levels of under-represented EEO groups, and maintaining and improving the levels of women and Aboriginal people and Torres Strait Islanders in the workforce.

- ongoing development of a Stolen Generations Memorial at Mount Annan Botanic Garden in partnership with Link Up New South Wales, the NSW Stolen Generations Committee, Gandangarra Local Aboriginal Land Council, and government agencies and private bodies
- an Aboriginal cultural awareness training needs analysis for a staff training program in 2006–07.



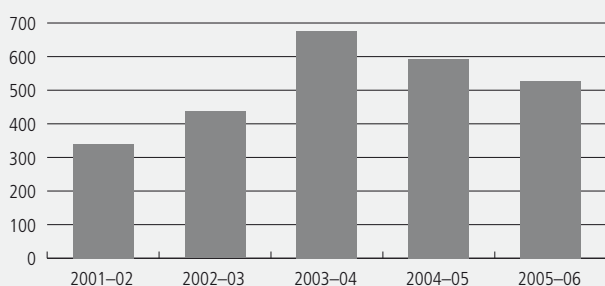
## ■ PERFORMANCE INDICATOR

### Number and value of reported DEC staff accidents and workers' compensation claims

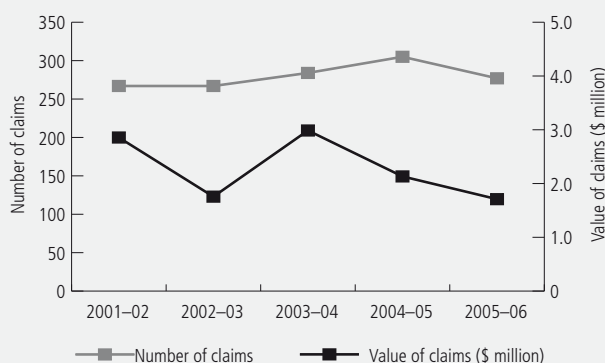
**Definition:** This indicator measures DEC work-related incidents or accidents and any resulting claim for compensation.

The number of reported accidents/incidents measures staff-reported events that could have led to, or did cause, an injury. The number and dollar value indicators measure the number and cost of injuries for which a claim was made. Claims are usually lodged and recorded immediately after an incident, although claims may be lodged and costs incurred for several years after. These costs and claims are reported as occurring in the year in which the incident occurred, so historical trend data may vary from year to year.

#### Accidents/incidents reported



#### Workers' compensation claims and their value



**Interpretation:** The total number of incidents reported has grown over most of the five-year period reflecting a growing staff awareness of incident reporting protocols. However, overall claim costs remain relatively similar. This is a good result against a trend of escalating medical costs, and the disruption of restructuring. Contemporary preventative and case management initiatives continue to be implemented across DEC to prevent incidents and contain claims costs.

Spokeswomen attended induction training and the NSW Spokeswoman Conference. They held celebrations on International Women's Day and conducted Women's Development Program events across the state, which covered topics such as confidence building, superannuation, career planning, public speaking skills, emotional intelligence and assertiveness.

Other events were supported or sponsored throughout the state, building strong networks between staff. Staff from DEC attended the Women in Science event at the Australian Museum and the Australasian Women in Fire Fighting Conference 2006. Staff from remote areas attended DEC's International Women's Day Breakfast.

DEC's Spokeswomen conducted surveys to establish the key issues facing women in DEC and provided this information to relevant DEC staff. Such issues included gender inequities in fire fighting and aviation roles, and the importance of flexible work practices.

The program is now featured on DEC's intranet home page with a link to comprehensive information. A brochure and posters on the program have been developed with these materials to be launched later in 2006. The Spokeswomen are currently finalising the strategic plan for 2006–09.

## Disability action planning

DEC is developing a department-wide Disability Action Plan which will build on former agency plans. DEC continues to improve access and services for staff and members of the public with disabilities. For example, during 2005–06 DEC moved offices in Dapto and Broadmeadow into other government office buildings with better access and services.

Park and reserve facilities for visitors with disabilities were also upgraded during the year, including:

- making the 1.8 kilometre Fairfax Heritage Walking Track at Govett's Leap Lookout, Blue Mountains National Park (NP), fully accessible
- improving toilet facilities at Bonnie Vale (Royal NP), Mulligans Hut (Gibraltar Range NP) and Pines Picnic Area (Yarriabinni NP)
- improved car parking at Garie Beach (Royal NP) and the Visitor Centre and Commemoration Flat car parks in Botany Bay NP.

Many national parks in NSW offer wheelchair-accessible campgrounds, tracks, picnic areas, lookouts and visitor centres. DEC provides information on these facilities at [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au).

## DEC Spokeswomen's Program

DEC's **Spokeswomen's Program** in 2005–06 provided opportunities for improving equity in the workplace. A newly elected committee, comprising 15 women who represented each division and Aboriginal and Torres Strait Island women, took office in July 2005. This committee met in Sydney each quarter.

## Ethnic affairs priorities statement (EAPS)

DEC places a high priority on multiculturalism. Due to the pressures of the DEC restructure and the amalgamation of four former agencies, DEC did not separately outline department-wide ethnic affairs priorities for 2005–06, but delivered the programs referred to in this report within the framework of the DEC Corporate Plan 2004–06 and departmental planning and priorities statements prepared by former agencies. These included the Environment Protection

Authority's EAPS and the National Parks and Wildlife Service's cultural diversity statement.

During 2005–06, DEC continued to deliver programs that recognise the diversity of the NSW public, for example by:

- employing bilingual liaison field officers to advise on pesticides and chemical use (see page 29)
- researching the ways in which visitors from non-English speaking backgrounds use sites in Georges River National Park (see page 72)
- conducting research into ethnic communities (see page 82)
- encouraging community garden projects with Department of Housing residents and other disadvantaged communities (Botanic Gardens Trust Community Greening program).

DEC is reviewing the detailed planning of key programs implementing the principles of multiculturalism and will prepare an ethnic affairs priorities statement for the current corporate planning cycle. In the coming year, DEC expects to implement the findings of the Georges River parklands use research (see above), and consider the needs of visitors from culturally and linguistically diverse backgrounds in its conservation volunteers program and visitor safety policy review. DEC will also tailor quality education materials relating to littering and waste as part of its ethnic communities multi-unit dwelling project.

## Occupational health and safety

DEC continued to focus on staff and public safety. In July 2005 DEC released a department-wide **Occupational Health and Safety Policy**. The policy was developed to express DEC's commitment to, and the future direction of, occupational health and safety (OHS) across the organisation.

In 2005–06 DEC assessed its divisions against the Premier's Occupational Health and Safety Standard with results indicating much improved implementation of OHS management systems. The results will be used to review DEC's OHS Plan.

New procedures and guidelines on OHS risk management and injury management were developed during 2005–06 to support consistency across DEC. Specific projects, including body-stressing injury prevention and management, dangerous goods management and traffic control, have commenced. Approximately 100 priority workplaces were visited by an OHS specialist as part of a site inspection program.

An improved OHS data management system will be implemented in early 2007.

See page 66 for the task-based assessment program for DEC's firefighters, which aims to improve employee safety.

## DEC in the wider community

In February 2006, DEC was asked by the World Archaeological Congress to participate in the **Global Libraries Project** by donating publications to help expand the archaeological literary collections of libraries in developing countries. Multiple copies of six different publications were donated by DEC including the *Scarred trees manual*; *Aboriginal women's heritage – Port Stephens*; *Mapping attachment – a spatial approach to Aboriginal post-contact heritage*, and *Living land, living culture – Aboriginal heritage and salinity*. The donated publications were distributed to 50 public and university libraries in 37 countries including Argentina, Bosnia and Herzegovina, Botswana, Ethiopia, India and Nigeria.

In August 2005, a documentary about Kosciuszko National Park – *Kosciuszko Reflections* – received a **bronze award at the 38th WorldFest in Houston**, one of the largest and longest-running film festivals in the world.

### ■ CASE STUDY

#### Making a Place for Herself: women's experiences of landscapes and national parks

The Spokeswoman Program coordinated and supported this highly engaging and informative travelling exhibition, which was officially opened by the Director General at the Royal Botanic Gardens in November 2005. The exhibition examines how women have made places for themselves and their families in NSW landscapes, enduring hardships, loneliness and isolation, but also experiencing the freedom, joy, pleasure and exhilaration of being in particular landscapes and places.

Making a Place for Herself was awarded an Energy Australia National Trust Heritage Award in April 2006, which recognises excellence in heritage conservation projects in NSW. The exhibition is travelling through national park visitor centres including many of the places featured in the exhibition.



Stakeholder representatives at the Making a Place for Herself exhibition. Left to right: Jason Ardler – DEC, Miss Emily Walker – Aboriginal Elder from Nambucca Valley who is featured in the exhibition, Lisa Corbyn – Director General DEC and Jean Rice – National Parks Advisory Council.

Produced in 2001, *Kosciuszko Reflections* was funded and project managed by the then National Parks and Wildlife Service (NPWS) and produced by Canberra filmmakers Images Online and Fine Films. The 12-minute documentary features stunning images and interviews with people who have a close association with Kosciuszko National Park. The production was fully funded by NPWS to promote the park's natural and cultural heritage values, educate the community and encourage visitors to the park.

## 5.1.6 Economic performance

### Financial management

In 2005–06, DEC's financial management strategy centred on strong budgetary management and consolidating the gains achieved in the initial stages of the restructure. DEC also maintained and improved the systems, policies and tools that ensure it can meet its statutory obligations and manage its finances and assets.

Significant projects and activities that were concluded during the period included:

- implementation of the **Australian Equivalent International Financial Reporting Standards (AEIFRS)** in DEC in accordance with the Treasury and standard setters' timetable
- development of improved strategies and protocols to deal with GST
- development of the external funds database in SAP software to replace the previous stand-alone version and address audit concerns, improve access to data and eliminate duplication.

In line with **DEC's continuous improvement strategy**, activities undertaken or commenced during the year to ensure robust financial systems and policies are in place included:

- continuous update and improvement of DEC's Financial and Budget Management Framework
- resolution of system support issues at the Botanic Gardens Trust site
- development of the SAP tutor module to provide improved training for SAP users
- update of DEC's purchasing card policy
- strengthening of DEC's cash handling policies
- continuation of scheduled financial training courses (some 450 SAP users were trained in 2005–06)
- a further review of the agency's financial delegations as part of ongoing refinements to meet changing business needs.

### Risk management

DEC's insurance cover is obtained through the Treasury Managed Fund supplied by Allianz for workers' compensation and GIO for other risk areas.

#### Areas of risk and relevant insurance premiums

	2004–05 \$000	2005–06 \$000
Workers' compensation	2,409	4,317
Property	2,086	2,158
Motor vehicles	827	1,187
Public liability	3,849	2,854
Fire	28,306	24,294
Miscellaneous	50	52
<b>TOTAL</b>	<b>37,527</b>	<b>34,862</b>

DEC actively manages risk through a number of coordinated programs, including those on:

- occupational health and safety (page 91)
- park visitation (page 69)
- fire management (page 66)
- audit and compliance (pages 16–18).

### Efficiency improvements

DEC has continued to improve efficiency of recruitment, payroll and accounts processes through a **single service centre**. In the coming year, the SAP travel module will be introduced, and recruitment and leave processing through employee self-service will be enhanced.

During 2005–06, **employee self service** (ESS) commenced. More than 2800 DEC staff can now directly access their human resources information through a web-based application. Some online processing has also been introduced, which should further improve productivity, allowing more effort to be directed to core activities. For example, employees can now update personal address information and change their net pay and bank deduction details online. Online processing will be extended over the next year to include leave processing.

During 2005–06, DEC established **Preferred Supplier Agreements** (PSAs). To date, two PSAs have been established for the procurement of stationery and photocopiers. With the release of the new DEC style guide a range of corporate stationery is available through the stationery PSA. These PSAs have saved DEC more than \$300,000 during 2005–06. Two more PSAs are being negotiated, one for outsourcing the uniform store and the other for security services. Market research is continuing on developing PSAs for park maintenance and to supply standard equipment identified in the new facilities manual.

# Finance

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# Department of Environment and Conservation



2005-2006  
Auditing year 2006

## INDEPENDENT AUDIT REPORT DEPARTMENT OF ENVIRONMENT AND CONSERVATION

To Members of the New South Wales Parliament

### Audit Opinion

In my opinion, the financial report of the Department of Environment and Conservation (the Department):

- presents fairly the Department's financial position as at 30 June 2006 and its performance for the year ended on that date, in accordance with Accounting Standards and other mandatory financial reporting requirements in Australia, and
- complies with section 45E of the Public Finance and Audit Act 1983 (the Act) and the Public Finance and Audit Regulation 2005.

My opinion should be read in conjunction with the rest of this report.

### Scope

#### The Financial Report and Director-General's Responsibility

The financial report comprises the operating statement, statement of changes in equity, balance sheet, cash flow statement, program statement - expenses and revenues, summary of compliance with financial directives and accompanying notes to the financial statements for the Department, for the year ended 30 June 2006.

The Director-General is responsible for the preparation and true and fair presentation of the financial report in accordance with the Act. This includes responsibility for the maintenance of adequate accounting records and internal controls that are designed to prevent and detect fraud and error, and for the accounting policies and accounting estimates inherent in the financial report.

### Audit Approach

I conducted an independent audit in order to express an opinion on the financial report. My audit provides reasonable assurance to Members of the New South Wales Parliament that the financial report is free of material misstatement.

My audit accorded with Australian Auditing Standards and statutory requirements, and I:

- assessed the appropriateness of the accounting policies and disclosures used and the reasonableness of significant accounting estimates made by the Director-General in preparing the financial report, and
- examined a sample of evidence that supports the amounts and disclosures in the financial report.

An audit does not guarantee that every amount and disclosure in the financial report is error free. The terms 'reasonable assurance' and 'material' recognise that an audit does not examine all evidence and transactions. However, the audit procedures used should identify errors or omissions significant enough to adversely affect decisions made by users of the financial report or indicate that the Director-General had not fulfilled her reporting obligations.

My opinion does not provide assurance:

- about the future viability of the Department,
- that it has carried out its activities effectively, efficiently and economically,
- about the effectiveness of its internal controls, or
- on the assumptions used in formulating the budget figures disclosed in the financial report.

#### Audit Independence

The Audit Office complies with all applicable independence requirements of Australian professional ethical pronouncements. The Act further promotes independence by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General, and
- mandating the Auditor-General as auditor of public sector agencies but precluding the provision of non-audit services, thus ensuring the Auditor-General and the Audit Office are not compromised in their role by the possibility of losing clients or income.

  
R. Moloney FCPA  
Director, Financial Audit Services

SYDNEY  
10 October 2006

## DEPARTMENT OF ENVIRONMENT AND CONSERVATION

# Financial statements

FOR THE YEAR ENDED 30 JUNE 2006

Pursuant to section 45F of the *Public Finance and Audit Act 1983*, I state that:

- (a) the accompanying financial statements have been prepared in accordance with the provisions of the *Public Finance and Audit Act 1983*, the Financial Reporting Code and Budget Dependent Agencies, the applicable clauses of the Public Finance and Audit Regulation 2005 and the Treasurer's Directions
- (b) the statements exhibit a true and fair view of the financial position and transactions of the Department
- (c) there are not any circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.



Lisa Corbyn  
Director General

10 October 2006

*Start of audited financial statements*

## DEPARTMENT OF ENVIRONMENT AND CONSERVATION

## Operating statement

FOR THE YEAR ENDED 30 JUNE 2006

	Notes	Actual 2006 \$'000	Budget 2006 \$'000	Actual 2005 \$'000
<b>Expenses excluding losses</b>				
Operating expenses				
Employee related	2(a)	259,123	225,240	251,725
Other operating expenses	2(b)	169,133	159,484	155,740
Depreciation and amortisation	2(c)	51,044	48,289	46,147
Grants and subsidies	2(d)	7,825	9,849	8,635
Finance costs	2(e)	2,027	—	1,042
Other expenses	2(f)	129	—	144
<b>Total expenses excluding losses</b>		<b>489,281</b>	<b>442,862</b>	<b>463,433</b>
Less:				
<b>Revenue</b>				
Sale of goods and services	3(a)	27,215	39,328	26,883
Investment revenue	3(b)	14,972	2,218	14,816
Retained fees and fines	3(c)	3,321	2,640	2,573
Grants and contributions	3(d)	46,526	36,692	55,586
Other revenue	3(e)	31,308	4,500	25,916
<b>Total revenue</b>		<b>123,342</b>	<b>85,378</b>	<b>125,774</b>
<b>Gain/(loss) on disposal</b>	4	29	(60)	(207)
<b>NET COST OF SERVICES</b>	26	<b>365,910</b>	<b>357,544</b>	<b>337,866</b>
<b>Government contributions</b>				
Recurrent appropriation	6(a)	308,443	302,407	283,731
Capital appropriation	6(b)	47,771	40,589	30,554
Acceptance by the Crown Entity of employee benefits and other liabilities	7	22,934	23,106	33,643
<b>Total government contributions</b>		<b>379,148</b>	<b>366,102</b>	<b>347,928</b>
<b>SURPLUS/(DEFICIT) FOR THE YEAR</b>		<b>13,238</b>	<b>8,558</b>	<b>10,062</b>

*The accompanying notes form part of these financial statements*

## DEPARTMENT OF ENVIRONMENT AND CONSERVATION

## Statement of changes in equity

FOR THE YEAR ENDED 30 JUNE 2006

	Notes	Actual 2006 \$'000	Budget 2006 \$'000	Actual 2005 \$'000
Net increase/(decrease) in property, plant and equipment asset revaluation reserve	21	66,150	—	90,366
Net increase/(decrease) in available for sale financial asset revaluation reserve		—	—	—
Other net increases/(decreases) in equity		—	—	—
<b>TOTAL INCOME AND EXPENSE RECOGNISED DIRECTLY IN EQUITY</b>		<b>66,150</b>	<b>—</b>	<b>90,366</b>
<b>Surplus/(deficit) for the year</b>		<b>13,238</b>	<b>8,558</b>	<b>10,062</b>
<b>TOTAL INCOME AND EXPENSE RECOGNISED FOR THE YEAR</b>		<b>79,388</b>	<b>8,558</b>	<b>100,428</b>
<b>Effect of changes in accounting policy and correction of errors</b>				
Accumulated fund		13,238	8,558	10,062
Reserves		66,150	—	90,366
		<b>79,388</b>	<b>8,558</b>	<b>100,428</b>

*The accompanying notes form part of these financial statements*



## DEPARTMENT OF ENVIRONMENT AND CONSERVATION

## Balance sheet

AS AT 30 JUNE 2006

	Notes	Actual 2006 \$'000	Budget 2006 \$'000	Actual 2005 \$'000
<b>ASSETS</b>				
<b>Current assets</b>				
Cash and cash equivalents	10	74,608	74,111	69,125
Receivables	11	20,645	19,996	21,864
Inventories	12	1,001	1,303	1,100
Other financial assets	13	16	16	16
<b>Total current assets</b>		<b>96,270</b>	<b>95,426</b>	<b>92,105</b>
<b>Non-current assets</b>				
Receivables	11	—	4,426	4,426
Property, plant and equipment				
— Land and buildings	14	2,060,845	1,947,171	1,938,179
— Plant and equipment	14	45,590	27,149	33,694
— Infrastructure systems	14	711,299	718,506	729,726
Total property, plant and equipment		2,817,734	2,692,826	2,701,599
Intangible assets	15	11,549	9,770	5,620
<b>Total non-current assets</b>		<b>2,829,283</b>	<b>2,707,022</b>	<b>2,711,645</b>
<b>TOTAL ASSETS</b>		<b>2,925,553</b>	<b>2,802,448</b>	<b>2,803,750</b>
<b>LIABILITIES</b>				
<b>Current liabilities</b>				
Payables	17	15,728	11,983	12,174
Borrowings	18	7,510	10,926	10,926
Provisions	19	30,638	24,442	28,659
Other	20	2,330	1,426	1,426
<b>Total current liabilities</b>		<b>56,206</b>	<b>48,777</b>	<b>53,185</b>
<b>Non-current liabilities</b>				
Borrowings	18	23,957	27,216	28,216
Provisions	19	248	3,710	232
<b>Total non-current liabilities</b>		<b>24,205</b>	<b>30,926</b>	<b>28,448</b>
<b>TOTAL LIABILITIES</b>		<b>80,411</b>	<b>79,703</b>	<b>81,633</b>
<b>NET ASSETS</b>		<b>2,845,142</b>	<b>2,722,745</b>	<b>2,722,117</b>
<b>EQUITY</b>				
Reserves	21	1,110,024	1,044,374	1,043,874
Accumulated funds	21	1,735,118	1,678,371	1,678,243
<b>TOTAL EQUITY</b>		<b>2,845,142</b>	<b>2,722,745</b>	<b>2,722,117</b>

*The accompanying notes form part of these financial statements*

## DEPARTMENT OF ENVIRONMENT AND CONSERVATION

## Cash flow statement

FOR THE YEAR ENDED 30 JUNE 2006

	Notes	Actual 2006 \$'000	Budget 2006 \$'000	Actual 2005 \$'000
<b>Cash flows from operating activities</b>				
<b>Payments</b>				
Employee related		(217,446)	(208,780)	(212,676)
Grants and subsidies		(7,825)	(6,129)	(8,635)
Finance costs		(2)	–	(3)
Other		(190,884)	(181,090)	(175,977)
<b>Total payments</b>		<b>(416,157)</b>	<b>(395,999)</b>	<b>(397,291)</b>
<b>Receipts</b>				
Sale of goods and services		28,582	39,033	34,416
Retained fees and fines		3,321	(162)	2,573
Interest received		4,510	2,103	3,253
Other		94,096	61,741	77,550
<b>Total receipts</b>		<b>130,509</b>	<b>102,715</b>	<b>117,792</b>
<b>Cash flows from government</b>				
Recurrent appropriation	6(a)	308,443	302,407	283,731
Capital appropriation	6(b)	47,771	40,589	30,554
Cash reimbursements from the Crown Entity		3,840	–	16,371
<b>Net cash flows from government</b>		<b>360,054</b>	<b>342,996</b>	<b>330,656</b>
<b>NET CASH FLOWS FROM OPERATING ACTIVITIES</b>	26	<b>74,406</b>	<b>49,712</b>	<b>51,157</b>
<b>Cash flows from investing activities</b>				
Proceeds from sale of land and buildings, plant and equipment and infrastructure systems		981	575	987
Purchases of land and buildings, plant and equipment and infrastructure systems		(62,635)	(44,301)	(58,385)
<b>NET CASH FLOWS FROM INVESTING ACTIVITIES</b>		<b>(61,654)</b>	<b>(43,726)</b>	<b>(57,398)</b>
<b>Cash flows from financing activities</b>				
Proceeds from borrowings and advances		3,654	–	21,700
Repayments of borrowings and advances		(10,923)	(1,000)	(21)
<b>NET CASH FLOWS FROM FINANCING ACTIVITIES</b>		<b>(7,269)</b>	<b>(1,000)</b>	<b>21,679</b>
<b>Net increase/(decrease) in cash</b>		5,483	4,986	15,438
Opening cash and cash equivalents		69,125	69,125	53,687
Cash transferred in (out) as a result of administrative restructuring		–	–	–
<b>CLOSING CASH AND CASH EQUIVALENTS</b>	10	<b>74,608</b>	<b>74,111</b>	<b>69,125</b>

*The accompanying notes form part of these financial statements*

## DEPARTMENT OF ENVIRONMENT AND CONSERVATION

## Summary of compliance with financial directives

	2006			2005		
	Recurrent appropriation \$'000	Expenditure/net claim on Consolidated Fund \$'000	Capital appropriation \$'000	Expenditure/net claim on Consolidated Fund \$'000	Recurrent appropriation \$'000	Expenditure/net claim on Consolidated Fund \$'000
<b>Original budget</b>						
<b>Appropriation/expenditure</b>						
Appropriation Act	355,948	355,898	40,089	38,579	298,133	24,660
	<b>355,948</b>	<b>355,898</b>	<b>40,089</b>	<b>38,579</b>	<b>298,133</b>	<b>24,660</b>
<b>Other appropriations/expenditure</b>						
Treasurer's advance	3,585	3,205	8,650	8,650	1,202	4,667
Section 22 – Expenditure for certain works and services	–	–	–	–	–	–
Section 24 – Transfers of functions between departments	(18,701)	(18,701)	500	500	–	–
Transfers to/from another agency (section 28 of the Appropriation Act)	2,881	2,881	42	42	11,528	1,532
	<b>(12,235)</b>	<b>(12,615)</b>	<b>9,192</b>	<b>9,192</b>	<b>12,730</b>	<b>6,199</b>
<b>TOTAL APPROPRIATIONS/EXPENDITURE/NET CLAIM ON CONSOLIDATED FUND (includes transfer payments)</b>	<b>343,713</b>	<b>343,283</b>	<b>49,281</b>	<b>47,771</b>	<b>310,863</b>	<b>30,859</b>
<b>Amount drawn down against appropriation</b>		<b>343,283</b>		<b>47,771</b>		<b>30,554</b>
<b>LIABILITY TO CONSOLIDATED FUND</b>		–		–		–

The summary of compliance is based on the assumption that Consolidated Fund moneys are spent first (except where otherwise identified or prescribed).

## DEPARTMENT OF ENVIRONMENT AND CONSERVATION

## Program statement – expenses and revenues

FOR THE YEAR ENDED 30 JUNE 2006

	Program 1*		Program 2*		Program 3*		Program 4*		Program 5*		Not attributable		Total	
	2006 \$'000	2005 \$'000	2006 \$'000	2005 \$'000	2006 \$'000	2005 \$'000	2006 \$'000	2005 \$'000	2006 \$'000	2005 \$'000	2006 \$'000	2005 \$'000	2006 \$'000	2005 \$'000
<b>Agency's expenses and revenues</b>														
<b>Expenses excluding losses</b>														
Operating expenses														
Employee related	46,570	49,096	9,353	9,506	27,994	27,167	145,470	137,990	6,648	5,959	23,088	22,007	259,123	251,725
Other operating expenses	16,168	12,526	9,868	11,486	10,389	8,346	130,409	121,742	2,299	1,640	–	–	169,133	155,740
Depreciation and amortisation	1,309	1,277	283	269	3,449	2,324	45,758	42,140	245	137	–	–	51,044	46,147
Grants and subsidies	741	399	4,488	5,883	383	553	2,178	1,764	35	36	–	–	7,825	8,635
Finance costs	–	–	–	–	–	–	2,027	1,042	–	–	–	–	2,027	1,042
Other expenses	25	11	5	2	15	6	80	124	4	1	–	–	129	144
<b>Total expenses excluding losses</b>	<b>64,813</b>	<b>63,309</b>	<b>23,997</b>	<b>27,146</b>	<b>42,230</b>	<b>38,396</b>	<b>325,922</b>	<b>304,802</b>	<b>9,231</b>	<b>7,773</b>	<b>23,088</b>	<b>22,007</b>	<b>489,281</b>	<b>463,433</b>
<b>Retained revenue</b>														
Sale of goods and services	217	762	13	185	168	439	26,678	25,267	139	230	–	–	27,215	26,883
Investment income	464	414	99	84	285	230	14,054	14,036	70	52	–	–	14,972	14,816
Retained fees and fines	1,211	–	48	–	140	–	1,888	2,573	34	–	–	–	3,321	2,573
Grants and contributions	11,565	4,783	10,543	19,587	2,397	2,595	21,951	28,536	70	85	–	–	46,526	55,586
Other revenue	114	30	485	44	160	70	7,446	3,765	15	–	23,088	22,007	31,308	25,916
<b>Total retained revenue</b>	<b>13,571</b>	<b>5,989</b>	<b>11,188</b>	<b>19,900</b>	<b>3,150</b>	<b>3,334</b>	<b>72,017</b>	<b>74,177</b>	<b>328</b>	<b>367</b>	<b>23,088</b>	<b>22,007</b>	<b>123,342</b>	<b>125,774</b>
Gain/(loss) on sale of non-current assets	–	–	–	–	–	–	29	(207)	–	–	–	–	29	(207)
<b>Net cost of services</b>	<b>51,242</b>	<b>57,320</b>	<b>12,809</b>	<b>7,246</b>	<b>39,080</b>	<b>35,062</b>	<b>253,876</b>	<b>230,832</b>	<b>8,903</b>	<b>7,406</b>	<b>–</b>	<b>–</b>	<b>365,910</b>	<b>337,866</b>
Government contributions**											379,148	347,928	379,148	347,928
<b>NET EXPENDITURE/(REVENUE) FOR THE YEAR</b>	<b>51,242</b>	<b>57,320</b>	<b>12,809</b>	<b>7,246</b>	<b>39,080</b>	<b>35,062</b>	<b>253,876</b>	<b>230,832</b>	<b>8,903</b>	<b>7,406</b>	<b>(379,148)</b>	<b>(347,928)</b>	<b>(13,238)</b>	<b>(10,062)</b>
<b>Administered expenses</b>														
Transfer payments (Note 8)														
<b>Total administered expenses</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>34,840</b>	<b>25,947</b>	<b>34,840</b>	<b>25,947</b>
<b>Administered revenues</b>														
Transfer receipts (Note 8)														
Consolidated Fund														
Taxes, fees and fines (Note 27)														
<b>Total administered revenues</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>163,452</b>	<b>149,022</b>	<b>163,452</b>	<b>149,022</b>
<b>Administered revenues less expenses</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>198,292</b>	<b>174,969</b>	<b>198,292</b>	<b>174,969</b>
<b>Administered revenues less expenses</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>163,452</b>	<b>149,022</b>	<b>163,452</b>	<b>149,022</b>

\* The name and purpose of each program is summarised at Note 9.

\*\* Appropriations are made on an agency basis and not to individual programs. Consequently, government contributions must be included in the 'Not attributable' column.



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## DEPARTMENT OF ENVIRONMENT AND CONSERVATION

## Notes to the financial statements

## 1. Summary of significant accounting policies

## (a) Reporting entity

The Department of Environment and Conservation (DEC) was established as a reporting entity by the Public Sector Employment and Management (Environment and Conservation) Order 2003 made on 24 September 2003. It comprises all the entities under its control, including the agency's commercial activities.

DEC is a NSW Government department. DEC is a not-for-profit entity (as profit is not its principal objective) and it has no cash generating units. The reporting entity is consolidated as part of the NSW Total State Sector Accounts.

The entity also encompasses funds which, while containing assets that are restricted for specific uses by the grantor donor, are nevertheless controlled by DEC.

The DEC reporting entity includes employee related expenses and provisions for the Royal Botanic Gardens and Domain Trust and the Lord Howe Island Board. These are offset by income and receivables. Refer to Notes 2(a), 3(e), 11 and 19 for the financial impact of these transactions.

The Environment Protection Authority (EPA) is not a controlled entity of DEC. This view was confirmed by the Treasurer during 2005–06.

However, the EPA's activities are fully integrated within DEC operations. The income and expenditure of the EPA has been determined as \$64,019,000 (2004–05: \$63,813,000). As a statutory body, the EPA is also required to prepare a separate financial report.

This financial report was authorised for issue by the Director General of DEC on 10 October 2006.

## (b) Basis of preparation

DEC's financial report is a general purpose financial report which has been prepared in accordance with:

- applicable Australian Accounting Standards, which include Australian Equivalents to International Financial Reporting Standards (AEIFRS)
- the requirements of the *Public Finance and Audit Act 1983* and Regulation
- the Financial Reporting Directions published in the *Financial reporting code for budget dependent general government sector agencies* or issued by the Treasurer.

Property, plant and equipment and intangibles are measured at fair value. Other financial statement items are prepared in accordance with the historical cost convention.

Judgements, key assumptions and estimates made by management are disclosed in the relevant notes to the financial report.

All amounts are rounded to the nearest one thousand dollars and are expressed in Australian currency.

## (c) Statement of compliance

The financial statements and notes comply with Australian Accounting Standards, which include AEIFRS.

This is the first DEC financial report prepared based on AEIFRS, and comparatives for the year ended 30 June 2005 have been restated accordingly, except as stated below.

In accordance with *AASB 1 First time adoption of Australian Equivalent to International Financial Reporting Standards* and Treasury Mandates, the date of transition to *AASB 132 Financial instruments: Disclosure and presentation* and *AASB 139 Financial instruments: Recognition and measurement* was deferred to 1 July 2005. As a result, comparative information for these two Standards is presented under the previous Australian Accounting Standards which applied to the year ended 30 June 2005.

The basis used to prepare the 2004–05 comparative information for financial instruments under previous Australian Accounting Standards is discussed in Note 1(aa) below. The financial instrument accounting policies for 2005–06 are specified in Notes 1(s)–(u) and (w) and (x), below.

Reconciliation of AEIFRS equity and surplus or deficit for 30 June 2005 to the balances reported in the 30 June 2005 financial report are detailed in Note 31. This note also includes separate disclosure of the 1 July 2005 equity adjustments arising from the adoption of AASB 132 and AASB 139.

## (d) Administered activities

DEC administers, but does not control, certain activities on behalf of the Crown Entity.

It is accountable for the transactions relating to those administered activities but does not have the discretion, for example, to deploy the resources for the achievement of DEC's own objectives.

Transactions and balances relating to the administered activities are not recognised as DEC revenues, expenses, assets and liabilities, but are disclosed in the accompanying schedules as 'Administered revenues' and 'Administered expenses'.

The accrual basis of accounting and all applicable accounting standards have been adopted for the reporting of these administered activities.

**(e) Income recognition**

Income is measured at the fair value of the consideration or contribution received or receivable. Additional comments regarding the accounting policies for the recognition of income are discussed below.

**(i) Parliamentary appropriations and contributions from other bodies**

Parliamentary appropriations and contributions from other bodies (including grants and donations) are generally recognised as income when DEC obtains control over the assets comprising the appropriations and contributions. Control over appropriations and contributions is normally obtained upon the receipt of cash.

An exception to this is when appropriations are unspent at year end. In this case, the authority to spend the money lapses and the unspent amount must generally be repaid to the Consolidated Fund in the following financial year. As a result, any unspent appropriations are accounted for as liabilities rather than revenue.

Where there is a liability, it is disclosed as part of 'Current liabilities – Other'. The amount is repaid and the liability extinguished in the next financial year. Any liability in respect of transfer payments is disclosed as part of 'Administered assets and liabilities'.

**(ii) Sale of goods and services**

Revenue from the sale of goods and services is recognised as revenue when DEC transfers the significant risks and rewards of ownership of the assets.

**(iii) Rendering of services**

Revenue is recognised when the service is provided or by reference to the stage of completion reached (based on labour hours incurred to date).

**(iv) Investment revenue**

Interest revenue is recognised using the effective interest method set out in *AASB 139 Financial instruments: Recognition and measurement*. Rental revenue is recognised in accordance with *AASB 117 Leases* on a straight-line basis over the term of the lease.

**(v) Taxes, fines, regulatory fees and contributions**

Taxes, fines, regulatory fees and contributions collected by DEC on behalf of the Crown are not recognised as revenues of DEC and are disclosed in the financial report by way of a note only. Waste-related levies and fees are shown net of rebates (refer to Note 27).

**(f) Employee benefits and other provisions**

**(i) Salaries and wages, annual leave, sick leave and on-costs**

Liabilities for salaries and wages (including non-monetary benefits), annual leave and paid sick leave that fall due wholly within 12 months of the reporting date are recognised and measured in respect of employees' services up to the reporting date at undiscounted amounts based on the amounts expected to be paid when the liabilities are settled.

Unused non-vesting sick leave does not give rise to a liability as it is not considered probable that sick leave taken in the future will be greater than the benefits accrued in the future.

The outstanding amounts of payroll tax, workers' compensation insurance premiums and fringe benefits tax, which are consequential to employment, are recognised as liabilities and expenses where the employee benefits to which they relate have been recognised.

**(ii) Long service leave and superannuation**

DEC's liabilities for long service leave and defined benefit superannuation are assumed by the Crown Entity. DEC accounts for the liability as having been extinguished resulting in the amount assumed being shown as part of the non-monetary revenue item described as 'Acceptance by the Crown Entity of employee benefits and other liabilities'. Prior to 2005–06 the Crown Entity also assumed the defined contribution superannuation liability.

Long service leave is measured using the present value basis in accordance with *AASB 119 Employee benefits*. This is based on the application of certain factors (specified in NSWTC 06/09) to employees with five or more years of service, using current rates of pay. These factors were determined in an actuarial review to approximate present value.

The superannuation expense for the financial year is determined using the formulae specified in the Treasurer's Directions. The expense for certain superannuation schemes (i.e. Basic Benefit and First State Super) is calculated as a percentage of the employee's salary. For other superannuation schemes (i.e. State Superannuation Scheme and State Authorities Superannuation Scheme), the expense is calculated as a multiple of the employee's superannuation contributions.

**(iii) Other provisions**

Other provisions exist when DEC has a present legal or constructive obligation as a result of a past event; it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Any provisions for restructuring are recognised only when DEC has a detailed formal plan and has raised a valid expectation in those affected by the restructuring that it will carry out the restructuring by starting to implement the plan or announcing its main features to those affected.

**(g) Borrowing costs**

Borrowing costs are recognised as expenses in the period in which they are incurred in accordance with Treasury's mandate to general government sector agencies.

**(h) Insurance**

DEC's insurance activities are conducted through the NSW Treasury Managed Fund (TMF) Scheme of self insurance for government agencies. The expense (premium) is determined by the fund manager based on past experience.

**(i) Accounting for the Goods and Services Tax (GST)**

Revenues, expenses and assets are recognised net of the amount of GST, except where:

- the amount of GST incurred by the agency as a purchaser that is not recoverable from the Australian Taxation Office is recognised as part of the cost of acquisition of an asset or as part of an item of expense
- receivables and payables are stated with the amount of GST included.

**(j) Acquisition of assets**

The cost method of accounting is used for the initial recording of all acquisitions of assets controlled by DEC. Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire the asset at the time of its acquisition or construction or, where applicable, the amount attributed to the asset when initially recognised in accordance with the specific requirements of other Australian Accounting Standards.

Assets acquired at no cost, or for nominal consideration during the year, are initially recognised as assets and revenues at their fair value at the date of acquisition (see contributed assets – Notes 3(d) and 14). Refer also to assets transferred as a result of an administrative restructure – Note 22.

Land transferred from other agencies at no cost, awaiting gazettal, is reported at fair value. Fair value means the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.

Infrastructure assets and property previously under construction which were completed and brought to account during the year have been valued at cost until that class of assets is revalued.

**(k) Capitalisation thresholds**

All assets valued at more than \$5,000 are capitalised. Items below \$5,000 are expensed except where they form an integral part of a network or facility (e.g. DEC radio network or wide area network). Plant and equipment comprises aircraft, motor vehicles, furniture and fittings, and other plant and equipment.

**(l) Revaluation of property, plant and equipment**

Physical non-current assets are valued in accordance with the *Guidelines for the valuation of physical non-current assets at fair value (TPP 05–03)* policy and guidelines paper. This policy adopts fair value in accordance with AASB 116 *Property, plant and equipment*.

Property, plant and equipment is measured on an existing use basis, where there are no feasible alternative uses in the existing natural, legal, financial and socio-political environment. However, in the limited circumstances where there are feasible alternative uses, assets are valued at their higher and best use.

Fair value of property, plant and equipment is based on the best available market evidence, including current market selling price for the same or similar assets. Where there is no available market evidence, an asset's fair value is measured at its market buying price, the best indicator of which is depreciated replacement cost.

DEC is a not-for-profit entity and does not hold assets predominantly for revenue generation.

As a result of the size and nature of its assets (land, buildings, roads and other access, utilities and other infrastructure), DEC revalues its physical non-current assets on a five-year cycle.



Set out below is a table of asset categories, dates last valued and by whom:

Asset category	Date of valuation	By whom
Land – dedicated	30 June 2005	NSW Department of Commerce*
Land – non-dedicated	30 June 2005	NSW Department of Commerce*
Buildings	1 July 2001	Australian Valuation Office
Other amenities and facilities	1 July 2004	DEC engineers**
Roads	1 July 2003	DEC engineers
Wharves	1 July 2003	DEC engineers
Utilities and other infrastructure	1 July 2001	DEC engineers
Aircraft	1 July 2001	Bankstown Aviation Aircraft Valuation Specialist
Historical furniture and fittings	1 July 2001	Tony Palmer Pty Ltd

\* Land dedicated and non-dedicated valuations are in accordance with the *Guidelines for the valuation of physical non-current assets at fair value (TPP05–03)* and *AASB 116 Property, plant and equipment*.

\*\*Other amenities and facilities valuations are based on statewide standard costs derived by DEC engineers. These costs reflect the cost standards required to construct DEC picnic areas, camping grounds, lookouts and external interpretive signs.

Non-specialised assets with short useful lives are measured at depreciated historic cost, as a surrogate for fair value. For other assets, any balances of accumulated depreciation at the revaluation date in respect of those assets are credited to the asset accounts to which they relate. The net asset accounts are then increased or decreased by the revaluation increments or decrements.

Revaluation increments are credited directly to the asset revaluation reserve, except that, to the extent that an increment reverses a revaluation decrement in respect of that class of asset previously recognised as an expense in the surplus/deficit, the increment is recognised immediately as revenue in the surplus/deficit. Revaluation decrements are recognised immediately as expenses in the surplus/deficit, except that, to the extent that a credit balance exists in the asset revaluation reserve in respect of the same class of asset, they are debited directly to the asset revaluation reserve.

As a not-for-profit entity, revaluation increments and decrements are offset against one another within a class of non-current assets but not otherwise.

Where an asset that has previously been revalued is disposed of, any balance remaining in the asset revaluation reserve in respect of that asset is transferred to accumulated funds.

#### (m) Impairment of property, plant and equipment

As a not-for-profit entity with no cash generating units, DEC is effectively exempt from *AASB 136 Impairment of assets* and impairment testing. This is because AASB 136 modifies the recoverable amount test to the higher of fair value less costs to sell and depreciated replacement cost. This means that, for an asset already measured at fair value, impairment can only arise if selling costs are material. Selling costs are regarded as immaterial.

#### (n) Assets not able to be reliably measured

DEC holds certain assets, which have not been recognised in the balance sheet because the value of these assets cannot be measured reliably. These assets include historical buildings (not in use) and cultural artefacts.

#### (o) Depreciation of property, plant and equipment

All non-current assets having a limited useful life are systematically depreciated over their expected useful life to DEC. This reflects the consumption of their service potential. The straight-line method is used to depreciate non-current assets.

Land is not a depreciated asset.

Certain heritage assets (in use) with an extremely long useful life are not depreciated. Depreciation for these cannot be reliably measured because the useful life and the net amount to be recovered at the end of the useful life cannot be reliably ascertained. In these cases, depreciation is not recognised. The decision not to recognise depreciation for these assets is reviewed annually.

Buildings and improvements:

- The construction type of DEC buildings is used to determine the asset's useful life (from which a depreciation rate is derived). For example, historic buildings in use are deemed to have useful lives of between 40 and 100 years; visitor centres and staff residences 40 to 80 years, etc.

Roads and other access; utilities and other infrastructure:

The following depreciation rates have been adopted:

- 2.5% for roads; car parks, fire trails and management tracks; walking tracks, bridges, picnic areas, camping areas and lookouts
- 5% for boat ramps and wharves, utilities and other infrastructure.

Except where bridges, boat ramps, wharves and utilities have been independently valued, an assessment of the useful life of each asset was carried out and the depreciation rate was derived accordingly.

Plant and equipment:

- Depreciation rates applied vary from 10% to 25% per annum.

Amortisation of intangible assets:

- 25% for software
- nil for water licences.

**(p) Maintenance**

Day-to-day servicing costs or maintenance are charged as expenses as incurred, except where they relate to the replacement of a significant part or component of an asset, in which case the costs are capitalised and depreciated.

**(q) Leased assets**

Under certain leases granted by DEC, the lessee will maintain or improve the leased property which, at the expiry of the lease, reverts to the ownership of DEC. Alternatively, where land is leased, property may be built on the land by the lessee and at the expiry of the lease, ownership of the property transfers to DEC.

Assets and improvements are brought to account by DEC upon expiry of the lease when actual ownership and control revert to DEC. Upon assumption of ownership, the asset will be included in the DEC assets register. Examples of such prospective assets include commercial buildings and infrastructure such as marinas and ski lifts (excluding associated plant and machinery) built by lessees on DEC property.

Operating lease payments are charged to the operating statement in the periods in which they are incurred.

**(r) Intangible assets**

DEC recognises intangible assets only if it is probable that future economic benefit will flow to DEC and the cost of the asset can be measured reliably. Intangible assets are measured initially at cost. Where an asset is acquired at no or nominal cost, the cost is its fair value as at the date of acquisition.

All research costs are expensed. Development costs are only capitalised when certain criteria are met. The useful lives of intangible assets are assessed to be finite. Intangible assets are subsequently measured at fair value only if there is an active market. As there is no active market for DEC's intangible software assets, the assets are carried at cost less any accumulated amortisation. DEC's intangible software assets are amortised using the straight-line method over a period of four years. DEC's intangible water licence assets are not amortised.

DEC holds water licences issued under the *Water Management Act 2000* and the *Water Act 1912*. Licences purchased during 2005–06 are reported at cost. Licences held but not purchased have not been included in the Financial Report.

In general, intangible assets are tested for impairment where an indicator of impairment exists. However, as a not-for-profit entity with no cash generating units, DEC is effectively exempt from impairment testing (refer to Note 1 (m)).

**(s) Loans and receivables – Year ended 30 June 2006**

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. These financial assets are recognised initially at fair value, usually based on the transaction cost or face value. Subsequent measurement is at amortised cost using the effective interest method, less an allowance for any impairment of receivables. Any changes are accounted for in the operating statement when impaired, de-recognised or through the amortisation process.

Short-term receivables with no stated interest rate are measured at the original invoice amount where the effect of discounting is immaterial.

Refer to Note 1 (aa) for the 2004–05 policy.

**(t) Inventories**

Inventories held for distribution are stated at the lower of cost and current replacement cost. Inventories (other than those held for distribution) are measured at the lower of cost and net realisable value. Cost is calculated using the weighted average cost. Shop stocks held for 12 months or more and considered to be unsaleable are regarded as obsolete and are expensed.

Generally, the quantum of inventory held is small. DEC relies on end-of-year stocktakes to identify shop stocks and inventory held for distribution for reporting purposes.

**(u) Other financial assets**

Other financial assets are recognised at fair value.

**(v) Equity transfers**

The transfer of net assets between agencies as a result of an administrative restructure, transfer of programs/ functions and parts thereof between NSW public sector agencies is designated as a contribution by owners and recognised as an adjustment to 'Accumulated funds'. This treatment is consistent with Urgent Issues Group Interpretation 1038 *Contributions by owners made to wholly-owned public sector entities*.

Transfers arising from an administrative restructure between government agencies are recognised at the amount at which the asset was recognised by the transferor government agency immediately prior to the restructure. In most instances this will approximate fair value. All other equity transfers are recognised at fair value.

**(w) Payables – Year ended 30 June 2006**

These amounts represent liabilities for goods and services provided to DEC and other amounts, including interest. Payables are recognised initially at fair value, usually based on the transaction cost or face value. Subsequent measurement is at amortised cost using the effective interest method. Short-term payables with no stated interest are measured at the original invoice amount where the effect of discounting is immaterial.

Refer to Note 1 (aa) for the 2004–05 policy.

**(x) Borrowings – Year ended 30 June 2006**

Loans are not held for trading or designated at fair value through profit or loss and are recognised at amortised cost using the effective interest method. Gains or losses are recognised in the operating statement on de-recognition. The finance lease liability is determined in accordance with *AASB 117 Leases*.

Refer to Note 1 (aa) for the 2004–05 policy.

**(y) Budgeted amounts**

The budgeted amounts are drawn from budgets as formulated at the beginning of the financial year (State Budget) and with any adjustments for the effects of additional appropriations under s.21A, s.24, and/or s.26 of the *Public Finance and Audit Act 1983*.

The budgeted amounts in the operating statement and the cash flow statement are generally based on amounts disclosed in the NSW Budget Papers (as adjusted above). However, in the balance sheet, the amounts vary from the budget papers, as the opening balances of the budgeted amounts are based on carried forward actual amounts, i.e. per the audited financial statements (rather than carried forward estimates).

**(z) Comparative information**

Comparative figures have been restated based on AEIFRS with the exception of financial instruments information which has been prepared under the previous AGAAP Standard (AAS 33) as permitted by AASB 1.36A. The transition date to AEIFRS for financial instruments information is 1 July 2005. The impact of adopting AASB 132/139 is further discussed in Note 31.

**(aa) Financial instruments accounting policy for 2004–05 comparative period**

Investment income:

Interest revenue is recognised as it accrues.

Receivables:

Receivables are recognised and carried at cost, based on the original invoice amount less a provision for any uncollectable debts. An estimate for doubtful debts is made when collection of the full amount is no longer probable. Bad debts are written off as incurred.

Payables:

These amounts represent liabilities for goods and services provided to the agency and other amounts, including interest. Interest is accrued over the period it becomes due.

Interest bearing liabilities:

All loans are valued at current capital value.

**(ab) Marine Parks Authority**

DEC administers jointly with the Department of Primary Industries certain assets on behalf of the Marine Parks Authority. These assets are the areas covered by the four established marine parks at Jervis Bay, Solitary Islands, Cape Byron and Lord Howe Island.

DEC's capital equipment used for maintaining day-to-day operations of these four administered assets has been recognised and reported in accordance with DEC's Asset Acquisition and Valuation Policy – Notes 1(j) and 1(l).

The operating costs incurred by DEC in administering these assets, which are included in the operating statement, were \$1,733,178 (2004–05: \$1,240,891).

## 2. Expenses excluding losses

	2006 \$'000	2005 \$'000
<b>(a) Employee related expenses</b>		
Salary and wages (including recreation leave)*	200,417	191,680
Superannuation – defined benefits plans	7,509	6,790
Superannuation – defined contribution plans	12,680	12,389
Long service leave	16,334	17,932
Workers' compensation insurance	4,169	3,421
Payroll tax and fringe benefits tax	15,425	12,708
Other	2,589	6,805
	<b>259,123</b>	<b>251,725</b>

\*Salaries and wages amounting to \$1,314,363 (2004–05: \$957,003) have been capitalised.

In 2006, \$23,088,000 was included for the Royal Botanic Gardens and Domain Trust and Lord Howe Island Board. Refer also to Notes 1(a) and 3(e).

<b>(b) Other operating expenses</b>		
Auditor's remuneration (audit or review of the financial reports)	245	235
Cost of sales	1,361	1,477
Cost of inventories held for distribution	21	79
Bad and doubtful debts	(178)	490
Operating lease rental expenses (minimum lease payments)	12,169	12,460
Other occupancy costs	3,472	3,740
Maintenance*	27,285	21,138
Insurance	30,875	35,730
Communication costs	5,954	5,742
Energy costs	3,091	2,902
Fees and services	47,996	39,777
Information dissemination	4,497	6,007
Legal costs	1,469	1,215
Stores and minor assets	13,682	10,076
Travel costs	16,598	14,242
Other	596	430
	<b>169,133</b>	<b>155,740</b>

\*Reconciliation

Maintenance expense (Note 2(b) as above)	27,285	21,138
Maintenance related employee expenses included in Note 2(a)	22,366	21,500
Total maintenance expenses included in Notes 2(a) and 2(b)	49,651	42,638

<b>(c) Depreciation and amortisation expenses</b>		
Buildings and improvements	7,603	7,501
Roads and other access	20,319	20,167
Utilities and other infrastructure	8,284	7,962
Plant and equipment	11,297	7,187
Furniture and fittings	1,662	1,750
	49,165	44,567
Amortisation of intangibles	1,879	1,580
	<b>51,044</b>	<b>46,147</b>

	2006 \$'000	2005 \$'000
<b>(d) Grants and subsidies</b>		
Federal Government	213	151
NSW Government	2,065	2,317
Local government	3,048	3,247
Non-government organisations	2,302	2,920
Other	197	–
	<b>7,825</b>	<b>8,635</b>
<b>(e) Finance costs</b>		
Interest	2,027	1,042
	<b>2,027</b>	<b>1,042</b>
<b>(f) Other expenses</b>		
Bank charges	128	143
Miscellaneous	1	1
	<b>129</b>	<b>144</b>
<b>3. Revenue</b>		
<b>(a) Sale of goods and services</b>		
Sale of goods:		
Annual and day entry	11,459	11,676
Camping fees	5,658	5,428
Sale of assets under \$5,000	382	17
Sale of publications and stock	2,260	2,408
	<b>19,759</b>	<b>19,529</b>
Rendering of services:		
Community service	2,916	2,841
Hire of facilities	2,119	2,098
Miscellaneous park service	1,694	1,839
Minor user charges	727	576
	<b>7,456</b>	<b>7,354</b>
<b>Total</b>	<b>27,215</b>	<b>26,883</b>
<b>(b) Investment revenue</b>		
Interest	4,132	3,253
Lease and rental of premises	10,840	11,563
	<b>14,972</b>	<b>14,816</b>
<b>(c) Retained fees and fines</b>		
Fees – licences and permits	737	644
Fees – kangaroo and other royalties	1,037	1,113
Fines – parking, court and other	1,547	816
	<b>3,321</b>	<b>2,573</b>



	2006 \$'000	2005 \$'000
<b>(d) Grants and contributions</b>		
Funding was provided by the Commonwealth and State Governments together with private and corporate sponsorship as follows (Note 5):		
Federal Government	2,952	2,167
NSW Government	32,050	45,595
Other state governments	127	228
Local government	455	213
Non-government	9,303	6,814
Contributed assets	1,639	569
	<b>46,526</b>	<b>55,586</b>
<b>(e) Other revenue</b>		
Insurance recoveries	5,933	3,581
Telephone rebate	18	2
Personnel services*	23,088	22,007
Miscellaneous	2,269	326
	<b>31,308</b>	<b>25,916</b>

\*Refer to Notes 1(a) and 2(a).

**(f) Revenue forgone**

DEC's revenue does not include park use fees which DEC forgoes through concessions such as free and discounted park use permits provided to certain groups, including pensioners, volunteer firefighters, etc.

#### 4. Gain/(loss) on disposal

	2006 \$'000	2005 \$'000
Proceeds from disposal of non-current assets		
Land and buildings	127	259
Plant and equipment	854	728
Infrastructure	—	—
Intangibles	—	—
Written down value of non-current assets disposed of		
Land and buildings	(246)	(671)
Plant and equipment	(479)	(177)
Infrastructure	(227)	(346)
<b>Net gain/(loss) on disposal</b>	<b>29</b>	<b>(207)</b>

#### 5. Conditions on contributions

DEC received contributions for specific purposes, e.g. restoration works or scientific research projects.

The amount received during this period was \$44,887,464 (2004–05: \$44,916,230).

Usually the conditions imposed upon DEC stipulate that grants provided are required to be spent on the specific project for which the funds were provided. Usually any funds that are not used on the specific project must be refunded to the donor body.

No externally imposed financial restrictions are operable in respect of DEC's assets (except cash) as a result of such contributions. In the case of research grants, assets of an intangible nature (e.g. intellectual property) may ensue. Due to the valuation difficulties and immateriality, all costs incurred are expensed.

The contributions which were unexpended as at 30 June 2006 were \$44,264,223 (2004–05: \$47,470,593).

Contributions which are unexpended at the balance date are considered to be restricted assets.

## 6. Appropriations

	2006 \$'000	2005 \$'000
<b>(a) Recurrent appropriation</b>		
Total recurrent drawdowns from Treasury*	343,283	309,678
Less: Liability to Consolidated Fund*	—	—
	<b>343,283</b>	<b>309,678</b>
Comprising:		
Recurrent appropriation**	308,443	283,731
Transfer payments (see Note 8)	34,840	25,947
	<b>343,283</b>	<b>309,678</b>
<b>(b) Capital appropriation</b>		
Total capital drawdowns from Treasury*	47,771	30,554
Less: Liability to Consolidated Fund*	—	—
	<b>47,771</b>	<b>30,554</b>
Comprising:		
Capital appropriation**	47,771	30,554
	<b>47,771</b>	<b>30,554</b>

\* As per summary of compliance

\*\* As per operating statement

## 7. Acceptance by the Crown Entity of employee benefits and other liabilities

The following liabilities/expenses have been assumed by the Crown Entity:

Superannuation*	6,337	17,227
Long service leave	15,521	15,382
Payroll tax on superannuation	1,076	1,034
	<b>22,934</b>	<b>33,643</b>

\*From 1 July 2005, DEC assumed responsibility for employees not covered by the defined benefit superannuation schemes.

## 8. Transfer payments

Foundation for National Parks and Wildlife	—	50
Jenolan Caves Reserve Trust	720	450
Lord Howe Island Board	1,305	1,003
Zoological Parks Board	32,815	24,444
	<b>34,840</b>	<b>25,947</b>

## 9. Programs/activities of the Department

### Program 1: Environment protection and regulation

Objective(s): To require and encourage environment protection across industry, government and the broader community

### Program 2: Sustainability programs

Objective(s): To enable individuals, government, business and organisations to adopt actions that accelerate the shift towards environmentally sustainable practices for waste and resource use

### Program 3: Policy and science

Objective(s): To ensure environment protection and conservation efforts by government, industry and the community are underpinned by sound policy and strong science

### Program 4: Parks and wildlife

Objective(s): To protect biodiversity and cultural heritage by managing NSW protected areas, including national parks, wilderness areas and marine parks, and by partnering communities on off-park protected areas

**Program 5: Cultural heritage**

Objective(s): To assess and protect cultural heritage in NSW, including Aboriginal heritage across the state and historic heritage on reserves

**10. Current assets – Cash and cash equivalents**

	2006 \$'000	2005 \$'000
For the purposes of the cash flow statement, cash and cash equivalents include all of the following:		
Cash at bank	37,261	37,480
Cash on hand	142	137
Cash at TCorp	37,205	31,508
Closing cash or cash equivalents (as per statement of cash flows)	<b>74,608</b>	<b>69,125</b>

Some of the cash at TCorp is a restricted asset as it was provided by Snowy Hydro Ltd to assist with the remediation of sites formerly occupied by that organisation.

**11. Current/non-current assets – Receivables****Current**

Debtors	16,791	16,401
Real estate debtors	442	719
GST	2,763	4,480
Less: Allowance for impairment	(191)	(752)
Prepayments	840	1,016
	<b>20,645</b>	<b>21,864</b>

**Non-current**

Debtors	–	4,400
Prepayments	–	26
	<b>–</b>	<b>4,426</b>

Debts written off during the period amounted to \$383,876 (2004–05: \$568,722).

**12. Current assets – Inventories**

Held for distribution	100	122
Finished goods – shop stocks	901	978
	<b>1,001</b>	<b>1,100</b>

**13. Current assets – Other financial assets at fair value**

Interest-bearing deposits	16	16
	<b>16</b>	<b>16</b>

## 14. Non-current assets – Property, plant and equipment

	Land and buildings \$'000	Plant and equipment \$'000	Infrastructure systems \$'000	Total \$'000
<b>At 1 July 2005</b>				
Gross carrying amount	2,078,870	108,252	985,522	3,172,644
Accumulated depreciation and impairment	(140,691)	(74,558)	(255,796)	(471,045)
Net carrying amount	1,938,179	33,694	729,726	2,701,599
<b>At 30 June 2006</b>				
Gross carrying amount	<b>2,209,271</b>	<b>117,020</b>	<b>995,559</b>	<b>3,321,850</b>
Accumulated depreciation and impairment	(148,426)	(71,430)	(284,260)	(504,116)
Net carrying amount	2,060,845	45,590	711,299	2,817,734

### Reconciliation

A reconciliation of the carrying amount of each class of property, plant and equipment at the beginning and end of the current reporting period is set out below.

#### Year ended 30 June 2006

Net carrying amount at start of year	1,938,179	33,694	729,726	2,701,599
Additions	29,095	16,440	10,446	55,981
Disposals	(246)	(479)	(227)	(952)
Acquisitions through administrative restructures	42,312	–	–	42,312
Net revaluation increment	57,394	8,756	–	66,150
Depreciation expense	(7,604)	(12,959)	(28,602)	(49,165)
Class change	76	138	(44)	170
Other movements – Free of cost	1,639	–	–	1,639
Net carrying amount at end of year	<b>2,060,845</b>	<b>45,590</b>	<b>711,299</b>	<b>2,817,734</b>

#### At 1 July 2004

Gross carrying amount	1,956,149	96,373	974,955	3,027,477
Accumulated depreciation and impairment	(139,757)	(67,408)	(227,633)	(434,798)
Net carrying amount	1,816,392	28,965	747,322	2,592,679

#### At 30 June 2005

Gross carrying amount	2,078,870	108,252	985,522	3,172,644
Accumulated depreciation and impairment	(140,691)	(74,558)	(255,796)	(471,045)
Net carrying amount	1,938,179	33,694	729,726	2,701,599

### Reconciliation

A reconciliation of the carrying amount of each class of property, plant and equipment at the beginning and end of the previous reporting period is set out below.

#### Year ended 30 June 2005

Net carrying amount at start of year	1,816,392	28,965	747,322	2,592,679
Additions	33,662	13,843	10,879	58,384
Disposals	(671)	(177)	(346)	(1,194)
Acquisitions through administrative restructures	5,361	–	–	5,361
Net revaluation increment	90,367	–	–	90,367
Depreciation expense	(7,501)	(8,937)	(28,129)	(44,567)
Other movements – Free of cost	569	–	–	569
Net carrying amount at end of year	<b>1,938,179</b>	<b>33,694</b>	<b>729,726</b>	<b>2,701,599</b>

DEC holds certain assets, which are not included in the financial statements as they cannot be measured reliably: see Note 1(n).

DEC also continues to derive service potential and economic benefit from some fully depreciated assets that have not been revalued this financial year. The effect of International Financial Reporting Standards is minimal as most fully depreciated assets are likely to be in poor condition and therefore may or may not have zero value.

	2006 \$'000	2005 \$'000
Buildings	14,158	4,621
Plant and equipment	–	45,323
Intangibles	7,511	5,490
Infrastructure	18,003	8,580
	<b>39,672</b>	<b>64,014</b>

## 15. Intangible assets

	Software \$'000	Water licences \$'000	Total \$'000
<b>At 1 July 2005</b>			
Cost (gross carrying amount)	13,745	—	13,745
Accumulated amortisation and impairment	(8,125)	—	(8,125)
Net carrying amount	5,620	—	5,620
<b>At 30 June 2006</b>			
Cost (gross carrying amount)	15,509	6,182	21,691
Accumulated amortisation and impairment	(10,142)	—	(10,142)
Net carrying amount	5,367	6,182	11,549
<b>Year ended 30 June 2006</b>			
Net carrying amount at start of year	5,620	—	5,620
Additions (from internal development or acquired separately)	1,796	6,182	7,978
Disposals	—	—	—
Amortisation (recognised in 'Depreciation and amortisation')	(1,879)	—	(1,879)
Other movements (reclassification)	(170)	—	(170)
Net carrying amount at end of year	5,367	6,182	11,549
<b>At 1 July 2004</b>			
Cost (gross carrying amount)	13,745	—	13,745
Accumulated amortisation and impairment	(6,545)	—	(6,545)
Net carrying amount	7,200	—	7,200
<b>At 30 June 2005</b>			
Cost (gross carrying amount)	13,745	—	13,745
Accumulated amortisation and impairment	(8,125)	—	(8,125)
Net carrying amount	5,620	—	5,620
<b>Year ended 30 June 2005</b>			
Net carrying amount at start of year	7,200	—	7,200
Additions (from internal development or acquired separately)	—	—	—
Disposals	—	—	—
Amortisation (recognised in 'Depreciation and amortisation')	(1,580)	—	(1,580)
Other movements	—	—	—
Net carrying amount at end of year	<b>5,620</b>	<b>—</b>	<b>5,620</b>

## 16. Restricted assets

DEC has under its control a wide range of assets, such as historic buildings, dedicated land and specified sites, which are subject to restrictions on their use by virtue of the *National Parks and Wildlife Act 1974*. These restrictions include disposal of the asset or, under certain circumstances, exploitation for financial or economic gain. Additional restrictions may be brought to bear by DEC's stakeholders as well as other legislation governing the use of historic sites and buildings.

DEC also conducts research projects on behalf of a wide range of donor bodies. These bodies provide funds that are restricted to use on projects specified by the donor body. Strict terms and conditions can apply to the use of these funds. Any unspent funds can be returned to the donor bodies.

## 17. Current liabilities – Payables

	2006 \$'000	2005 \$'000
Creditors	12,242	6,980
Voluntary redundancies	584	580
Accrued salaries, wages and on-costs	2,902	4,614
	<b>15,728</b>	<b>12,174</b>



## 18. Current/non-current liabilities – Borrowings

	2006 \$'000	2005 \$'000
Treasury advances repayable	31,467	39,142
	<b>31,467</b>	<b>39,142</b>

### Repayment of borrowings

	Perisher Development*	Western Land**	GEEIP***	Total
<b>2005–06</b>				
Not later than one year	–	7,494,545	15,892	7,510,437
Later than one year and not later than five years	–	–	–	–
Later than five years	–	–	–	–
To be confirmed by NSW Treasury	23,957,000	–	–	23,957,000
<b>Total</b>	<b>23,957,000</b>	<b>7,494,545</b>	<b>15,892</b>	<b>31,467,437</b>

Comparative balances for 2004–05 have been valued under Australian Accounting Standard *AAS 33 Financial instruments*.

	Perisher Development*	Western Land**	GEEIP***	Water for Life	Total
<b>2004–05</b>					
Not later than one year	–	9,900,000	25,945	1,000,000	10,925,945
Later than one year and not later than five years	–	7,900,000	12,973	–	7,912,973
Later than five years	–	–	–	–	0
To be confirmed by NSW Treasury	20,303,000	–	–	–	20,303,000
<b>Total</b>	<b>20,303,000</b>	<b>17,800,000</b>	<b>38,918</b>	<b>1,000,000</b>	<b>39,141,918</b>

\* DEC has drawn down a repayable advance to meet costs associated with the Perisher Resort Development, i.e. to meet the costs associated with the development of a masterplan and upgrading the water in the Perisher area. The repayable schedule of the interest-bearing repayable advances will be determined in the context of the NSW Infrastructure Strategy. No repayments are scheduled to commence within the next 12 months.

\*\* DEC has drawn down a non-interest capital repayable advance to meet some of the acquisition costs of land for reservation in the Western Division of the state. With the introduction of AEIFRS *AASB 139 Financial instruments*, DEC has now valued the loan and interest payable at their fair value.

\*\*\* DEC has drawn down \$90,219 of a Crown advance as part of the Government Energy Efficiency Investment Program (GEEIP) in 2002–03. The advance is being repaid in half-yearly instalments of principal and interest over a period of four years effective from when the advance was drawn down.

While DEC did not have the powers to borrow funds (i.e. loans) under the *Public Authorities (Financial Arrangements) Act 1987*, specific approval was given by the NSW Treasurer for these advances.

## 19. Current/non-current liabilities – Provisions

	2006 \$'000	2005 \$'000
<b>Employee benefits and related on-costs</b>		
Recreation leave	24,376	22,528
Recreation leave on-costs	1,549	1,516
Long service leave on-cost – current*	4,713	4,615
Long service leave on-cost – non-current	248	232
<b>Total provisions</b>	<b>30,886</b>	<b>28,891</b>
*\$4,370,000 expected to be paid later than 12 months (2004–05: \$4,561,000)		
<b>Aggregate employee benefits and related on-costs</b>		
Provisions – current	30,638	28,301
Provisions – non-current	248	590
Accrued salaries, wages and on-costs (Note 17)	3,486	5,194
	<b>34,372</b>	<b>34,085</b>

Refer to Note 1(a).

**20. Current liabilities – Other**

	2006 \$'000	2005 \$'000
Security deposits	486	471
Prepaid income	1,844	955
	<b>2,330</b>	<b>1,426</b>

**21. Changes in equity**

	Accumulated funds		Asset revaluation reserve		Total equity	
	2006 \$'000	2005 \$'000	2006 \$'000	2005 \$'000	2006 \$'000	2005 \$'000
<b>Balance at the beginning</b>	1,678,243	1,662,619	1,043,874	953,508	2,722,117	2,616,127
First time adoption of AASB 139 (Note 31)	1,325	201	–	–	1,325	201
Restated opening balance	1,679,568	1,662,820	1,043,874	953,508	2,723,442	2,616,328
<b>Changes in equity – transactions with owners as owners</b>						
Increase/(decrease) in net assets from equity transfers (Note 22)	42,312	5,361	–	–	42,312	5,361
Total	1,721,880	1,668,181	1,043,874	953,508	2,765,754	2,621,689
<b>Changes in equity – other than transactions with owners as owners</b>						
Surplus/(deficit) for the year	13,238	10,062	–	–	13,238	10,062
Increment/(decrement) on revaluation of:						
Land and buildings	–	–	66,150	90,366	66,150	90,366
Infrastructure systems	–	–	–	–	–	–
Total	13,238	10,062	66,150	90,366	79,388	100,428
<b>Balance at the end of the financial year</b>	<b>1,735,118</b>	<b>1,678,243</b>	<b>1,110,024</b>	<b>1,043,874</b>	<b>2,845,142</b>	<b>2,722,117</b>

**22. Increase/decrease in net assets from equity transfers**

Other administrative restructures transferred since the formation of DEC are:

Other administrative restructures transferred since the formation of DEC are:		2006 \$'000	2005 \$'000
Increase/(decrease) in net assets from administration		42,312	5,361
		<b>42,312</b>	<b>5,361</b>
Transfers of land and associated infrastructure from other agencies, which are treated as 'administrative restructuring' (refer to Note 1(v)) are detailed below:			
State Forests of NSW	Land	32,832	—
Roads and Traffic Authority	Land and infrastructure	(7)	154
Crown Entity	Land and infrastructure	9,131	5,199
Department of Planning	Land	356	8
		<b>42,312</b>	<b>5,361</b>

## 23. Commitments for expenditure and revenue

	2006 \$'000	2005 \$'000
<b>Commitment – expenditure</b>		
<b>(a) Capital commitments*</b>		
Aggregate capital expenditure contracted at balance date and not provided for:		
Not later than one year	2,963	667
Later than one year and not later than five years	–	–
Later than five years	–	–
<b>Total (including GST)</b>	<b>2,963</b>	<b>667</b>
<b>(b) Other expenditure commitments*</b>		
Aggregate other expenditure contracted at balance date and not provided for:		
Not later than one year	4,411	3,350
Later than one year and not later than five years	–	–
Later than five years	–	–
<b>Total (including GST)</b>	<b>4,411</b>	<b>3,350</b>
<b>(c) Operating lease** commitments*</b>		
Future non-cancellable operating lease rentals not provided for and payable:		
Not later than one year	20,067	18,653
Later than one year and not later than five years	40,408	46,162
Later than five years	2,544	7,113
<b>Total (including GST)</b>	<b>63,019</b>	<b>71,928</b>

\* As a consequence of the Goods and Services Tax (GST), a contingent asset is included in the commitments above. The value of this contingent asset is \$6,399,407 (2004–05: \$6,903,985), which represents commitments contracted for at balance date but not recognised in the statements as liabilities.  
The increase in value of the contingent asset is due to lease contracts granted prior to the introduction of the GST becoming subject to the tax for the first time from 1 July 2005.

\*\* Operating leases are for office accommodation, plant and equipment and motor vehicles.

### Commitment – revenue

#### (a) Operating lease commitments – receivables\*

Future non-cancellable operating leases not provided for and receivable:		
Not later than one year	5,029	4,266
Later than one year and not later than five years	18,363	15,585
Later than five years	67,181	61,090
<b>Total (including GST)</b>	<b>90,573</b>	<b>80,941</b>

\*As a consequence of the GST, a contingent liability is included in the commitments above.  
The value of this contingent liability is \$6,279,119 (2004–05: \$2,435,769).

DEC's revenue commitments arise from a varied portfolio of commercial leases that enable private operators to provide visitor services and experiences in national parks for a specific period of time. These lease contracts are often complex. Many contain clauses that create difficulties in estimating, with any certainty, the quantum of future commitments as the revenue is subject to various contingent factors, such as the future Consumer Price Index over extended periods, sales turnover (which is itself subject to the vagaries of weather) and/or taxable income. DEC management considers that this category of leases cannot be reliably measured and has therefore excluded these leases from the above figures.

The lease commitments involving receivables reflected in this note relate solely to leases that specify a base rent component or receivables calculated as a percentage of land value which, in certain cases, is the minimum lease revenue that could be expected in future years.

## 24. Contingent liabilities and contingent assets

There is a claim for compensation for land acquired at Jervis Bay under the *Land Acquisition (Just Terms Compensation) Act 1991*. If agreement cannot be reached, the amount of compensation will be determined by the Land and Environment Court. Proceedings are currently before the Court but will not be finalised for some years. At this point it is not possible to determine what impact this will have on DEC's financial position. The impact will be reviewed on a regular basis.

### Treasury Managed Fund

The TMF manages a number of civil claims against DEC in relation to issues such as negligence and public liability. Current cases include:

- civil law suits against DEC by property holders who sustained property damage during the December–January 2001–02 and 2002–03 fires, which occurred across a large proportion of the state
- civil law suits arising from the January 2003 bushfires in Canberra
- a civil law suit by an individual claiming damages in relation to alleged exposure to lead at Broken Hill.

DEC's insurable risk should adequately cover all these claims.

Other than the above, DEC is not aware of any significant or material contingent liability in existence at 30 June 2006 or which has emerged subsequent to this date, which may materially impact on the financial position of DEC as shown in the Financial Statements.

## 25. Budget review

### Net cost of services

The actual net cost of services was higher than budget by \$8,366,000.

This was primarily due to the following factors:

- |  |               |
|--|---------------|
| (a) The financial reporting code states that the 'budget amount must not be adjusted for section 22 of the <i>Public Finance and Audit Act 1983</i> , Treasurer's Advance payments and transfers from another agency (i.e. s.26 of the <i>Appropriation Act 2000</i> '. If these appropriation supplementation movements were included to match expenditure incurred, the effect would reduce the variance by: | \$6,036,000   |
| (b) Grants and subsidies paid were lower than expected   | (\$2,024,000) |
| (c) Depreciation was higher than originally forecast<br>(refer to comments under 'Assets and liabilities' below)   | \$2,755,000   |
| (d) Borrowing costs were not originally budgeted for   | \$2,027,000   |
| (e) An increase in operating and other expenses by \$37,628,000. This was largely funded by an increase in revenue of \$37,964,000 of which grants and contributions accounted for \$9,834,000. The movement was mainly attributable to the Royal Botanic Gardens and Domain Trust and Lord Howe Island Board being included in the actual, not budget, of \$23,088,000.                                       | (\$336,000)   |

### Assets and liabilities

Net assets were higher by \$122,397,000.

This was primarily due to the following factors:

- |  |              |
|--|--------------|
| (a) Assets free of cost that have not been factored into budget papers   | \$1,070,000  |
| (b) DEC receiving assets (net increase) from other government agencies through administrative restructures, which was not factored into the budget papers prepared much earlier  | \$42,312,000 |
| (c) Revaluation of land and buildings not factored into budget papers, which were prepared much earlier  | \$66,150,000 |
| (d) Section 22 transfer from the Treasurer's advance are not included in budget amount   | \$8,650,000  |
| (e) In previous years, DEC used 'cost less depreciation' to approximate fair value and disclosed various plant and equipment assets as fully depreciated. However, these assets continued to provide economic benefit. Under the AEIFRS, these fully depreciated plant and equipment assets were required to be revalued as they have fair value. This resulted in all 'fully depreciated assets' of plant and equipment being revalued at fair value. | \$4,734,000  |

**Cash flows**

The net increase in cash flow was higher than expected by \$497,000.

This was primarily due to the following factors:

(a) DEC received additional supplementation for recurrent appropriation	(\$6,036,000)
(b) Cash reimbursements from the Crown for long service leave paid were not originally included in budget papers due to activity occurring after the budget cycle	(\$3,840,000)
(c) The capital program was higher than was factored into budget papers	\$10,744,000
(d) The net proceeds and the repayment of borrowings were not originally in the budget papers due to activity occurring after the budget cycle	\$569,000
(f) Receipts were higher (\$22,094,000) than expected due to increased activity. This was offset by an equivalent increase in payments (\$20,158,000).	(\$1,936,000)

## 26. Reconciliation of net cash flows from operating activities to net cost of services

	2006 \$'000	2005 \$'000
Net cash flows used on operating activities	(74,406)	(51,157)
Cash flows from government appropriations	356,214	314,285
Acceptance by Crown Entity of employee benefits and other liabilities	22,934	33,643
Depreciation	51,044	46,147
Contributed assets	(1,639)	(569)
Decrease/(increase) in receivables	5,643	(7,142)
Decrease/(increase) in inventories	99	88
Increase/(decrease) in provisions	1,995	755
Increase/(decrease) in creditors	3,554	657
Increase/(decrease) in other liabilities	904	952
Increase/(decrease) due to first time adoption of AEIFRS	(403)	–
Net loss/(gain) on sale of plant and equipment	(29)	207
<b>Net cost of services</b>	<b>365,910</b>	<b>337,866</b>

## 27. Administered assets, liabilities and revenue

Receipts collected on behalf of the Consolidated Fund are not included in DEC's Financial Statements. They are brought to account as revenue in the Treasurer's Public Accounts.

(a) Administered assets	Receivables	2,804	3,347
	Allowance for impairment	(1,677)	(1,959)
	Cash	112	74
		<b>1,239</b>	<b>1,462</b>
(b) Administered liabilities	Creditors	44	–
		<b>44</b>	<b>0</b>
(c) Administered revenues	Pollution licences and approvals	40,708	40,457
	Radiation licences	1,299	1,437
	Other fees and licences	1,007	830
	Waste-related levies and fees	120,666	107,399
	Waste levy rebates	(920)	(2,419)
	Fines	692	1,318
<b>Total revenue collected on behalf of the Crown</b>		<b>163,452</b>	<b>149,022</b>

## 28. Administered revenue – Debts written off

Debts written off in 2005–06: nil (2004–05: \$53,001)



## 29. Administered revenue – Schedule of uncollected amounts

### Schedule of uncollected amounts

	\$'000
Waste audit levies	2,338
Pollution control licences	281
Radiation control licences	185
	<b>2,804</b>

## 30. Financial instruments

DEC's principal financial instruments are outlined below. These arise directly from DEC's operations or are required to finance these operations.

DEC does not enter into or trade financial instruments for speculative purposes nor does it use financial derivatives.

Classes of instruments are recorded at cost and are carried at net fair value.

### (a) Cash

Cash comprises cash on hand and bank balances within the NSW Treasury Banking System.

Interest is earned on daily bank balances at the monthly average NSW Treasury Corporation (TCorp) 11 am unofficial cash rate adjusted for a management fee to Treasury.

The deposits at balance date were earning an interest rate of 4.75% (4.49% in 2005) while over the period the average interest rate was 4.54% (4.33% in 2005).

### (b) Other financial assets

As at 30 June 2006, DEC held two fixed-term interest-bearing deposits to the value of \$15,500 with the Commonwealth Bank of Australia.

Deposits at 30 June 2006 were earning an average interest rate of 5.5% (4.84% in 2005) while over the period the average interest rate was 5.1% (3.28% in 2005).

### (c) Hour-glass Investment Facilities

DEC has funds in TCorp's Hour-Glass Investment Facilities. DEC's investment is represented by a number of units in managed investment within the facilities. Each facility has different investment horizons and comprises a mix of asset classes appropriate to the investment horizon. TCorp appoints and monitors fund managers and establishes and monitors the application of appropriate investment guidelines.

All funds are held in the Cash Facility.

### (d) Receivables

All trade debtors are recognised as amounts receivable at balance date. Collectability of trade debtors is reviewed on an ongoing basis. Debts, which are known to be uncollectable, are written off. An allowance for impairment is raised when there is objective evidence that the entity will not be able to collect all amounts due.

The credit risk is the carrying amount (net of any allowance for impairment).

The carrying amount approximates net fair value. Sales are made on 30-day terms.

All lease revenue falls due immediately after the issue of the customer invoice except where the lease rent schedule conditions stipulate otherwise.

### (e) Bank overdraft

DEC does not have any bank overdraft facility. However it does have a number of operational activities/limits with the bank that have a potential to be a liability. These include cheque cashing authorities, purchase card limits, a payroll agreement and a tape negotiation authority.

### (f) Trade creditors and accruals

The liabilities are recognised for amounts due to be paid in the future for goods or services received, whether or not invoiced. Amounts owing to suppliers (which are unsecured) are settled in accordance with the policy set out in Treasurer's Direction 219.01. If trade terms are not specified, payment is made no later than the end of the month following the month in which an invoice or a statement is received. Treasurer's Direction 219.01 allows the Minister to award interest for late payment. No interest payments were awarded during the year.

### (g) Treasury advances

The carrying amounts for Treasury advances are not materially different from their fair values.

The repayments schedule is included in Note 18.

### 31. Financial impact of adopting AEIFRS

DEC has applied the Australian Equivalents to International Financial Reporting Standards (AEIFRS) for the first time in the 2005–06 financial report. The key areas where changes in accounting policies have had an impact on the financial report are disclosed below. Some of these arise because AEIFRS requirements are different from previous AASB requirements (AGAAP). DEC has adopted the options mandated by NSW Treasury for all NSW public sector agencies and the impacts below reflect Treasury's mandates and policy decisions.

The impacts of adopting AEIFRS on total equity and surplus/(deficit) as reported under previous AGAAP are shown below. There are no material impacts on DEC's cash flows.

#### (a) Reconciliations – 1 July 2004 and 30 June 2005

##### Reconciliation of equity under previous Accounting Standards (AGAAP) to equity under AEIFRS

	Notes	2005 \$'000	2004 \$'000
Total equity under previous AGAAP		2,721,995	2,616,127
<b>Adjustments to accumulated funds</b>			
<i>AASB 102 Inventory</i> held for distribution (net)	1	122	201
<b>Total equity under AEIFRS</b>		<b>2,722,117</b>	<b>2,616,328</b>
<b>Reconciliation of surplus/(deficit) under previous AGAAP to surplus/(deficit) under AEIFRS</b>			
<b>Year ended 30 June 2005</b>			<b>\$'000</b>
<b>Surplus/(deficit) under AGAAP</b>			10,141
<i>AASB 102 Inventory</i> held for distribution			(79)
<b>Surplus/(deficit) under AEIFRS</b>			<b>10,062</b>

Based on the above, if AEIFRS had applied in 2004–05, the net cost of services would have decreased from \$347,887,000 to \$347,808,000.

##### Note to table above

1. The adoption of *AASB 102 Inventory* would result in inventories held for distribution at the Dorriggo construction workshop and the Parks and Wildlife Division's uniform store at Hurstville being valued.

#### (b) Financial instruments – 1 July 2005 first time adoption impacts

As mentioned in Note 1(c), the comparative information for 2004–05 for financial instruments has not been restated and is presented in accordance with previous AGAAP. AASB 132 and AASB 139 have been applied from 1 July 2005. Accordingly, the 1 July 2005 AEIFRS opening equity adjustments for the adoption of AASB 132/AASB 139 follow:

	Accumulated funds \$'000	Other reserves \$'000	Total \$'000
Refer to Note 21			
Total opening equity 1 July 2005	1,678,243	1,043,874	2,722,117
Interest free loan measured at fair value on initial recognition	1,325	–	1,325
Restated opening equity 1 July 2005 (after applying AASB 139)	1,679,568	1,043,874	2,723,442

#### (c) Grant recognition for not-for-profit entities

As a not-for-profit entity, DEC has applied the requirements in *AASB 1004 Contributions* regarding contributions of assets (including grants) and forgiveness of liabilities. There are no differences in the recognition requirements between the new AASB 1004 and AASB 2004. However, AASB 1004 may be amended by proposals in Exposure Draft (ED) 125 'Financial reporting by local governments' and ED 147 'Revenue from non-exchange transactions (including taxes and transfers)'. If the ED 125 and ED 147 approach is applied, revenue and/or expense recognition will not occur until either DEC supplies the related goods and services (where grants are in-substance agreements for the provision of goods and services) or until conditions are satisfied. ED 125 and ED 147 may therefore delay revenue recognition compared with AASB 1004, where grants are recognised when controlled. However, at this stage, the timing and dollar impact of these amendments is uncertain.

### Early adoption of standards – AASB 108 review

At reporting date a number of Australian Accounting Standards have been issued by the AASB but are not yet operative. These have not been early adopted by DEC. The following is a list of these standards and their possible impact on the financial report, if any, in the period of their initial application.

		AASB amendment	Application date of Standard	Application date for Department
<b>No impact on financial report</b>				
AASB 1	<i>First time adoption of AEIFRS</i>	2005–10	01/01/2007	01/07/2007
AASB 2	<i>Business combinations</i>	2005–6	01/01/2006	01/07/2006
AASB 101	<i>Presentation of financial statements</i>	2004–3	01/01/2006	01/07/2006
AASB 114	<i>Segment reporting</i>	2005–10	01/01/2007	01/07/2007
AASB 117	<i>Leases</i>	2005–10	01/01/2007	01/07/2007
AASB 119	<i>Employee benefits</i>	New Standard	01/01/2006	01/07/2006
AASB 121	<i>Effects of change in foreign exchange rates</i>	2006–1	01/01/2006	01/07/2006
AASB 124	<i>Related party disclosures</i>	2004–3	01/01/2006	01/07/2006

### Impact under evaluation

The effect of changes in the following standards are still being evaluated, as the effect of any change is not easily estimated:

AASB 7	<i>Financial instruments: Disclosure</i>	New Standard	01/01/2007	01/07/2007
AASB 132	<i>Financial instruments: Disclosure and presentation</i>	Various	01/01/2006	01/07/2006
AASB 139	<i>Financial instruments: Recognition and measurement</i>	2005–10	01/01/2007	01/07/2007

The following new standards have no application to DEC:

AASB 4	<i>Insurance contracts</i>
AASB 133	<i>Earnings per share</i>
AASB 1023	<i>General insurance contracts</i>
AASB 1038	<i>Life insurance contracts</i>

## 32. After balance date events

There are no known events that would impact on the state of affairs of DEC or have a material impact on the financial report.

### End of audited financial statements

## Other DEC financial information

### Grants to community organisations

For the period 1 July 2005 to 30 June 2006

Recipient	Amount (\$)	Program	Nature and purpose of grant
Australian Conservation Foundation	75,000	3	Community conservation organisation grant
Blue Mountains World Heritage Institute	50,000	4	Advice and design services
Cobowra Local Aboriginal Land Council	1,454	4	NAIDOC sponsorship
FAWNA (NSW)	2,000	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Fivebough & Tuckerbil Wetlands	23,700	1	Funding position of Natural Resource Officer
Friends of the Koalas Inc	1,350	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Great Lakes Wildlife Rescue	5,005	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Hunter Koala Preservation Society	1,500	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Leishman Associates – IAA	9,091	1	Sponsorship of the Australian Radiation Protection Society (non-profit association)
Macquarie Marshes Management Committee	20,182	4	Establishment funding for floodplain management of Macquarie Marshes
National Parks Association	20,000	4	Sponsorship of the Great Australian Bushwalk
Native Animal Trust Fund	8,450	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Nature Conservation Trust	220,000	4	Community conservation organisation grant
Nelson Bay Town Management	273	4	Contribution for whale festival
New England Ecotourism Society	3,000	4	Support for sustainable tourism program
Noelene Gordon	1,650	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Northern Rivers Wildlife Carers	5,900	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Red Ochre Events Inc	1,000	4	Donation to Aboriginal Festival
The Smith Family	10,909	2	Research and development grant for a textile recycling feasibility study
The Wetlands Centre Australia	36,137	1	Funding for alligator weed control
The Wetlands Centre Australia	33,953	1	Support for Ramsar Wetlands Conservation Program
Town With Heart	2,000	1	Contribution to Kurri Mural Project
Tweed Valley Wildlife Carers	5,050	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Ulitarra Conservation Society	2,144	1	Funding Indian Myna Action Group
Warrumbungle Landcare Group	5,000	4	Funding for fox baiting in the Warrumbungles
Wildlife Animal Rescue and Care	2,500	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
WIRES – Northern Rivers	5,700	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
WIRES – Woolgoolga	909	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
WIRES – Clarence Valley	1,818	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
WIRES – Coffs Harbour and District	1,818	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
WIRES – Woolgoolga	909	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna

Recipient	Amount (\$)	Program	Nature and purpose of grant
WIRES – Central Coast Branch	2,500	4	To help wildlife carers rescue, care for and rehabilitate sick, injured and orphaned protected native fauna
Wolli Creek Preservation	5,000	4	Publication costs for <i>Birds of Wolli Valley</i>
<b>Total grants</b>	<b>565,902.28</b>		

#### Key to programs

1. Environment protection and regulation
2. Sustainability programs
3. Policy and science
4. Parks and wildlife

## 2005–06 major works

Project	Cost to date* \$'000	Estimated completion
<b>Major new works</b>		
New park establishment costs	4,251	2008–09
Brigalow/Nandewar establishment	475	2009–10
Infrastructure improvements in national parks	6,490	2008–09
<b>Major works-in-progress</b>		
Circle of reserves around Sydney	600	2006–07
New parks in Hunter Valley	500	2007–08
Green Cities	740	2007–08
Establishment of private lands – western NSW	1,461	2007–08
Stockton Bight National Park development	240	2005–06
World Heritage Visitors Centre	300	2005–06
Establishment of new acquisitions	3,013	2007–08
Kooragang Island – wader bird habitat	973	2005–06
Pest weed and animal control	927	2006–07
Finalise Northern Regional Forest Agreement	10,120	2006–07
Land purchases – funded by grants and donations	22,225	2008–09
Conversion of vacant Crown Lands	4,109	2005–06
Improvements to major metropolitan parks	4,299	2005–06
Sewerage Upgrade Program – stages 1 and 2	22,614	2005–06
Land acquisition – open spaces	27,688	2006–07
Lane Cove National Park – upgrade visitors facilities	92	2005–06
Establishment of Jervis Bay National Park	18,459	2005–06
Land acquisition – Dunphy Wilderness	5,191	2005–06
<b>Total</b>	<b>134,767</b>	

There were no significant cost overruns in these projects.

\*Costs to date represent cumulative expenditures incurred by the formative agencies prior to the establishment of DEC on 23 September 2004.



## Employee liabilities

Liability as at 30 June 2006	\$'000
Long service leave*	46,882
On-cost long service leave	4,962
Recreation leave	24,376
On-cost recreation leave	1,549

\*DEC liabilities for long service leave are assumed by the Crown Entity.  
Long service leave is measured using the present value basis.

## Payment of accounts – performance indicators

In respect of trade creditor accounts paid on time, DEC's performance in each quarter of the 2005–06 financial year was as follows:

### Trade creditor 'accounts payable' balances each quarter for the financial year 2005–06

Quarter	Current (i.e. within due date) \$	Less than 30 days overdue \$	Between 30 and 60 days overdue \$	Between 60 and 90 days overdue \$	More than 90 days overdue \$
September	717,014	131,051	46,869	3,483	0
December	1,071,880	2,059,751	104,537	14,269	0
March	1,383,342	4,908,819	50,657	1,845	265
June	525,199	2,170,251	6,857	3,599	4,101

The main reasons for overdue accounts were:

- (a) minor purchases usually under \$10,000, not in contract where short payment terms (7 or 14 day) were indicated on the invoice (but not before invoicing) and no payment discounts were involved
- (b) invoices issued (often in the case of computer equipment) before delivery or installation
- (c) unsatisfactory supply or some other complication which occurred more frequently with significant and expensive purchases.

Quarter	Total accounts paid on time		Total amount paid	
	Target %	Actual %	\$	\$
September	85	89.17	47,956,062	53,781,589
December	85	69.37	22,232,842	32,051,263
March	85	75.40	32,913,667	43,654,773
June	85	85.06	72,641,777	85,401,664

The above figures also include the NSW Environmental Trust and Stormwater Trust.

Initiatives taken during the year to improve payment performance were:

- (a) an increase in online purchase order entry and issue
- (b) the increased use of corporate credit cards for local and minor purchases.

### Late payment of accounts

DEC was not required to pay interest to creditors due to the late payment of accounts during the year.

### Credit card certification

In accordance with Treasurer's Direction 205.01, it is certified that credit card usage by DEC officers has been in accordance with the appropriate government policies, Premier's Memoranda and Treasurer's Directions, and meets best practice guidelines issued by Treasury.

## Major assets

By virtue of its functions, the DEC asset base covers a wide range of fixed assets and other infrastructure which have been categorised as follows for accounting purposes:

### Land

Most of the land parcels in this category of assets are 'dedicated land' which includes national parks, nature reserves, historic sites and Aboriginal areas. A full list of dedicated and DEC-managed lands is included in Appendix 9.

### Buildings and improvements

This category of assets includes all buildings and improvements in use or temporarily out of use. Buildings number 1310 in total. Buildings with a replacement value of \$1 million or more are:

- Audley Office, Royal National Park
- DEC Lidcombe laboratories
- Discovery Centre, Botany Bay National Park
- Dorrigo Rainforest Centre
- Fitzroy Falls Visitor Centre, Morton National Park
- Fort Denison, Sydney Harbour National Park
- Gap Bluff officers' mess, Sydney Harbour National Park
- Goat Island amenities and ship repair building, Sydney Harbour National Park
- Greycliffe House, Sydney Harbour National Park
- Hartley Court House and Royal Hotel, Hartley Historic Site
- Jenkins Centre, Lane Cove National Park
- La Pérouse museum and gallery, Botany Bay National Park
- Long Tan residences, Scheyville National Park
- Quarantine Station, accommodation units and conference centre, Sydney Harbour National Park
- Sawpit Creek Office, Kosciuszko National Park
- Sea Acres Visitor Centre, Port Macquarie
- Snowy Mountains Visitor Centre, Jindabyne
- Throsby Park Homestead, Throsby Park Historic Site
- Western Regional Office, Broken Hill
- White Cliffs Visitor Centre, White Cliffs.

This category of assets also includes a number of heritage buildings in various locations, such as:

- Bare Island
- Goat Island
- Hartley Historic Site
- Hill End Historic Site
- Quarantine Station, Manly
- Rodd Island
- Barrenjoey, Port Stephens, Greencape and Cape Byron lighthouses.

In addition to buildings, this asset category includes such 'improvements' as picnic areas, campsites and lookouts. Major picnic areas and campsites (with a replacement value of \$750,000 or more) are located in Blue Mountains, Botany Bay, Cattai, Ku-ring-gai Chase, Georges River and Sydney Harbour national parks, as well as in Arakoon State Conservation Area and Western Sydney Regional Park.

## Roads and other access

Apart from roads of various construction, this category of assets includes access facilities such as fire trails, walking tracks, car parks and bridges which are DEC responsibilities. Roads and other access facilities with a replacement value of \$3 million or more are:

- Cambridge Plateau, Richmond Range National Park
- Camerons Corner Road, Sturt National Park
- Elliot Way, Kosciuszko National Park
- Geehi Walls Track, Kosciuszko National Park
- Guthega Road, Kosciuszko National Park
- Kiandra to Khancoban Road, Kosciuszko National Park
- Minnamurra Rainforest Walk, Budderoo National Park
- Mungo Brush Road, Myall Lakes National Park
- Olsens Road, Kosciuszko National Park
- Pocket Saddle Road, Woomargama National Park
- Port Phillip Road, Kosciuszko National Park
- Tantangara Road, Kosciuszko National Park
- Tin Min Road, Woomargama National Park
- Tweed Scenic Drive, Border Ranges National Park.

## Utilities and other infrastructure

This category of assets includes electricity reticulation, sewerage systems, levees and fences. Assets with a replacement value of \$1 million or more include sewage treatment plants in Kosciuszko National Park and water supply systems in Sydney Harbour, Lane Cove, Ku-ring-gai Chase, Gundabook and Yathong national parks.

## Motorised plant

The following items were valued at \$5,000 or more.

Location	Tractors	Graders	Caravans	Trailers	Boats	Others*	Total
Head office	1	0	0	1	0	0	2
Central Region	15	3	1	24	18	95	156
Southern Region	12	1	3	19	7	63	105
Western Region	23	9	1	25	1	20	79
Northern Region	40	2	3	33	17	88	183
EPRD**	0	0	0	0	0	0	0
Policy and Science	0	0	3	2	4	0	9
<b>Total</b>	<b>91</b>	<b>15</b>	<b>11</b>	<b>104</b>	<b>47</b>	<b>266</b>	<b>534</b>

\* Items such as loaders, bobcats, skidoos and ride-on mowers

\*\* Environment Protection and Regulation Division

## Consultancies

A consultant is an organisation or individual engaged for a defined period of time solely to provide an expert opinion or recommendation to DEC on a specific issue or task.

### Consultancies of \$30,000 or more

Consultant	Project description	Cost (\$)
CNF & Associates Pty Ltd	Improved frameworks for managing waste	31,650
Ian Grey Groundwater	Groundwater pollution	34,700
Price Waterhouse	Threatened species reform – special projects	50,000
Taylor Fry Pty Ltd	Threatened species reform – special projects	36,000
High Ground Consulting	Conservation strategies	60,000
University of Ballarat	Vegetation survey	33,400
J A Hunter Pty Ltd	Vegetation survey	31,091
Major Perspective	Aboriginal partnership and access policy	35,945
Macinante Consulting Pty Ltd	Assist in the preparation of the 2006 State of the Environment report	31,125
Ecosteps Pty Ltd	Assist in the preparation of the 2006 State of the Environment report	34,618
Charles Sturt University	Assist in the preparation of the 2006 State of the Environment report	37,000
Dept of Natural Resources	Coastal lakes economic studies	45,462
CSIRO	Provide advice on the metropolitan air quality study	40,000
Access Macquarie	Review of modelling days – Metrology Atmospheric Science	63,636
Spatial Vision Innovations Pty Ltd	Assist in information review of spatial information and analysis system	37,500
Spatial Vision Innovations Pty Ltd	Assist in data modelling – assets and integration with SAP	47,765
Godden Mackay Logan	Interpretation plan	35,000
<b>Subtotal</b>		<b>743,894</b>

### Consultancies less than \$30,000

Category	Number	Total cost (\$)
Finance and accounting	12	51,863
Information technology	11	73,923
Legal	3	9,671
Management service	25	220,456
Environment	281	1,187,873
Engineering	30	79,172
Training	1	736
<b>Subtotal</b>		<b>1,623,696</b>
<b>Total consultancies</b>		<b>2,367,590</b>

# Environment Protection Authority



CPO 6048 13  
Sydney NSW 2001

## INDEPENDENT AUDIT REPORT Environment Protection Authority

To Members of the New South Wales Parliament

### Audit Opinion

In my opinion, the financial report of the Environment Protection Authority (the Authority)

- presents fairly the Authority's financial position as at 30 June 2006 and its performance for the year ended on that date, in accordance with Accounting Standards and other mandatory financial reporting requirements in Australia, and
- complies with section 418 of the Public Finance and Audit Act 1983 (the Act) and the Public Finance and Audit Regulation 2005.

My opinion should be read in conjunction with the rest of this report.

### Scope

#### The Financial Report and Board's Responsibility

The financial report comprises the balance sheet, income statement, statement of changes in equity, cash flow statement and accompanying notes to the financial statements for the Authority, for the year ended 30 June 2006.

The members of the Board of the Authority are responsible for the preparation and true and fair presentation of the financial report in accordance with the Act. This includes responsibility for the maintenance of adequate accounting records and internal controls that are designed to prevent and detect fraud and error, and for the accounting policies and accounting estimates inherent in the financial report.

#### Audit Approach

I conducted an independent audit in order to express an opinion on the financial report. My audit provides reasonable assurance to Members of the New South Wales Parliament that the financial report is free of material misstatement.

My audit accorded with Australian Auditing Standards and statutory requirements, and I:

- assessed the appropriateness of the accounting policies and disclosures used and the reasonableness of significant accounting estimates made by the members of the Board in preparing the financial report, and
- examined a sample of evidence that supports the amounts and disclosures in the financial report.



An audit does not guarantee that every amount and disclosure in the financial report is error free. The terms 'reasonable assurance' and 'material' recognise that an audit does not examine all evidence and transactions. However, the audit procedures used should identify errors or omissions significant enough to adversely affect decisions made by users of the financial report or indicate that the Directors had not fulfilled their reporting obligations.

My opinion does not provide assurance:

- about the future viability of the Authority,
- that it has carried out its activities effectively, efficiently and economically, or
- about the effectiveness of its internal controls.

#### Audit independence

The Audit Office complies with all applicable independence requirements of Australian professional ethical pronouncements. The Act further promotes independence by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General, and
- mandating the Auditor-General as auditor of public sector agencies but precluding the provision of non-audit services, thus ensuring the Auditor-General and the Audit Office are not compromised in their role by the possibility of losing clients or income.

  
R. Hickey FCIS  
Director, Financial Audit Services

SYDNEY  
2 November 2006


## ENVIRONMENT PROTECTION AUTHORITY


# Financial statements

FOR THE YEAR ENDED 30 JUNE 2006

Pursuant to Section 41C (1B) and (1C) of the *Public Finance and Audit Act 1983* and Clause 11 (a) and (b) of the Public Finance and Audit Regulation 2005, we state that:

- (a) the accompanying financial statements have been prepared in accordance with the provisions of the *Public Finance and Audit Act 1983*, the Public Finance and Audit Regulation 2005 and the Treasurer's Directions
- (b) the statements exhibit a true and fair view of the financial position and transactions of the Authority
- (c) there are not any circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.

  
John Scanlon  
Chair, EPA Board  
27 October 2006

  
Anthony Wright  
Deputy Chair, EPA Board  
26 October 2006

*Start of audited financial statements*

## ENVIRONMENT PROTECTION AUTHORITY

**Income statement****FOR THE YEAR ENDED 30 JUNE 2006**

	Notes	Actual 2006 \$'000	Actual 2005 \$'000
<b>Revenue</b>			
Other revenue	2	64,019	63,813
<b>Total revenue</b>		<b>64,019</b>	<b>63,813</b>
<b>Expenses</b>			
Operating expenses			
Board member fees	3(a)	314	311
Other expenses	3(b)	63,705	63,502
<b>Total expenses</b>		<b>64,019</b>	<b>63,813</b>
<b>SURPLUS/(DEFICIT) FOR THE YEAR</b>		<b>—</b>	<b>—</b>

*The accompanying notes form part of these financial statements*

## ENVIRONMENT PROTECTION AUTHORITY

## Statement of changes in equity

FOR THE YEAR ENDED 30 JUNE 2006

	Notes	Actual 2006 \$'000	Actual 2005 \$'000
Net income recognised directly in equity		—	—
Surplus/(deficit) for the year		—	—
<b>Total recognised income and expense for the year</b>		<b>—</b>	<b>—</b>

*The accompanying notes form part of these financial statements*

## ENVIRONMENT PROTECTION AUTHORITY

## Balance sheet

AS AT 30 JUNE 2006

	Notes	Actual 2006 \$'000	Actual 2005 \$'000
<b>ASSETS</b>			
<b>Current assets</b>			
Cash			
Receivables			
<b>Total current assets</b>		–	–
<b>Non-current assets</b>			
Property, plant and equipment			
– Land and buildings			
– Plant and equipment			
<b>Total non-current assets</b>		–	–
<b>Total assets</b>		–	–
<b>LIABILITIES</b>			
Current liabilities			
Payables			
Provisions			
<b>Total current liabilities</b>		–	–
<b>Non-current liabilities</b>			
Provisions			
<b>Total non-current liabilities</b>		–	–
<b>Total liabilities</b>		–	–
<b>Net assets</b>		–	–
<b>EQUITY</b>			
Reserves		–	–
Accumulated funds		–	–
<b>Total equity</b>		–	–

*The accompanying notes form part of these financial statements*

## ENVIRONMENT PROTECTION AUTHORITY

## Cash flow statement

FOR THE YEAR ENDED 30 JUNE 2006

	Notes	Actual 2006 \$'000	Actual 2005 \$'000
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
<b>Payments</b>			
Employee related			
Grants and subsidies			
Other			
<b>Total payments</b>		—	—
<b>Receipts</b>			
Sale of goods and services			
Retained fees and fines			
Investment income			
Other			
Government contributions			
<b>Total receipts</b>		—	—
<b>NET CASH FLOWS FROM OPERATING ACTIVITIES</b>		—	—
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Proceeds from sale of land and buildings, plant and equipment and infrastructure systems			
Purchases of land and buildings, plant and equipment and infrastructure systems			
<b>NET CASH FLOWS FROM INVESTING ACTIVITIES</b>		—	—
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Proceeds from borrowings and advances			
Repayments of borrowings and advances			
<b>NET CASH FLOWS FROM FINANCING ACTIVITIES</b>		—	—
<b>NET INCREASE/(DECREASE) IN CASH</b>			
Opening cash and cash equivalents		—	—
Cash transferred in (out) as a result of administrative restructuring			
<b>CLOSING CASH AND CASH EQUIVALENTS</b>		—	—

*The accompanying notes form part of these financial statements*



## ENVIRONMENT PROTECTION AUTHORITY

## Notes to and forming part of the financial statements

## 1. Summary of significant accounting policies

## (a) Reporting entity

The Public Sector Employment and Management (Environment and Conservation) Order 2003 made on 24 September 2003 established a new Department of Environment and Conservation (DEC).

This was partly achieved by the abolition of the Environment Protection Authority (EPA) as a department.

As such, the EPA is no longer a separate department of the Crown.

However, a factor that had to be considered in the creation of DEC was the need to retain an independent role for the statutory body corporate of the EPA in taking legal actions, including the possible prosecution of State Government authorities and for most serious Tier 1 prosecutions. As a result, the Government decided to retain a separate legal entity that could take this legal action. It is important to recognise that the surviving statutory body known as the EPA with its Board is a legal mechanism only that operates within the confines of the environment protection legislation, such as the *Protection of the Environment Administration Act 1991*, in order to facilitate certain activities of DEC staff.

The EPA has no staff of its own, no material assets under its control and no material liabilities and will not receive a direct allocation from the Consolidated Fund to fund its operations. DEC has been providing services and resources free of charge for the EPA's operations.

While the activities of the EPA are fully integrated within DEC operations, as a statutory body the EPA is required to produce a separate financial report. The fair value of the expenditure of the EPA has been derived through an assessment by management of the resources consumed by DEC to enable the EPA to discharge its obligations. A notional grant has been provided by DEC as an offset.

This financial report has been authorised for issue by the Minister on 27 October 2006.

## (b) Basis of preparation

The EPA's financial report is a general purpose financial report which has been prepared in accordance with:

- applicable Australian Accounting Standards, which include Australian Equivalents to International Financial Reporting Standards (AEIFRS)
- the requirements of the *Public Finance and Audit Act 1983* and its Regulation.

Judgements, key assumptions and estimations management has made are disclosed in the relevant notes to the financial report.

All amounts are rounded to the nearest one thousand dollars and are expressed in Australian currency.

## (c) Comparative information

Comparative figures have been restated using the methodology described in 1(a).

## (d) The financial impact of adopting Australian Equivalents to International Financial Reporting Standards (AEIFRS)

In accordance with the requirements of *AASB 1: First-time adoption of Australian Equivalents to International Financial Reporting Standards* (AEIFRS), adjustments to the accounts resulting from the introduction of International Financial Reporting Standards have been applied retrospectively to 2005 comparative figures.

These accounts are the first financial statements to be prepared in accordance with AEIFRS.

The accounting policies set out below have been consistently applied to all years presented. As there was no adjustment in reported results when the company moved to AEIFRS, there is no need for a reconciliation of AEIFRS equity and profit for 30 June 2005.

The financial report of the EPA complies with all AEIFRS in their entirety.

## 2. Revenue

	2006 \$'000	2005 \$'000
<b>Other revenue</b>		
Grant from DEC	64,019	63,813
	<b>64,019</b>	<b>63,813</b>

### 3. Expenses

	2006 \$'000	2005 \$'000
<b>(a) Operating expenses</b>		
Board member fees	314	311
	<b>314</b>	<b>311</b>
<b>(b) Other expenses</b>		
Fees for service – Department of Environment and Conservation	63,705	63,502
	<b>63,705</b>	<b>63,502</b>
<b>TOTAL EXPENDITURE</b>	<b>64,019</b>	<b>63,813</b>

#### Audit fee for EPA

The audit fee has been included in the audit of the Department of Environment and Conservation

### 4. Expenditure by the Department of Environment and Conservation (DEC)

Total expenses relating to the EPA have been spent by DEC in a number of program areas. This expenditure is reported in Note 3. A description of each program, its objectives and the amounts expended follows.

#### Environment protection and regulation

A program to require and encourage environment protection across industry, government and the broader community.

#### Sustainability programs

A program to enable individuals, government, business and organisations to adopt actions that accelerate the shift towards environmentally sustainable practices for waste and resource use.

#### Policy and science

A program to ensure environment protection and conservation efforts by government, industry and the community are underpinned by sound policy and strong science.

Program	2006 \$'000	2005 \$'000
Environment protection and regulation	35,055	39,213
Sustainability programs	4,183	2,367
Policy and science	24,781	22,233
	<b>64,019</b>	<b>63,813</b>

### 5. Contingent liabilities

There are no known contingent liabilities that would impact on the state of affairs of the EPA or have a material impact on the financial report.

### 6. Early adoption of standards

At reporting date a number of Australian Accounting Standards have been issued by the AASB but are not yet operative. These have not been early adopted by the Authority. These standards have been assessed for their possible impact on the financial report, if any, in the period of their initial application. The assessment concluded that there will be no material impact.

### 7. After balance date events

There are no known after balance date events that would impact on the state of affairs of the EPA or have a material impact on the financial report.

#### End of audited financial statements

# Stormwater Trust



GPB 604 12  
Sydney NSW 2001

## INDEPENDENT AUDIT REPORT STORMWATER TRUST

To Members of the New South Wales Parliament

### Audit Opinion

In my opinion, the financial report of the Stormwater Trust:

- presents fairly the Trust's financial position as at 30 June 2006 and its performance for the period 1 July 2005 to that date, in accordance with Accounting Standards and other mandatory financial reporting requirements in Australia, and
- complies with section 418 of the Public Finance and Audit Act 1983 (the Act) and the Public Finance and Audit Regulation 2005.

My opinion should be read in conjunction with the rest of this report.

### Scope

#### The Financial Report and Trustees' Responsibility

The financial report comprises the balance sheet, income statement, statement of changes in equity, cash flow statement and accompanying notes to the financial statements for the Trust, for the period 1 July 2005 to 30 June 2006.

The Trustees of the Stormwater Trust are responsible for the preparation and true and fair presentation of the financial report in accordance with the Act. This includes responsibility for the maintenance of adequate accounting records and internal controls that are designed to prevent and detect fraud and error, and for the accounting policies and accounting estimates inherent in the financial report.

### Audit Approach

I conducted an independent audit in order to express an opinion on the financial report. My audit provides reasonable assurance to Members of the New South Wales Parliament that the financial report is free of material misstatement.

My audit accorded with Australian Auditing Standards and statutory requirements, and I:

- assessed the appropriateness of the accounting policies and disclosures used and the reasonableness of significant accounting estimates made by the Trustees in preparing the financial report, and
- examined a sample of evidence that supports the amounts and disclosures in the financial report.

An audit does not guarantee that every amount and disclosure in the financial report is error free. The terms "reasonable assurance" and "material" recognise that an audit does not examine all evidence and transactions. However, the audit procedures used should identify errors or omissions significant enough to adversely affect decisions made by users of the financial report or indicate that the Trustees had not fulfilled their reporting obligations.


My opinion does not provide assurance:

- about the future viability of the Trust,
- that it has carried out its activities effectively, efficiently and economically, or
- about the effectiveness of its internal controls.

#### Audit independence

The Audit Office complies with all applicable independence requirements of Australian professional ethical pronouncements. The Act further promotes independence by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General, and
- mandating the Auditor-General as auditor of public sector agencies but precluding the provision of non-audit services, thus ensuring the Auditor-General and the Audit Office are not compromised in their role by the possibility of losing clients or income.

  
R. Payne CPA  
Director, Financial Audit Services

SYDNEY  
24 October 2006

#### STORMWATER TRUST

## Statement by members of the Trust

In accordance with a resolution of the Stormwater Trust, we state that:

- (a) the accompanying financial statements exhibit a true and fair view of the financial position of the Stormwater Trust as at 29 June 2006 and the transactions for the period then ended
- (b) the financial statements have been prepared in accordance with the provisions of the *Public Finance and Audit Act 1983*, the *Public Finance and Audit Regulation 2005*, and the Treasurer's Directions.

Further, we are not aware of any circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.



**Lisa Corbyn**  
Chairperson

20 October 2006



**Garry Payne**  
Member

*Start of audited financial statements***STORMWATER TRUST****Operating statement****FOR THE PERIOD 1 JULY 2005 TO 29 JUNE 2006**

	Notes	2006 \$'000	2005 \$'000
<b>Revenue</b>			
Interest	2(f)	90	151
Other revenue	2(g)	71	85
<b>TOTAL REVENUE</b>		<b>161</b>	<b>236</b>
<b>Expenditure</b>			
Other operating expenses	3	1,177	1,092
Grants	2(d) & 4	1,352	1,498
<b>TOTAL EXPENDITURE</b>		<b>2,529</b>	<b>2,590</b>
<b>SURPLUS/(DEFICIT) FOR THE YEAR</b>		<b>(2,368)</b>	<b>(2,354)</b>

*The accompanying notes form part of these financial statements*



## STORMWATER TRUST

## Statement of changes in equity

FOR THE PERIOD 1 JULY 2005 TO 29 JUNE 2006

	Notes	2006 \$'000	2005 \$'000
Net income recognised directly in equity		–	–
Surplus /(deficit) for the year		(2,368)	(2,354)
Total recognised income and expense for the year	11	(2,368)	(2,354)
Effect of changes in accounting policy and corrections of errors		–	–
Accumulated fund		(2,368)	(2,354)

*The accompanying notes form part of these financial statements*

## STORMWATER TRUST

## Balance sheet

AS AT 29 JUNE 2006

	Notes	2006 \$'000	2005 \$'000
<b>Current assets</b>			
Cash assets	5	38	2,350
Receivables	6	77	59
<b>TOTAL ASSETS</b>		<b>115</b>	<b>2,409</b>
<b>Current liabilities</b>			
Payables	9	115	41
<b>TOTAL LIABILITIES</b>		<b>115</b>	<b>41</b>
<b>NET ASSETS</b>		<b>–</b>	<b>2,368</b>
<b>Equity</b>			
Accumulated funds		–	2,368
<b>TOTAL EQUITY</b>	11	<b>–</b>	<b>2,368</b>

*The accompanying notes form part of these financial statements*

## STORMWATER TRUST

## Cash flow statement

FOR THE PERIOD 1 JULY 2005 TO 29 JUNE 2006

	Notes	2006 \$'000	2005 \$'000
<b>Cash flows from operating activities</b>			
<b>Payments</b>			
Grants		(1,352)	(1,498)
Other		(1,103)	(1,331)
<b>Total payments</b>		<b>(2,455)</b>	<b>(2,829)</b>
<b>Receipts</b>			
Interest received		110	218
Other		33	99
<b>Total receipts</b>		<b>143</b>	<b>317</b>
<b>Net cash flows used in operating activities</b>	12	<b>(2,312)</b>	<b>(2,512)</b>
Net decrease in cash held		(2,312)	(2,512)
Cash at the beginning of the reporting period		2,350	4,862
<b>Cash at the end of the reporting period</b>	5	<b>38</b>	<b>2,350</b>

*The accompanying notes form part of these financial statements*

**STORMWATER TRUST**

# Notes to and forming part of the financial statements

## 1. Object of Trust

The objective of the Stormwater Trust ('the Trust') was to encourage and support improved urban stormwater quality management practices in order to improve the condition of the state's waterways. This was achieved through a combination of public education, stormwater management planning, piloting innovation and undertaking remedial actions. The Trust's activities promoted partnerships between the private and public sectors in meeting this objective.

The Trust commenced operation in October 1997.

The Trust wound down its operations during 2005–06 and was dissolved on 29 June 2006. Any unspent Trust funds have been transferred to the Department of Environment and Conservation on that date.

## 2. Summary of significant accounting policies

### (a) Reporting entity

The Stormwater Trust is a separate reporting entity.

These financial statements have been authorised for issue by the Trust on 20 October 2006.

### (b) Basis of preparation

The Trust's financial statements are a general purpose financial report prepared in accordance with:

- applicable Australian Accounting Standards, which include Australian Equivalents to International Financial Reporting Standards (AEIFRS)
- the requirements of the *Public Finance and Audit Act 1983* and Regulation
- the Treasurer's Directions.

Where there are inconsistencies between the above requirements, the legislative provisions have prevailed.

Judgements, key assumptions and estimations made by management are disclosed in the relevant notes to the financial statements.

All amounts are rounded to the nearest \$1,000 and are expressed in Australian currency.

### (c) Statement of compliance

The financial statements and notes comply with Australian Accounting Standards, which include AEIFRS.

This is the first financial report prepared based on AEIFRS, and comparatives for the year ended 30 June 2005 have been restated accordingly, unless otherwise permitted.

### (d) Grants

Grants approved but not paid for in the current financial year are treated as commitments against future funding provided by the NSW Government: refer to Note 10.

### (e) Accounting for the Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where:

- the amount of GST incurred by the agency as a purchaser that is not recoverable from the Australian Taxation Office is recognised as part of the cost of acquisition of an asset or as part of an item of expense
- receivables and payables are stated with the amount of GST included.

### (f) Cash and cash equivalents

Cash comprises cash on hand and bank balances within the Treasury Banking System.

Interest is earned on daily bank balances at the monthly average of NSW Treasury Corporation (TCorp) 11 am unofficial cash rate adjusted for a management fee to Treasury. The average interest rate during the year was 4.54% (4.33% in 2004–05) and the interest rate at the end the year was 4.75% (4.49% in 2004–05).

### (g) Income recognition

Income is measured at the fair value of the consideration or contribution received or receivable.

Income is recognised when the Trust has control of the goods or right to receive; it is probable that the economic benefits will flow to the Trust; and the amount of income can be reliably measured. All of the Trust's income arises from its operating activities.

When the unused part of a grant is returned to the Trust, it is recognised as other revenue.

**(h) Assistance provided by other organisations free of charge**

The maintenance of the Trust's accounting records and provision of other administrative services is provided by the Department of Environment and Conservation for no consideration.

**3. Other operating expenses**

	2006 \$'000	2005 \$'000
Fees for services rendered	1,136	955
Audit fees	8	8
Other operating expenses	33	129
	<b>1,177</b>	<b>1,092</b>

**4. Grants**

The following grants were paid during the financial year:

Grants to councils	382	1,378
Other	970	120
	<b>1,352</b>	<b>1,498</b>

**5. Cash assets**

Cash at the end of the reporting period as shown in the cash flow statement is reconciled to the related items in the balance sheet as follows:

Cash assets	38	2,350
	<b>38</b>	<b>2,350</b>

**6. Receivables**

Debtors	—	1
Prepayments	—	—
GST receivable	38	(1)
Interest receivable	39	59
	<b>77</b>	<b>59</b>

**7. Capital commitments**

There were no capital commitments at 29 June 2006 (nil in 2004–05).

**8. Bank overdraft**

The Trust does not have any bank overdraft facility.

**9. Payables**

Liabilities recognised for amounts due to be paid in the future for goods or services received, whether or not invoiced, are treated as either trade creditors, where the creditor is known with certainty, or as accrued expenses. Amounts owing to suppliers (which are unsecured) are settled in accordance with the policy set out in Treasurer's Direction 219.01.

If trade terms are not specified, payment is made no later than the end of the month following the month in which an invoice or a statement is received after delivery of the goods or services concerned. Treasurer's Direction 219.01 allows the Minister to award interest for late payment. No such interest was awarded during the period.

	2006 \$'000	2005 \$'000
Trade payables	0	3
Accrued expenses	115	38
	<b>115</b>	<b>41</b>



**10. Operating expenditure commitments**

	2006 \$'000	2005 \$'000
Trust commitments for the funding of stormwater initiatives are:		
Not later than one year	—	488
	—	<b>488</b>

**11. Changes in equity****Accumulated funds:****Balance at the beginning of the financial year**

AASB 139 first time adoption

**Re-instated opening balance**

Surplus/(deficit) for the year

	2,368	4,722
	—	
	2,368	
	(2,368)	(2,354)
<b>Balance at the end of the financial year</b>	<b>—</b>	<b>2,368</b>

**12. Reconciliation of net cash flows from operating activities to operating surplus/(deficit) from ordinary activities**

Surplus/(deficit) for the year	(2,368)	(2,354)
Increase/(decrease) in payables	74	(81)
Increase/(decrease) in provisions	—	(158)
Decrease/(increase) in receivables	(18)	81
<b>Net cash flows used in operating activities</b>	<b>(2,312)</b>	<b>(2,512)</b>

**13. Contingent liabilities**

There were no contingent liabilities as at 29 June 2006 (nil in 2004–05).

**14. Financial impact of adopting AIFRS**

The Stormwater Trust has applied the Australian Equivalents to International Financial Reporting Standards (AIFRS) for the first time in the 2005–06 financial report.

The Stormwater Trust has determined that there is no impact arising from the introduction of AIFRS with the exception of the following:

**Grant recognition for not-for-profit entities**

The Stormwater Trust, as a not-for-profit entity, has applied the requirements in *AASB 1004 Contributions* regarding contribution of assets (including grants) and forgiveness of liabilities. There are no differences in the recognition requirements between the new AASB 1004 and the previous AASB 1004. However, the new AASB 1004 may be amended by proposals in Exposure Draft *ED 125 Financial reporting by local governments* and *ED 147 Revenue from non-exchange transactions (including taxes and transfers)*. If the ED 125 and the ED 147 approach is applied, revenue and/or expense recognition will not occur until either the Trust supplies the related goods and services (where grants are in-substance agreements for the provision of goods and services) or until conditions are satisfied. ED 125 and ED 147 may therefore delay revenue and/or expense recognition compared with AASB 1004, where grants are recognised when controlled.

However, at this stage, the timing and dollar impact of these amendments is uncertain.

**15. Early adoption of standards**

At reporting date a number of Australian Accounting Standards have been issued by the AASB but are not yet operative. These have not been early adopted by the Trust. These standards have been assessed for their possible impact on the financial report, if any, in the period of their initial application. The assessment concluded that there will be no material impact.

**16. After balance date events**

The Trust wound up its operations on 29 June 2006. There are no known events that would impact on the financial report after this date.

This is the final financial report of the Stormwater Trust.

**End of audited financial statements**

# Appendices

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## 1. Statement of responsibility

As Director General, I have worked with other Executive members, principal officers and managers with responsibility for particular internal control processes to use these processes to provide reasonable assurance that DEC is achieving its objectives and using its resources efficiently. These processes include reporting to me and the Executive on aspects of organisational performance; controls on how expenditure and staff resources are managed; contracting out various independent external assessments of aspects of our work; and managing a program of internal audits that focuses on both operational and financial risk. This includes participating in an independently chaired statutory audit and compliance committee for the National Parks and Wildlife Service that reports to the Minister. For details of internal audits and external assessments, see page 86.

To the best of my knowledge, all these control processes have operated satisfactorily during the reporting year.



**LISA CORBYN**

**Director General**

## 2. Performance of senior staff

### Chief Executive

**Name:** Ms Lisa Corbyn  
**Position title:** Director General  
**Period:** 1 July 2005–30 June 2006  
**SES level:** 8  
**Remuneration:** \$335,201

During the year Ms Corbyn provided strong leadership, consolidation of the reforms undertaken in the setting up of the Department of Environment and Conservation, team building, and sound financial and program management. This year has seen the establishment and delivery of major new programs tackling some of the most significant environmental challenges across NSW.

### Results

- Worked with Aboriginal communities in new ways through the return of Biamanga and Gulaga national parks to their Aboriginal owners, the setting up of the Aboriginal Cultural Heritage Advisory Committee, delivery of key milestones in the Two Ways Together Culture and Heritage Action Plan, and initiating DEC's cultural awareness training program
- Delivered the City and Country Environment Restoration Program with key components including NSW RiverBank, rejuvenation of the Environmental Trust, funding for establishment of two new marine parks and the Native Vegetation Assistance Package
- Worked collaboratively with agencies in CEO clusters, and with catchment management authorities and the Natural Resources Commission to progress natural resources management and environmental reforms, including delivering the NRM Monitoring, Evaluation and Reporting Strategy
- Implemented a vigorous reform program of environmental legislation, including amendment to the Protection of the Environment Operations Act, and regulations on clean air, water and waste
- Implemented new conservation areas and approaches to add to the reserve system in western NSW in the Brigalow and Nandewar Community Conservation Area, at Yanga Station and in the Wetland Recovery Program
- Completed major strategic reviews to revise the long-term environmental strategies of Action for Air and the Waste Strategy 2006 and the discussion paper on the national chemical management framework
- Achieved DEC budget savings.



**BOB DEBUS**

**Minister for the Environment**

## Senior Executive Service officers

**Name:** Dr Tony Fleming  
**Position title:** Deputy Director General, Parks and Wildlife Division  
**Period:** 1 July 2005–30 June 2006  
**SES level:** 6  
**Remuneration:** \$267,300

The Director General has expressed satisfaction with Dr Fleming's performance throughout 2005–06. Dr Fleming has achieved the performance criteria contained in his performance agreement. He has commenced implementation of recently developed strategic frameworks for building and managing the protected area system. He has also commenced a detailed review of DEC's wildlife licensing and management functions. As Head of the National Parks and Wildlife Service within DEC, he has demonstrated a strong commitment to building the protected area system and managing the reserve system to an excellent standard.

### Results

- Finalised the DEC Future Directions for Protected Areas and Wildlife Management Strategy
- Continued to build the protected area system, including the addition of significant acquisitions in western NSW
- Implemented a park management program that identifies park values and management objectives as well as providing better resources and information for park managers
- Refined the asset maintenance system to ensure more effective implementation from 2007
- Finalised *Pests and weeds in NSW: Protecting our national parks*, demonstrating DEC's commitment to, and successes in, pest animal and weed management
- Handed back Biamanga and Gulaga national parks to their traditional owners
- Actively participated as the DEC member of the Marine Parks Authority, including progressing the creation of two new marine parks at Batemans Shelf and Manning Shelf
- Progressed the revitalisation of Sydney's national parks through major infrastructure renewal and restoration of historic heritage sites
- Ensured DEC undertook an active approach to fire management, including hazard reduction and trail maintenance programs, staff training and fire management planning and communications
- Implemented strong occupational health and safety programs for the Parks and Wildlife Division and achieved positive audit results
- Managed and participated in the National Parks and Wildlife Advisory Council and built a positive relationship with the extensive network of regional Advisory Committees.

**Name:** Mr Simon AY Smith  
**Position title:** Deputy Director General, Environment Protection and Regulation Division  
**Period:** 1 July 2005–30 June 2006  
**SES level:** 6  
**Remuneration:** \$253,552

The Director General has expressed satisfaction with Mr Smith's performance throughout 2005–06. Mr Smith has achieved the performance criteria in his performance agreement. Under his leadership, the Environment Protection and Regulation Division has maintained a credible system of regulation across DEC's wide range of environment protection and conservation responsibilities, advanced significant reforms and completed the restructuring that was initiated on DEC's formation.

### Results

- Supported the Minister in devising and implementing the \$439-million City and Country Environment Restoration Program, which includes significant increases in the Waste and Environment Levy to stimulate waste avoidance and recycling, and funding for a range of major new urban and rural environmental programs
- Established NSW RiverBank, a \$105-million market-based program for the purchase and management of water entitlements to protect the health of iconic inland wetlands, including the first purchase of water in the Lachlan River
- Established an enhanced waste regulation program to increase DEC's effectiveness in deterring illegal waste dumping and ensuring consistent compliance with environmental requirements in the waste industry
- Supported the Minister in advancing creation of a market-based system to stimulate conservation management on private land, called BioBanking, which included the introduction of legislation to establish the scheme into Parliament, and substantial work by five expert focus groups to develop operational aspects of the scheme
- Completed preparations allowing commencement of amendments to the threatened species legislation, including new offences, and provisions to allow biodiversity certification and release of a draft Priorities Action Statement that sets out where the state should focus its efforts on threatened species conservation
- Maintained DEC's highly regarded program of environmental regulation across air, water, noise and waste issues, including numerous successful prosecutions and completion of significant pollution reduction programs
- Expanded enforcement effort on threatened species conservation, including several successful prosecutions for threatened species offences
- Commenced a divisional 'people program' to invest in staff skills and performance management.

**Name:** Mr Jim Booth  
**Position title:** Executive Director, Policy and Science Division  
**Period:** 1 July 2005–30 June 2006  
**SES level:** 5  
**Remuneration:** \$206,101

The Director General has expressed satisfaction with Mr Booth's performance throughout 2005–06. Mr Booth has achieved the performance criteria in his performance agreement. He continues to deliver on a broad reform agenda, particularly in natural resources management, conservation and science. He has consolidated the Policy and Science Division and rebuilt economics expertise in the division.

## Results

- Developed DEC's Science Investment and Management Plan to ensure strategic investment in science is focused on key government objectives and links closely to the DEC Corporate Plan
- Led DEC's contribution to the development of the NRM Monitoring, Evaluation and Reporting Strategy, which describes a program for monitoring natural resources at a statewide scale for assessment against the government's targets for natural resource management
- Managed development of the draft *NSW State of the Environment 2006*
- Actively participated in the reform of the Clean Air (Plant and Equipment) Regulation and the review of threatened species legislation
- Finalised the interim update of Action for Air
- Chaired the natural resources subcommittee of the Executive to effectively manage DEC's commitments under natural resources management
- Delivered a final report on DEC's role in conservation on private land
- Finalised development of the Biodiversity Forecaster
- Continued to manage the successful restructure of the Policy and Science Division and build cross-branch relationships.

## 3. Principal officers

DEC's Executive, comprising 13 principal officers, had the following members on 30 June 2006:

### Director General

Ms Lisa Corbyn, BA, MPA

### Deputy Director General, Environment Protection and Regulation Division

Mr Simon Smith, BA (Hons)

### Deputy Director General, Parks and Wildlife Division

Dr Tony Fleming, BSc (Hons), PhD (Forestry)

### Executive Director, Botanic Gardens Trust

Dr Tim Entwistle, BSc, PhD (Botany)

### Executive Director, Corporate Services Division

Mr Arthur Diakos, BBus, FCPA

### Executive Director, Cultural Heritage Division

Mr Jason Ardler, BEc

### Executive Director, Legal Services

Ms Donna Campbell, LLB

### Executive Director, Strategy, Communication and Governance Division

Ms Sally Barnes, BA, DipEd, GradDip Information Sciences (Teacher Librarianship)

### Executive Director, Operations

Mr Joe Woodward, BSc, ME (Hons)

### Executive Director, Policy and Science Division

Mr Jim Booth, BAgSc, BSc (Hons)

### Executive Director, Sustainability Programs Division

Mr Tim Rogers, BEc, MAd

### Director Central, Parks and Wildlife Division

Mr Bob Conroy, BA, Dip EnvSt, MMgt

### Director Executive Services

Ms Susan Calvert, BSc (Hons), MEnvSc

## 4. EPA Board members' curricula vitae

### Chairman and member with expertise in environment protection policy

**Mr David Harley, AM** (attended 7 meetings) – from 1 July 2005 to 10 April 2006

Mr David Harley served as Chair of the Environment Protection Authority Board twice for a total of eight years before his resignation in April 2006.

A former Chair of the Sydney Water Board, Mr Harley was a member of the Sydney Water Inquiry and the NSW Government's Waterways Advisory Panel, and has held positions in international banking, trade and commerce.



## Deputy Chairman and member with experience in, or knowledge of, environmental aspects of agriculture, industry or commerce

**Mr Tony Wright, Dip Tech, MBA** (attended 10 meetings)

Mr Tony Wright is Managing Director of Wright Corporate Strategy Pty Ltd, Chair of the State Water Corporation and Chair of Biotrack Australia Pty Ltd. He also chairs the NSW State of the Environment Advisory Council and the Extended Producer Responsibility Expert Reference Group. Mr Wright is a past Chair of Environment Business Australia and a past Director of the Cooperative Research Centre for Waste Management and Pollution Control.

## Director General, Department of Environment and Conservation

**Ms Lisa Corbyn, BA, MPA, FIPAA** (attended 11 meetings)

Ms Lisa Corbyn was appointed Director General of the Department of Environment and Conservation when it was formed in September 2003. Ms Corbyn was also Chief Executive Officer of the Sydney Catchment Authority from September 2003 to February 2005. Prior to that, she held the position of Director General of the NSW Environment Protection Authority from November 2000. Ms Corbyn is a Commissioner of the Murray–Darling Basin Commission and a member of the Council on the Cost and Quality of Government.

Ms Corbyn has had a varied career as a senior manager in both the public and private sectors in Australia where she has worked for the NSW Ministry of the Environment, AWA Ltd, the Sydney Water Board and the NSW Department of Environment and Planning. Prior to moving to Australia, Ms Corbyn worked for over 10 years for the United States Environmental Protection Agency, primarily in water programs.

## Members with experience in, or knowledge of, nature conservation or environment protection

**Dr Judy Henderson, AO, MBBS (FRACP)** (attended 10 meetings)

Dr Judy Henderson is Chair of the Northern Rivers Catchment Management Authority, Chair of the Amsterdam-based Global Reporting Initiative, Chair of the Centre for Australian Ethical Research and a former Commissioner on the World Commission on Dams. She is the previous Chair of Oxfam International and a former member of the Board of Greenpeace International.

**Mr Peter Prineas, BA, LLB** (attended 11 meetings)

Working with community environmental organisations has given Mr Peter Prineas wide experience in environmental policy. He has served as Chair of the Nature Conservation Council of NSW and Director of the National Parks Association of NSW. Mr Prineas has also contributed to government bodies including the Licence Regulator for urban water utilities and the National Parks and Wildlife Advisory Council.

## Member with experience in, or knowledge of, environmental aspects of agriculture, industry or commerce

**Dr John Keniry, AM, BSc (Hons), PhD** (attended 10 meetings)

Dr John Keniry chairs several bodies, including Ridley Corporation Ltd and the Scientific Advisory Council to the NSW Minister for Primary Industries. He is a Fellow of the Royal Australian Chemical Institute and the Academy of Technological Sciences and Engineering and was awarded a Centenary Medal in 2003. Dr Keniry is Past Chairman of the Livestock Export Review, the National Registration Authority for Agricultural and Veterinary Chemicals, and Unisearch Ltd.

## Member with experience in environmental science

**Mr Bob Junor, HDA, BA** (attended 11 meetings)

Mr Bob Junor is a former Commissioner and Chief Soil Conservationist with the Soil Conservation Service of NSW. Mr Junor headed the Community Advisory Committee of the Murray–Darling Basin Commission from 1992 to 1995. He is a natural resources management consultant, undertaking strategic planning, environmental audits and land management consultancies. Mr Junor also chairs the Sydney Metropolitan Catchment Management Authority.

## Members with expertise in regional environmental issues

**Ms Yvonne Stewart** (attended 5 meetings) – from 1 January 2006

Ms Yvonne Stewart chairs the Arakwal National Park Management Committee and the Cape Byron Headland Trust Reserve, and is Deputy Chair of DEC's Aboriginal Cultural Heritage Advisory Committee. She was a member of the Department of Lands Water Sharing Committee and is actively involved with the Byron Shire Council Aboriginal Consultative Committee in both environmental management issues and plans of management.

Ms Stewart was the recipient of a NSW Government Heritage Volunteer Award in 2004 for her work in promoting and protecting Aboriginal culture and involving Aboriginal people in the management of national parks.

**Dr Colleen Watts, OAM, BScAgr (Hons), M Phil, PhD** (attended 5 meetings) – from 1 July 2005 to 16 December 2005

Dr Colleen Watts has qualifications in Agricultural Science and Limnology, is a beef producer on the Central Tablelands of NSW and is a medical practice manager. Dr Watts has been actively involved in regional environmental work for many years, mainly through Landcare and the Carcoar Dam Catchment Management Committee. She is currently a national councillor on the Australian Conservation Foundation, the secretary of the Lachlan Macquarie Landcare Executive Committee and a member of the Central Tablelands Landcare Management Committee.

## Member with expertise in environmental law and an academic employed in a NSW tertiary institution

**Professor Gerry Bates, LLB (Hons), PhD (Birm)**  
(attended 9 meetings)

Dr Gerry Bates teaches various undergraduate and postgraduate courses in environmental law at a number of universities, including the Australian Centre for Environmental Law, University of Sydney; the Australian National University, Canberra; and the University of NSW. He has published extensively on environmental law, including the standard text *Environmental Law in Australia*. Dr Bates was formerly leader of the Greens in the Tasmanian State Parliament.

## Members with expertise in local government matters

**Councillor Genia McCaffery, BEc (Hons)** (attended 3 meetings) – from 14 March 2006

Councillor Genia McCaffery is the Mayor of North Sydney and President of the NSW Local Government Association. She has worked for the Department of Labour and Immigration and as a researcher for the National Trust and undertaken work on youth issues, unemployment and public advocacy. Councillor McCaffery is a member of the Sydney Metropolitan Catchment Management Authority Board, the Environmental Trust and the Natural Resources Advisory Council.

**Emeritus Mayor Peter Woods, OAM, JP BA, MLitt, CertCommMed, FAICD, MACE** (attended 5 meetings)  
– from 1 July 2005 to 16 December 2005

Mr Peter Woods was President of the Local Government Association of NSW from 1990 to 2002. The long-term Mayor of Concord until December 2000, he was elected to the new City of Canada Bay Council and retired in March 2004. Mr Woods chairs the Local Government Superannuation Scheme and is a director of Chifley Financial Services, Local Government Financial Services and Futureplus Financial Services. He was also President of the Australian Local Government Association, a member of the Council of Australian Governments and a member of several Ministerial Councils.

## 5. Significant statutory bodies and advisory committees

### Significant committees advising DEC

#### Aboriginal Cultural Heritage Advisory Committee

The Aboriginal Cultural Heritage Committee, appointed by the Minister for the Environment in March 2006, is DEC's principal advisory body on Aboriginal cultural heritage. The committee contributes to the development of statewide policies and programs on, and approaches to, managing Aboriginal cultural heritage.

Viola Brown  
Robert Burgess  
Glenda Chalker  
Leslie Phillip Duncan (Chair)  
Lavinia Duroux  
Mary Duroux  
James Ingram  
Maureen O'Donnell  
Victor Perry  
Stephen Ryan  
Yvonne Stewart (Deputy Chair)

#### Animal Ethics Committee

Mark Conlon, DEC (Chair)

#### Veterinarians

Robert Johnson, South Penrith Veterinary Clinic  
Leslie Reddacliff, Department of Primary Industries

#### Researchers

Tanya Leary, DEC  
Dan Lunney, DEC

#### Welfare

Chris Coddington, RSPCA  
Tony Gregory, Project Jonah

#### Independents

Darrill Clements, public relations consultant (appointed November 2005)  
David Hodgkinson, grazier (until September 2005)  
Karen Lambert, architect

#### Arakwal National Park Management Committee

Jan Barham  
Lorraine Harding  
Mark Johnston, DEC  
Lorna Kelly (deceased)  
James Law (resigned)  
Dulcie Nicholls  
Yvonne Stewart (Chair)  
Linda Vidler

## Beachwatch Advisory Committee

Paul Byleveld, NSW Health  
 Bernard Carlon, Director Business and Community Programs, DEC (Chair)  
 Dr Rex Campbell, Surfrider Foundation  
 Graham Cassidy, Australian Professional Surfers Association  
 David Harrison, Australian Yachting Federation  
 Councillor Patricia Harvey, Sydney Coastal Councils  
 Colin Huntingdon, Total Catchment Management  
 Colin Lennox, Oz Green (representing the Nature Conservation Council of NSW)

## Cape Byron State Conservation Area Trust

Jan Barham  
 Mark Johnston, DEC  
 Sean Kay  
 Lorna Kelly (deceased)  
 Tony McCabe  
 Merran Morrison  
 Yvonne Stewart  
 Linda Vidler

## Kangaroo Management Advisory Panel

### Aboriginal representative

Les Trindall, NSW Aboriginal Land Council

### Animal welfare and conservation groups

Steve Coleman, NSW RSPCA  
 Dr Tony English, Australian Veterinary Association  
 Vacant, Dubbo Field Naturalists and Conservation Society Inc.  
 Vacant, Humane Society International

### Kangaroo industry representatives

Michael Cavanagh, Kangaroo Industries Association of Australia  
 Mike Mulligan, Australian Game Meat Producers Association  
 Vacant, Professional Kangaroo Cullers Association

### Landholders

Rosemary Barnes, NSW Farmers' Association  
 Sandy Bright, Pastoralists Association of West Darling  
 Marie Russell, Rural Lands Protection Board

### Government agencies

Joshua Gilroy, DEC (Chair)  
 Nicole Payne, DEC  
 Geoff Woods, NSW Department of Primary Industries

## Load-based Licensing Technical Review Panel

### DEC representatives

Mark Gifford, Director Reform and Compliance (Chair)  
 Dr Keith Osborne, Environmental Science

### DEC Director General's nominee (independent)

Dr John Carras, CSIRO Energy Technology

### Industry representatives

Dr Richard Benson, Qenos Pty Ltd  
 Peter Stephenson, Stephenson Environmental Management Australia

### Environment groups representative

Professor Donald White, Nature Conservation Council of NSW

### Local government representative

Vacant

## Menindee Aboriginal Elders Council

A Memorandum of Understanding has been established between DEC and the Menindee Aboriginal Elders Council to cooperatively manage Kinchega National Park. DEC consults with the council on the general management of the park, and assists it with the protection, management and interpretation of Aboriginal cultural sites in the national park and the Menindee area.

### Elders

Evelyn Bates  
 Harold Bates  
 Isobel Bennett  
 Patricia Doyle  
 Noeline Ferguson  
 Marietta Files  
 Lorraine King  
 Patricia Quayle  
 William Riley  
 Eileen Williams  
 Ricky Williams

### Councillors

Leslie Bennett  
 Marindah Doyle

## Mount Grenfell Historic Site Board of Management

Peter Dykes  
 Keith Hampton  
 Peter Harris  
 Faye Johnston  
 Richard Kennedy  
 Elaine Ohlsen  
 Isabel Pretty  
 Neville Strachan  
 Phillip Sullivan (Chair)  
 Gwen Troutman  
 Dennis Williams  
 Steve Wolter, DEC

## Mutawintji Board of Management

Richard Anderson  
 Badger Bates  
 Harold John Bates Jnr  
 William Bates  
 Barbara Clark  
 Adrian Davey  
 Norma Dutton  
 Walter Dutton  
 Mary Ann Hausia  
 Doris Hunter  
 Edna Hunter  
 Elizabeth Hunter  
 Robert Hunter  
 Sky Kidd  
 Terry Korn, DEC  
 Paul O'Connor  
 Dulcie O'Donnell  
 Kim O'Donnell (Chair)  
 Maureen O'Donnell  
 Gerald Quayle  
 Anthony Pease  
 William Riley  
 Patricia Whyman

## Mungo National Park Joint Management Advisory Committee

The three Aboriginal tribal groups in the Willandra Lakes Region World Heritage Area formed an Elders Council and, following consultation with DEC, it was decided to set up the committee to jointly manage Mungo National Park. The committee consists of a majority of traditional landowners who advise DEC on management of the park.

Jean Charles  
 Jo Gorman, DEC  
 Maryann Humphreys  
 Noel Johnston  
 Laurence Jones  
 Danny Kelly  
 Faye Kennedy  
 Roy Kennedy  
 Ann Kiely  
 Darryl King  
 Steve Millington, DEC  
 Junette Mitchell  
 Gary Pappin  
 Mary Pappin (Chair)  
 Alan Putil  
 Geoff Rodda  
 Joan Slade  
 Des Wakefield  
 Ian Wakefield  
 Martin Westbrooke  
 Lottie Williams

## National Parks and Wildlife Advisory Council

Dr Geoff Cary, Australian National University  
 Christine Ferguson, NSW Aboriginal Land Council  
 Dr Tony Fleming, Deputy Director General, Parks and Wildlife Division, DEC  
 Councillor Robert Gledhill, Local Government and Shires Associations  
 Dr Ronnie Harding, University of NSW  
 Dr Bruce Hayllar, University of Technology Sydney  
 Dr David Hodgkinson, NSW Farmers' Association (until September 2005)  
 Diana Hoffman, NPW Advisory Committee, Western (Chair)  
 Nick Jacomas, NPW Advisory Committee, Central  
 Jane Judd, Nature Conservation Council of NSW  
 Ron Mathews, 4 Wheel Drive Clubs of NSW (resigned)  
 Councillor Genia McCaffery, Local Government and Shires Associations  
 Dr George McKay, NPW Advisory Committee, Northern (Deputy Chair)  
 Ken Prendergast, NPW Advisory Committee, Southern  
 Anne Reeves, National Parks Association of NSW  
 Jean Rice, Australian International Council on Monuments and Sites  
 John Verhoeven, Department of Natural Resources (resigned)  
 Dr Kent Williams, scientific qualifications associated with conservation of nature

## National Parks and Wildlife Regional Advisory Committees

### Blue Mountains Region

Warwick Armstrong  
 Tracey Austin  
 Joseph Banffy  
 Elizabeth Black  
 Nicola Bowskill (resigned)  
 Robyn Bushell  
 Roy Cameron (resigned)  
 Grahame Douglas  
 Helen Drewe  
 Andy McQueen (Chair)  
 Fiona Meller  
 Ngulla Murrandah  
 Beth Rushton  
 Bill Shields  
 Chris Tobin  
 Jack Tolhurst  
 Ian Tucker

### Central Coast Hunter Range Region

Kim Baillie  
 Daryl Bower (Chair)  
 Jodi Cameron  
 Shane Geerin  
 Narelle Howard  
 Nick Jacomas  
 Dellas Johnson  
 Robert Kelly  
 Desmond Mills  
 Christine O'Brien  
 Andrew Paul  
 Stephen Talbot  
 Ian Webb  
 Trevor Woolley

### Far South Coast Region

Michael Darcy  
Chris Kowal  
Catherine Lawler  
Mitchell Litchfield  
Shane McAlister  
Fiona McCrossin  
Denise Robin (resigned)  
Kay Rogers  
Wendy Rose (resigned)  
Robert Ross (Chair)  
David Shaw  
Alexander Sherriff  
Frank Slabb  
Yvonne Thomson  
Josie Walcott  
David Wauchope  
Douglas Willcoxson

### Far West Region

Michael Anderson (resigned)  
Peter Beven  
Beryl Carmichael  
David Croft  
Geoffrey Davis  
James Graham  
Diana Hoffman (Chair)  
Vicki Jackson  
Dick Kelly  
Thomas Kennedy  
Dorothy Kiely  
Michael McCulkin  
Frances McKinnon  
Maureen O'Donnell  
Peter Sullivan  
Louise Turner (resigned)  
Arthur Vann  
Brian Wakefield (resigned)

### Hartley Historic Site

Krystina Campbell  
Roger Clarke (resigned)  
Margaret Combs  
Helen Dreves  
Clare Evans  
Ross Fragar  
Annette Gilbey  
Cheryl Kenny  
Marian Kinnear  
John Luchetti  
Gerard Martin  
Malcolm McDonald  
Robert Morris (Chair)  
Ngulla Murrandah  
David Peters  
Chris Tobin

### Hunter Region

Leonard Anderson  
John Asquith  
Helen Brown (Chair)  
Viola Brown  
John Clarke  
Trevor Connell  
Michael Elfick  
Joachim Engel  
Margaret Francis  
Sonia Hornery  
Suzanne Landers  
George McKay  
Christine Prietto  
Gerard Tuckerman

### Mid North Coast Region

Megan Benson (resigned)  
Leonard Blacklow  
John Clark  
Janet Cohen (resigned)  
Helen Hannah  
Franklin Harrison (Chair)  
Philip Holberton  
Margaret Howard  
Max Ingram  
Isabelle Lee  
Gary Morris  
Cameron Price  
Barry Ramke  
Steve Read  
Leslie Ridgeway (resigned)  
Clark Valler

### North Coast Region

Martyn Blake (resigned)  
Barbara Fahey (Chair)  
Robin Heath  
Marie Howlett  
Kay Jeffery  
Brad Lewis  
Joy Mathews (deceased)  
Peter Morgan  
Judith Mortlock  
Paul Parramore  
Warwick Roche  
Peter Smith  
James Tedder  
Bridget Walker

### Northern Plains Region

Meryl Dillon  
Sandy Findlay  
Jane Harding  
Margaret Harris  
Gillian Hogendyk  
Janis Hosking (transferred to Upper Darling Advisory Committee)  
Jane Judd  
Christopher Lord  
Geoffrey Mitchell  
Ken Rogers (Chair)  
Maureen Sulter  
David Toynton  
Joan Treweweke  
Alfred Trindall  
John Whitehead

### Northern Rivers Region

Harry Boyd  
James Brideson  
Rod Caldicott  
Trevor Close  
David Cook (resigned)  
Raylee Delaney  
Richard Gates (Chair) (resigned)  
Anthony Gleeson  
Earle Grundy  
Sarah Harris  
Jennifer Hoff (resigned)  
Douglas Jardine  
Sharon McGrigor  
Hugh Nicholson  
Jeanette Olley  
Stanley Taylor  
Max Willoughby

### Northern Tablelands Region

Clive Ahoy (resigned)  
Kate Boyd  
Sandy Butler  
Lynne Hosking  
Suzanne Hudson  
John MacFarlane  
Steve Mephram  
Peter Metcalfe  
Nicholas Reid (Chair)  
Dianne Roberts  
Timothy Scrace  
Allen Strudwick  
John Taylor

### Snowy Mountains Region

Robert Creelman  
Euan Diver  
Gaynor Epstein  
James Hart  
John Hood (Chair)  
Noreen Pendergast  
Anthony Seldon  
Rae Solomon-Stewart  
Diane Thompson  
Jan Walker  
Geoffrey Waters  
Iris White

### South Coast Region

William Barnetson  
William Bean  
Helen Bell (resigned)  
Frances Bray  
Noel Butler  
Courtney Fink (resigned)  
Karen Guymer (resigned)  
Jack Hampton  
John King  
Donald Kowalczyk  
Kevin Mills (Chair)  
Robert Pallin  
David Phelps  
David Tranter  
Vic Walker  
Joyce Wheatley  
Pia Winberg

### South West Slopes Region

Janet Anderson  
Robyn Barker  
Coral Bulger  
David Campbell  
Timothy Cathles  
Adrian Davey  
Paul Davies (Chair)  
Rachael Eggins  
Ramsay Freeman  
Susan Moore  
Kenneth Prendergast  
Gerry Proft  
Roger Quarterman  
Maurice Sexton  
Peter Southwell  
Jacqueline Stol  
Mary Williams (resigned)



**Sydney Region**

Simon Balderstone  
 Penny Carl-Nelson  
 Kevin Cramer  
 Barbara de Rome  
 Brigid Dowsett  
 Denis Foley  
 Geoff Gougeon  
 Colin Hesse  
 Garry McIlwaine (Chair)  
 Zenon Michniewicz  
 Susan Moylan-Coombs (resigned)  
 Gary Peters  
 Omar Seychell  
 Barbara Shaffer  
 Tabatha Timbery-Cann (resigned)  
 Sally Whitelaw (resigned)  
 Allan Young

**Sydney North Region**

Angelo Baldo  
 David Bentham  
 Trevor Brown  
 Diane Campbell  
 Paul Coe  
 Dave Ella  
 Patricia Giles (Chair)  
 Kirsten Hartshorne  
 Penny Holloway  
 Anntonette Joseph  
 Doug MacDonald  
 Robert Salt  
 Grant Stone  
 David Tribe

**Sydney South Region**

Sheelah Boleyn (Chair)  
 Glenda Chalker  
 Phillip Costa  
 Sharyn Cullis  
 Joanne Daly  
 Brian Everingham  
 Nicholas Gill  
 Anthony Kent  
 Martyn Kiellor  
 Linda Lacey (resigned)  
 Philip Sansom  
 Robert Spenser  
 Peter Stitt  
 Miriam Verbeek (resigned)  
 Shayne Williams  
 Mark Wood

**Upper Darling Region**

Michael Brown  
 Sally Bryant (resigned)  
 Catherine Cooper  
 Michael Davis  
 Douglas Egan  
 Kiersten Griffiths (resigned)  
 Cecily Hampton  
 Philip Hams (resigned)  
 Janis Hosking (transferred from Northern Plains Advisory Committee)  
 Philip Johnston  
 Karen Kneipp  
 Wayne Leigh  
 Robyn Martin (resigned)  
 Steve Meredith  
 Anthony O'Halloran  
 Sharron Ohlsen (resigned)  
 Isabell Pretty  
 Marie Russell (Chair)

**Western Rivers Region**

David Carter  
 Juliet Corish  
 Syd Craythorn (Chair)  
 Colin Ferguson  
 Yvonne Hutton  
 Cecilia Kinross  
 Bill Kite  
 Ian Lockhart  
 Bill Moller  
 Lilian Parker (resigned)  
 Nerida Reid  
 Mike Schultz  
 Roy Stacy  
 Ian Thompson  
 Susan Wakefield  
 Graham Williams  
 James Williams

**Pilliga Nature Reserve****Aboriginal Consultative Committee**

The committee comprises two Elders, or community representatives endorsed by the Elders, for each of the Coonabarabran, Narrabri and Gunnedah communities. Under a Memorandum of Understanding, DEC works in partnership with the committee to manage the nature reserve.

Ellen Draper  
 Michael Horne  
 Margaret Leslie  
 Robert Miller  
 Elizabeth Niddrie  
 William Robinson  
 Maureen Sulter  
 Danny Trindall  
 Sylvia Trindall

## DEC membership of other significant statutory bodies

Jason Ardler, Executive Director, Cultural Heritage Division	Heritage Council of NSW (alternate)
Bernard Carlon, Director Business and Community Programs	NSW Council on Environmental Education
Lisa Corbyn, Director General	Council on the Cost and Quality of Government Environmental Trust Environment Protection Authority Board Heritage Council of NSW Murray–Darling Basin Commission Natural Resource Advisory Council
Dr Tim Entwisle, Executive Director Botanic Gardens Trust	Royal Botanic Gardens and Domain Trust
Dr Tony Fleming, Deputy Director General, Parks and Wildlife Division	Lord Howe Island Board Marine Parks Authority Nature Conservation Trust
Dr David Keith, Principal Research Scientist	NSW Scientific Committee
Craig Lamberton, Director Specialised Regulation	Radiation Advisory Council
Bob Makinson, Coordinator, Centre for Plant Conservation	NSW Scientific Committee
Liz Moore, Manager Chemicals Policy Unit	Hazardous Chemicals Advisory Committee
Tim Rogers, Executive Director, Sustainability Programs Division	State Contracts Control Board
Dr Todd Soderquist, Senior Threatened Species Officer	NSW Scientific Committee
Dr Lynn Webber, Manager Conservation Partnerships	Nature Conservation Trust NSW Council on Environmental Education

## DEC membership of significant interdepartmental committees

Jason Ardler, Executive Director, Cultural Heritage Division	NSW Two Ways Together Coordinating Committee NSW Two Ways Together Culture and Heritage Cluster NSW Two Ways Together Economic Development Cluster NSW Two Ways Together Families and Communities Cluster NSW Two Ways Together Justice Cluster State Heritage Register Committee
Sally Barnes, Executive Director, Strategy, Communication and Governance Division	Environment Protection and Heritage Council – Ministerial Council Standing Committee Natural Resource Management – Ministerial Council Standing Committee Wetland Recovery Plan Project Team
Jim Booth, Executive Director, Policy and Science Division	Australian Biosecurity System Taskforce Energy Savings Fund Advisory Committee Natural Resource Information Needs Committee Natural Resources Management Joint Steering Committee Natural Resources Policy and Programs Committee Water Savings Fund Advisory Committee
Lisa Corbyn, Director General	CEO Forum on Economic Development CEO Group on Aboriginal Affairs CEO Group on Counter Terrorism CEO Group on Greenhouse CEO Group on Metropolitan Water CEO Group on Sustainability Chief Executive Committee Community Conservation Council Metropolitan Strategy CEO Committee Natural Resources and Environment CEO Cluster Group and Water CEO's subcommittee Planning CEO Forum
Arthur Diakos, Executive Director, Corporate Services Division	NSW Treasury Managed Fund Advisory Board
Dr Tony Fleming, Deputy Director General, Parks and Wildlife Division	Parks Heads of Agencies
Tim Rogers, Executive Director, Sustainability Programs Division	CEO Group on Sustainability Working Party Environmental Trust Marine Parks Subcommittee Environmental Trust Waste Subcommittee
Simon Smith, Deputy Director General, Environment Protection and Regulation Division	Planning Reform Reference Group
Joe Woodward, Executive Director Operations, Environment Protection and Regulation Division	Environmental Trust Restoration and Rehabilitation Technical Committee Intensive Agriculture Consultative Committee NSW National Oil Spill Plan Executive Committee State Emergency Management Committee

## 6. Staff statistics

### Employees by classification

The numbers reported are equivalent full-time (EFT) employees.

<b>Environment protection officers</b>	<b>EFT 30 June 2004</b>	<b>EFT 30 June 2005</b>	<b>EFT 30 June 2006</b>
EPO 1	7	5	2
EPO 2	25	51	45
EPO 3	41	57	66
EPO 4	36	34	47
EPO 5	56	58	63
EPO 6	42	35	46
EPO 7	58	68	75
EPO 8	124	116	138
EPO 9	92	123	158
EPO 10	107	95	105
EPO 11	56	56	49
EPO 12	58	56	66
EPO 13	46	60	71
EPO 14	7	4	3
Senior officers	30	34	35
Senior executive service	20	15	14
Other*	483	249	163
<b>Total</b>	<b>1,288</b>	<b>1,116</b>	<b>1,146</b>

\* 'Other' includes clerical staff, departmental professional officers, project research officers and technical officers

<b>Parks and wildlife officers</b>	<b>EFT 30 June 2004</b>	<b>EFT 30 June 2005</b>	<b>EFT 30 June 2006</b>
Area managers	77	78	82
Field officers	564	563	603
Pilots/crew	6	5	5
Project officers/research scientists	101	93	76
Rangers/senior rangers	253	256	273
Tradespersons	7	7	7
Senior officers	21	23	25
Senior executive service	5	6	6
Other*	367	370	429
<b>Total</b>	<b>1,401</b>	<b>1,401</b>	<b>1,506</b>

\* 'Other' includes clerical staff, departmental professional officers, engineers, general service officers, interpretive assistants and technical officers, survey drafting officers and trainees

<b>Botanic Gardens officers</b>	<b>EFT 30 June 2004</b>	<b>EFT 30 June 2005</b>	<b>EFT 30 June 2006</b>
Horticulturists/rangers	147	143	135
Senior officers	2	2	3
Senior executive service	3	2	2
Other*	102	112	105
<b>Total</b>	<b>254</b>	<b>259</b>	<b>245</b>

\* 'Other' includes building and mechanical trades staff, clerical staff, casual teachers, education officers, herbarium assistants, librarians, sales and information staff, scientific officers and technical officers

<b>Total DEC employees</b>	<b>EFT 30 June 2004</b>	<b>EFT 30 June 2005</b>	<b>EFT 30 June 2006</b>
<b>Total</b>	<b>2,943</b>	<b>2,776</b>	<b>2,897</b>

## Employees by location

The numbers reported are equivalent full-time (EFT) employees.

Location	EFT 30 June 2004	EFT 30 June 2005	EFT 30 June 2006
Sydney metropolitan area	1,697	1,588	1,624
Regional areas	1,246	1,188	1,273
<b>Total</b>	<b>2,943</b>	<b>2,776</b>	<b>2,897</b>

## Executive officers

SES level	30 June 2004	30 June 2005	30 June 2006
8	1	1	1
7	0	0	0
6	2	2	2
5	1	1	1
4	7	5	6
3	6	9	9
2	8	5	3
1	3	0	0
<b>Total</b>	<b>28</b>	<b>23</b>	<b>22</b>

## Female executive officers

	30 June 2004	30 June 2005	30 June 2006
<b>Total</b>	<b>4</b>	<b>4</b>	<b>4</b>

## Employees by work area

The numbers reported are equivalent full-time (EFT) employees.

Work area	EFT 30 June 2004	EFT 30 June 2005	EFT 30 June 2006
Director General's Unit	1	1	3
Botanic Gardens Trust	254	259	245
Corporate Services Division	212	177	171
Cultural Heritage Division	56	55	68
Environment Protection and Regulation Division	484	417	442
Parks and Wildlife Division	1,401	1,401	1,506
Policy and Science Division	277	255	246
Strategy, Communication and Governance Division	139	133	133
Sustainability Programs Division	119	78	83
<b>Total</b>	<b>2,943</b>	<b>2,776</b>	<b>2,897</b>

## Staff representation levels for EEO groups

### Trends in the representation of EEO groups

EEO group	% of total staff*			
	Benchmark	30 June 2004	30 June 2005	30 June 2006
Women	50	41.0	42.0	42.0
Aboriginal people and Torres Strait Islanders	2	5.1	6.1	6.9
People whose first language is not English	19	8.0	9.0	8.0
People with a disability	12	4.0	4.0	4.0
People with a disability requiring a work-related adjustment	7	1.3	1.3	1.4

\* Excludes casual staff

### Trends in the distribution of EEO groups

EEO group	Distribution Index* for total staff**			
	Benchmark	30 June 2004	30 June 2005	30 June 2006
Women	100	102	101	102
Aboriginal people and Torres Strait Islanders	100	67	70	66
People whose first language is not English	100	107	107	107
People with a disability	100	99	102	104
People with a disability requiring a work-related adjustment	100	105	114	115

\* A Distribution Index of 100 indicates that the centre of the distribution of the EEO group across salary levels is equivalent to that of other staff. Values less than 100 mean that the EEO group tends to be more concentrated at lower salary levels than is the case for other staff. The more pronounced this tendency is, the lower the index will be. In some cases the index may be more than 100, indicating that the EEO group is less concentrated at lower salary levels.

\*\* Excludes casual staff

## 7. Legislation and legal changes

### Acts administered by DEC

DEC has responsibilities, powers, duties and functions – some of which are exercised in the name of the EPA – under the following NSW legislation:

- *Brigalow and Nandewar Community Conservation Area Act 2005*
- *Contaminated Land Management Act 1997*
- *Crown Lands Act 1989* (only for certain matters relating to the Jenolan Caves Reserves)
- *Environmentally Hazardous Chemicals Act 1985*
- *Environmental Trust Act 1998*
- *Filming Approval Act 2004*
- *Forestry and National Park Estate Act 1998*
- *Forestry Restructuring and Nature Conservation Act 1995*
- *Forestry Revocation and National Parks Reservation Act 1983*
- *Forestry Revocation and National Parks Reservation Act 1984*
- *Forestry Revocation and National Parks Reservation Act 1996*
- *Lane Cove National Park (Sugarloaf Point Additions) Act 1996*
- *Lord Howe Island Act 1953*
- *Lord Howe Island Aerodrome Act 1974*
- *Marine Parks Act 1997*
- *National Environment Protection Council (New South Wales) Act 1995*
- *National Park Estate (Reservations) Act 2002*
- *National Park Estate (Reservations) Act 2003*
- *National Park Estate (Reservations) Act 2005*
- *National Park Estate (Southern Region Reservations) Act 2000*
- *National Parks and Wildlife Act 1974*
- *National Parks and Wildlife (Adjustment of Areas) Act 2001*
- *National Parks and Wildlife (Adjustment of Areas) Act 2005*
- *National Parks and Wildlife (Adjustment of Areas) Act 2006*
- *National Parks and Wildlife (Further Adjustment of Areas) Act 2005*
- *Nature Conservation Trust Act 2001*

- *Ozone Protection Act 1989*
- *Pesticides Act 1999*
- *Protection of the Environment Administration Act 1991*
- *Protection of the Environment Operations Act 1997*
- *Radiation Control Act 1990*
- *Recreation Vehicles Act 1983*
- *Road and Rail Transport (Dangerous Goods) Act 1997*
- *Roads Act 1993* (only in relation to Lord Howe Island)
- *Royal Botanic Gardens and Domain Trust Act 1980*
- *Threatened Species Conservation Act 1995*
- *Waste Avoidance and Resource Recovery Act 2001*
- *Wilderness Act 1987*

## New and amending Acts

The following Acts were assented to in 2005–06:

The ***National Parks and Wildlife (Adjustment of Areas) Act 2006*** revokes reservation under the *National Parks and Wildlife Act 1974* of certain land in Bargo State Conservation Area and vests that land in the Minister administering the *Sporting Venues Management Act 2002*. The Act also reserves certain additional Crown land.

The ***National Parks and Wildlife Amendment (Jenolan Caves Reserves) Act 2005*** transfers the care, control and management of the Jenolan, Wombeyan, Borenore and Abercrombie Karst Conservation Reserves from the Jenolan Caves Reserve Trust to the Director General of DEC and establishes a Karst Management Advisory Committee. Amendments are made to the requirements of plans of management for karst conservation reserves.

The ***National Park Estate (Reservations) Act 2005*** transfers certain State forests and Crown lands, including Monga State Forest, South Brooman State Forest and Dampier State Forest, to the national parks estate.

The ***Protection of the Environment Operations Amendment Act 2005*** implements recommendations arising from the five-yearly statutory review of the *Protection of the Environment Operations Act 1997*. Changes include:

- an increase in the maximum penalties for offences under the *Protection of the Environment Operations Act 1997*
- introduction of smoke abatement notices to regulate residential smoke pollution
- introduction of new offences for land pollution and for providing false or misleading information about waste
- establishment of green offset schemes and works
- repeal of the classified waters scheme in the Clean Waters Regulation 1972 and the associated introduction of new guidelines
- expansion of the fit and proper person test applied in licensing decisions
- the requirement for the EPA to review licences extended from every three to every five years
- an expanded scope of noise control notices
- provision that, in the absence of a court order, certain appeals lodged do not stay the operation of a decision
- expansion of the ability of regulatory authorities to recover and waive certain costs and fees

- additional powers for authorised officers, including an express power to turn off certain unlawfully sounding noisy alarms
- removal of the 'no knowledge' defence for company directors
- provision for the EPA to accept court-enforceable voluntary undertakings.

The ***Protection of the Environment Operations Amendment (Waste Reduction) Act 2006*** inserts a regulation-making power into Schedule 2 of the *Protection of the Environment Operations Act 1997* to enable the establishment and administration of the local council waste reduction scheme to facilitate recycling and other reduction of waste.

The ***Statute Law (Miscellaneous Provisions) Act 2006*** makes a number of minor changes to legislation administered by DEC, including:

- clarifying that only the Minister, regulatory authority or public authority that issued a notice under Chapter 4 of the *Protection of the Environment Operations Act 1997* can amend or revoke that notice
- making provision for the EPA to approve places and persons to carry out inspection and testing of vehicles and other articles under the *Protection of the Environment Operations Act 1997*
- increasing the Scientific Committee's ability to make minor amendments to the relevant schedules to the *Threatened Species Conservation Act 1995* by allowing it to add or omit a description of a species or populations from those schedules.

The ***Statute Law (Miscellaneous Provisions) Act (No. 2) 2005*** makes minor amendments to the *Brigalow and Nandewar Community Conservation Area Act 2005*, *Forestry and National Park Estate Act 1998*, *National Park Estate (Southern Region Reservations) Act 2000*, *Protection of the Environment Operations (Clean Air) Regulation 2002* and the *Threatened Species Conservation Act 1995*.

## New and amending Regulations

The following Regulations were gazetted in 2005–06:

The ***National Parks and Wildlife Amendment Regulation 2005*** makes a number of minor changes, including:

- changing penalty notice amounts for some parks offences
- creating some new offences in relation to parks
- clarifying offences relating to hunting dog equipment
- changing circumstances in which deadfalls of timber may be collected in parks
- limiting a defence relating to planning legislation available under the Regulation.

The ***National Parks and Wildlife Amendment (Marine Mammals) Regulation 2006*** relates to the conservation and protection of marine mammals by prescribing distances for approaching marine mammals and regulating swimming and the use of certain equipment in the vicinity of marine mammals.



The **National Parks and Wildlife Amendment (Threatened Species) Regulation 2005** allows penalty notices to be issued for threatened species offences under the *National Parks and Wildlife Act 1974* and limits the scope of a new 'routine farming practice activity' defence to threatened species and protected fauna offences.

The **Pesticides Amendment (Notification and Miscellaneous Matters) Regulation 2005** introduces new requirements for notifying the use of pesticides by public authorities and multiple occupancy residential complexes, as well as introducing a new offence relating to failure to provide records.

The **Protection of the Environment Operations (Clean Air) Amendment (Industrial and Commercial Activities and Plant) Regulation 2005** repeals the Clean Air (Plant and Equipment) Regulation 1997 and transfers its provisions, with modifications, to the Protection of the Environment Operations (Clean Air) Regulation 2002.

The **Protection of the Environment Operations (Penalty Notices) Amendment (Clean Air) Regulation 2005** enables penalty notices to be issued for offences against new provisions introduced by the Protection of the Environment Operations (Clean Air) Amendment (Industrial and Commercial Activities and Plant) Regulation 2005.

The **Protection of the Environment Operations (General) Amendment Regulation 2006** makes changes consequential to the enactment of the *Protection of the Environment Operations Amendment Act 2005*, including prescribing the meaning of expressions used in the land pollution defence, provisions in relation to green offsets schemes and changes related to noise control notices.

The **Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Amendment Regulation 2005** amends the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 for law revision purposes by updating references to certain government departments and authorities, clarifying aspects of the scheme and updating various dictionary definitions.

The **Protection of the Environment Operations (Noise Control) Amendment (Motor Cycle Noise Control) Regulation 2006** repeals clause 19 of the Protection of the Environment Operations (Noise Control) Regulation 2000 so that a motor cycle is no longer prohibited from being used on a road where it does not comply with certain labelling requirements for noise-related equipment.

The **Protection of the Environment Operations (Penalty Notices) Amendment (Pollution and Other Offences) Regulation 2006** allows penalty notices to be issued for new offences introduced by the *Protection of the Environment Operations Amendment Act 2005* and certain offences under the *Environmentally Hazardous Chemicals Act 1985*.

The **Protection of the Environment Operations (Savings and Transitional) Amendment Regulation 2006** contains savings and transitional provisions consequential to the enactment of the *Protection of the Environment Operations Amendment Act 2005*.

The **Protection of the Environment Operations (Waste) Amendment (Waste Reduction) Regulation 2006:**

- establishes the waste performance improvement scheme, which allows payments to be made to local councils that meet waste performance goals
- increases the waste levy paid by scheduled waste facilities
- makes minor changes to waste tracking and record-keeping requirements.

The **Protection of the Environment Operations (Waste) Regulation 2005** repeals and replaces the Protection of the Environment Operations (Waste) Regulation 1996 and makes changes to the management of wastes.

The **Threatened Species Conservation Amendment (Listing Criteria) Regulation 2005** sets out the criteria to be used by the NSW Scientific Committee when determining eligibility for listing as a threatened species, population or ecological community under the *Threatened Species Conservation Act 1995*.

The **Threatened Species Conservation (Savings and Transitional) Amendment Regulation 2005** introduces savings and transitional provisions related to changes to listing criteria.

## Legislative reviews

There were no major legislative reviews in 2005–06.

## 8. Infringements and prosecutions

### Penalty notices issued by DEC and local government under EPA legislation

Infringement	DEC authorised officers **	Local government authorised officers
<b>Air: Smoky vehicles</b> – POEO* (Clean Air) Regulation	693	0
<b>Air: Other air offences from vehicles</b> – POEO Act, POEO (Clean Air) Regulation	1	0
<b>Air and odour: All non-vehicle offences</b> – POEO Act, POEO (Control of Burning) Regulation	1	90
<b>Noise: Noisy vehicles</b> – POEO (Noise Control) Regulation	341	582
<b>Noise: All non-vehicle offences</b> – POEO Act, POEO (Noise Control) Regulation	0	290
<b>Waste: Littering (from motor vehicles)</b> – POEO Act	963	3,333
<b>Waste: Aggravated littering (motor vehicle-related)</b> – POEO Act	1	13
<b>Waste: Littering (other than motor vehicles)</b> – POEO Act	0	1,128
<b>Waste: All offences</b> – POEO Act, POEO (Waste) Regulation	9	644
<b>Water: All offences</b> – POEO Act	8	554
<b>Dangerous goods: All offences</b> – Road Transport Reform (Dangerous Goods) (NSW) Regulations, Rail Transport Reform (Dangerous Goods) (NSW) Regulations	12	0
<b>Pesticides: All offences</b> – Pesticides Act and Regulation	21	0
<b>Radiation: All offences</b> – Radiation Control Act and Regulation	0	0
<b>Ozone: All offences</b> – Ozone Protection Act and Regulation	0	0
<b>Other offences</b> (e.g. contravene a condition of a licence) – POEO Act, POEO (General) Regulation	90	81
<b>Total penalty infringement notices issued</b>	<b>2,140</b>	<b>6,715</b>
<b>Total value of fines imposed (estimates only)</b>	<b>\$698,700</b>	<b>\$2,718,610</b>

Sources: DEC databases, Office of State Revenue (Infringement Processing Bureau)

\* POEO: Protection of the Environment Operations

\*\* DEC issues some penalty notices on behalf of local councils and other agencies (e.g. RTA)

## Prosecutions

Details of prosecutions completed during 2005–06 are reported below.

**LEC:** Land and Environment Court

**LC:** Local court

**s. 10:** under section 10 of the *Crimes (Sentencing Procedure) Act 1999*, the court, although finding the defendant guilty of the offences charged, did not record a conviction or impose a fine.

### Prosecutions completed under EPA legislation

#### TIER 2 OFFENCES

Defendant	Charge	Result/penalty	Court
<b><i>Protection of the Environment Operations Act 1997</i></b>			
Allied Industrial Services Pty Ltd	Pollute waters	\$25,000 Ordered to pay laboratory analysis costs of \$12,000	LEC
Andrews, Phillip Anthony	Littering	\$100	LC
Arenco Pty Ltd	Pollute waters	Ordered to pay \$21,000 for an erosion and sediment control project at Silver Peak Mine, Yerranderie and to publicise details of the offence in <i>The Sydney Morning Herald</i> and <i>The Western Advocate</i>	LEC
Arenco Pty Ltd	Pollute waters	Ordered to pay \$5,000 for an erosion and sediment control project at Silver Peak Mine, Yerranderie and to publicise details of the offence in <i>The Sydney Morning Herald</i> and <i>The Western Advocate</i>	LEC
Australian Waste Recyclers 1 Pty Ltd	Breach licence condition	\$225,000 Ordered to pay laboratory analysis costs of \$20,285 and to publicise details of the offence in <i>The Sydney Morning Herald</i> and a waste industry journal	LEC
Ballina Shire Council	Breach licence condition	\$35,000	LEC
Barnes, Phillip Gregory	Unlawfully transport and deposit waste	\$500 Ordered to pay laboratory analysis costs of \$364	LEC
Barnes, Phillip Gregory	Unlawfully transport and deposit waste	\$4,000 Ordered to pay laboratory analysis costs of \$364	LEC
Boutros, Magdy	Littering	\$150	LC
Caltex Refineries (NSW) Pty Ltd	Pollute waters	\$45,000 Ordered to pay laboratory analysis costs of \$8,733	LEC
Cary, Ric George	Littering	\$50	LC
Castle, Glenn	Littering	Acquitted	LC
Coe Drilling Australia Pty Ltd	Pollute waters	\$18,000 Ordered to pay laboratory analysis costs of \$3,005	LEC
Dakic, Robert	Littering	\$300	LC
First Aid Drive Shaft (NSW) Pty Ltd	Littering	Acquitted	LC
Furnin Pty Ltd	Littering	\$400	LC
Gregoriou, Nicos	Littering	\$600	LC
Hastings, Corey David	Littering	Acquitted	LC

**TIER 2 OFFENCES**

Defendant	Charge	Result/penalty	Court
Hochtief AG	Breach licence condition	\$24,000 Ordered to publicise details of offence in <i>The Australian Financial Review</i> and <i>The Sydney Morning Herald</i>	LEC
Hochtief AG	Breach licence condition	\$20,000 Ordered to publicise details of offence in <i>The Australian Financial Review</i> and <i>The Sydney Morning Herald</i>	LEC
Hochtief AG	Pollute waters	\$12,000	LEC
Integral Energy Australia	Pollute waters	\$26,250 Ordered to pay laboratory analysis costs of \$2,471 and publicise details of offence in defendant's 2005–06 annual report	LEC
Kolta, Michael	Littering	\$250	LC
Manning, Michael John	Littering	\$200	LC
Munn, Joshua Saul	Littering	\$200	LC
Olex Australia Pty Ltd	Pollute waters	\$15,000	LEC
Orica Australia Pty Ltd	Breach licence condition	\$10,500	LEC
Pawlowski, Arkadiusz	Littering	\$200	LC
Quilty, Stephen	Aggravated littering	\$500	LC
Reid, Ewan Robert	Littering	\$300	LC
Sarkis, Toufic Laba	Littering	\$50	LC
Sua Latu, Willie	Littering	\$200	LC
Thiess Pty Ltd	Pollute waters	\$12,000	LEC
Tyco Water Pty Ltd	Pollute waters	\$50,000	LEC

**Protection of the Environment Operations (Noise Control) Regulation 2000**

Cook, Christopher Joseph	Vehicle's noise control equipment defective	\$250	LC
Cook, Christopher Joseph	Noisy vehicle	\$250	LC
Cooper, Kieran John	Vehicle's noise control equipment defective	\$500	LC
Cooper, Kieran John	Vehicle's noise control equipment defective	\$250	LC
Yigit, Tamer	Vehicle's noise control equipment defective	\$200	LC
Yigit, Tamer	Noisy vehicle	\$350	LC

**Protection of the Environment Operations (Clean Air) Regulation 2002**

A & P Produce Pty Ltd	Smoky vehicle	\$1,500	LC
Agricultural Development Pty Ltd	Smoky vehicle	\$400	LC
Alsco Pty Ltd	Smoky vehicle	\$4,000	LC
Amanowicz, Zbignew	Smoky vehicle	\$1,500	LC
Ashley Furniture Design Pty Ltd	Smoky vehicle	\$1,500	LC
Baipini Engineering Pty Ltd	Smoky vehicle	\$500	LC
Bowers, Kelvin	Smoky vehicle	\$1,000	LC
D & C Family Holdings Pty Ltd	Smoky vehicle	\$500	LC
Dickson Carriers Pty Ltd	Smoky vehicle	\$8,000	LC
Findtime Pty Ltd	Smoky vehicle	\$1,000	LC
Green, Donald William	Smoky vehicle	\$750	LC
Havatu Pty Ltd	Smoky vehicle	\$100	LC
Illawarra Cold Stores Pty Ltd	Smoky vehicle	\$500	LC

**TIER 2 OFFENCES**

Defendant	Charge	Result/penalty	Court
Illawarra Cold Stores Pty Ltd	Smoky vehicle	\$500	LC
Kindarun Holdings Pty Ltd	Smoky vehicle	\$500	LC
Lidcombe Ice Pty Ltd	Smoky vehicle	\$2,000	LC
Maintain IT Pty Ltd	Smoky vehicle	s.10	LC
Mikhaeel, Williem	Smoky vehicle	\$500	LC
Moops Distribution Pty Ltd	Smoky vehicle	\$2,500	LC
Moops Distribution Pty Ltd	Smoky vehicle	\$5,000	LC
N & J Storey Pty Ltd	Smoky vehicle	\$2,000	LC
N & J Storey Pty Ltd	Smoky vehicle	\$500	LC
Saba Legal and Research Pty Ltd	Smoky vehicle	\$500	LC
Sinagra, Lynette Kellie	Smoky vehicle	\$200	LC
Toll Ipec Pty Ltd	Smoky vehicle	\$2,000	LC
Wiseley, Lolita	Smoky vehicle	\$500	LC
<b>Total Tier 2 offences</b>		<b>\$565,500</b>	

**NON-TIER OFFENCES*****Contempt of Court***

Ableway Waste Management Pty Ltd	Failure to comply with court orders	Convicted with no fine	LEC
Tsaur, Charles (Xhiat Song)	Failure to comply with court orders	\$35,000	LEC

***Pesticides Act 1999***

May, Hughie George	Contravene instruction on pesticide label	\$200	LC
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***Pesticides Regulation 1995***

May, Hughie George	Failure to make required record of pesticide use	\$200	LC
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***Road and Rail Transport (Dangerous Goods) Act 1997***

Patrick Distribution Pty Ltd	Failure to ensure dangerous goods transported in a safe manner	\$9,750	LEC
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***Road Transport Reform (Dangerous Goods) (NSW) Regulations***

Aamac Warehousing and Transport Pty Ltd	Transport dangerous goods without required safety equipment	\$1,000	LC
Aamac Warehousing and Transport Pty Ltd	Transport dangerous goods without required emergency information	\$1,500	LC
Aamac Warehousing and Transport Pty Ltd	Transport dangerous goods without required fire extinguisher	\$3,000	LC
Bowman, Geoffrey Allan	Transport a placard load of dangerous goods without appropriate placards	\$500	LC

**Total non-tier offences****\$51,150****Total prosecutions under EPA legislation****\$616,650**

## Prosecutions completed under parks, wildlife and Aboriginal heritage legislation

### NON-TIER OFFENCES

Defendant	Charge	Result/penalty	Court
<b><i>National Parks and Wildlife Act 1974</i></b>			
Andjal, Robert	Breach licence condition	s. 10	LC
Ayre, Warren Barry	Sell protected fauna	\$1,000	LC
BGP Properties Pty Ltd	Pick plant that is part of a threatened species	\$40,000	LEC
Coady, John	Damage known habitat of an endangered species	Acquitted	LC
Gordon, Hugh	Pick plant that is part of a threatened species	\$30,000	LEC
Harvey, Benjamin Ty	Possess protected fauna	\$200	LC
Langi, Samita	Harm protected fauna	\$2,500	LC
Merrick, Sue Marree	Failure to provide name and address to authorised officer	\$250	LC
Smith, Andrew Nevell	Sell protected fauna	\$1,100	LC
Smith, Andrew Nevell	Harm protected fauna	\$1,100	LC
Tooth, Phillip George	Harm protected fauna	\$1,500	LC
Tooth, Phillip George	Possess protected fauna	\$1,000	LC
<b><i>National Parks and Wildlife Regulation 2002</i></b>			
Angland, Cody Wade	Possess animal in park	\$450	LC
Angland, Cody Wade	Hunt animal in park	\$250	LC
Ball, Daniel	Park vehicle without valid pass displayed	\$60	LC
Cotterill, Mitchell John	Possess animal in park	\$400	LC
Cotterill, Mitchell John	Hunt animal in park	\$400	LC
Cotterill, Mitchell John	Leave fire unattended in park	\$400	LC
Cotterill, Mitchell John	Control dog in park with breast plate	\$400	LC
Ebsworth, Anthony David	Drive vehicle in park dangerously	\$500	LC
Fraser, Brian	Drive vehicle in park dangerously	\$300	LC
Gallagher, Daniel Kevin	Park vehicle without valid pass displayed	\$50	LC
Gallagher, Daniel Kevin	Park vehicle without valid pass displayed	\$50	LC
Gallagher, Daniel Kevin	Park vehicle without valid pass displayed	\$50	LC
Gallagher, Daniel Kevin	Park vehicle without valid pass displayed	\$50	LC
Lawlor, Bernard	Operate heavy machinery in park	\$400	LC
Lawlor, Bernard	Damage vegetation in park	\$400	LC
Martin, Justin Robert	Park vehicle in a prohibited area	s. 10	LC
Martin, Murray Lawrence	Park vehicle in a prohibited area	Acquitted	LC
Merrick, Sue Marree	Carry out activity in a park contrary to the terms of a notice	\$100	LC
Parkinson, Neil Thomas	Drive vehicle on access-barred track	s. 10	LC
Parkinson, Phillip	Drive vehicle on access-barred track	s. 10	LC
Raadschelders, Frank Peter	Drive vehicle on access-barred track	s. 10	LC
Stockton, Jed Wayne	Possess animal in park	\$500	LC
Stockton, Jed Wayne	Hunt animal in park	\$500	LC
Stockton, Jed Wayne	Leave fire unattended in park	\$500	LC
Strauss, Ronald Franz	Park vehicle without valid pass displayed	s. 10	LC
Trounson, Gary V	Dog in park with radio tracking equipment	\$500	LC
<b>Total prosecutions under parks, wildlife and Aboriginal heritage legislation</b>		<b>\$84,910</b>	
<b>Total DEC prosecutions completed</b>		<b>\$701,560</b>	



## 9. DEC-managed lands at 30 June 2006

	Area (ha)
<b>Aboriginal areas</b>	
Appletree	4
Finchley	4
Howe	7
Jubullum Flat Camp	7
Lennox Head	< 1
Mooney Mooney	8
Mount Ku-ring-gai	< 1
Murramarang	60
Nambucca	2
Nunguu Mirral	122
Pindera Downs	11,433
Snake Rock	61
Stonewoman	2
<b>Total area</b>	<b>11,711</b>
<b>Aboriginal areas</b>	

<b>Historic sites</b>	
Cadmans Cottage	< 1
Clybucca	467
Davidson whaling station	27
Hartley	13
Hill End	133
Innes Ruins	406
Koonadan	22
Maroota	32
Maynggu Ganai	16
Mount Grenfell	1,357
Mutawintji	486
Throsby Park	75
Tweed Heads	8
Wisemans Ferry	21
Yuranighs Aboriginal Grave	2
<b>Total area</b>	<b>3,065</b>
<b>historic sites</b>	

<b>National parks</b>	
Abercrombie River	19,000
Arakwal	186
Bago Bluff	4,023
Bald Rock	8,883
Bangadilly	2,141
Barakee	4,981
Barool	11,214
Barrington Tops	74,568
Basket Swamp	2,820
Belford	294
Bellinger River	2,830
Benambra	1,399
Ben Boyd	10,486
Ben Halls Gap	2,500
Biamanga	13,749
Bimberamala	4,396
Bindarri	5,513
Biriwal Bulga	6,528
Blue Mountains	267,297
Bongil Bongil	4,136
Boonoo Boonoo	4,377
Booti Booti	1,567
Border Ranges	31,729
Botany Bay	456
Bouddi	1,532
Bournda	2,648
Brindabella	18,472
Brisbane Water	11,473
Broadwater	4,226
Budawang	23,787
Budgeroo	7,120
Bugong	1,022
Bundjalung	20,359
Bungawalbin	3,730
Butterleaf	3,000
Capoompeta	4,297
Carrai	11,397
Cascade	3,620
Cataract	1,504
Cathedral Rock	10,897
Cattai	424
Chaelundi	19,093
Clyde River	1,278
Cocoparra	8,358
Conimbla	7,590
Conjola	11,063
Coolah Tops	13,797
Coorabakh	1,840
Cottan–Bimbang	30,679
Crowdy Bay	10,279

<b>Area (ha)</b>	
Culgoa	22,006
Cunnawarra	16,315
Curracabundi	8,104
Deua	122,033
Dharug	14,850
Dooragan	1,042
Dorrigo	11,902
Dunggir	2,651
Eurobodalla	2,913
Fortis Creek	7,960
Gardens of Stone	15,010
Garigal	2,203
Georges River	337
Ghin–Doo–Ee	4,819
Gibraltar Range	25,407
Goobang	42,080
Goonengerry	440
Goulburn River	71,658
Gourock	7,873
Gulaga	4,673
Gundabooka	63,903
Guy Fawkes River	100,590
Hat Head	7,459
Heathcote	2,672
Indwarra	940
Jerrawangala	4,014
Jervis Bay	4,854
Junuy Juluum	945
Kalyarr	8,173
Kanangra–Boyd	68,661
Kinchega	44,260
Kings Plains	6,918
Kooraban	11,643
Koreelah	5,270
Kosciuszko	673,340
Kumbatine	14,881
Ku-ring-gai Chase	14,966
Kwiambal	6,532
Lane Cove	600
Livingstone	1,919
Macquarie Pass	1,064
Mallanganee	1,144
Mallee Cliffs	57,969
Maria	2,335
Marramarra	11,786
Maryland	2,283
Mebbin	3,800
Meroo	3,643
Middle Brother	1,830
Mimosa Rocks	5,802
Minjary	1,462
Monga	26,465

<b>Area (ha)</b>	
Mooball	1,160
Morton	190,729
Mount Clunie	1,426
Mount Imlay	4,822
Mount Jerusalem	5,149
Mount Kaputar	49,779
Mount Nothofagus	2,180
Mount Pikapene	2,630
Mount Royal	6,920
Mount Warning	2,455
Mummel Gulf	12,220
Mungo	110,967
Murramarang	12,387
Mutawintji	68,912
Myall Lakes	47,595
Nangar	9,196
Nattai	48,944
New England	72,241
Nightcap	8,080
Nowendoc	16,297
Nymbo–Binderay	17,243
Nymboida	38,119
Oolambeyan	21,851
Oxley Wild Rivers	142,333
Paroo–Darling	178,053
Popran	3,970
Ramornie	3,307
Richmond Range	15,712
Royal	15,092
Saltwater	33
Scheyville	920
Scone Mountain	78
Seven Mile Beach	964
Single	2,559
South-East Forest	115,499
Sturt	325,329
Sydney Harbour	393
Tallaganda	16,728
Tapin Tops	10,976
Tarlo River	8,074
Thirlmere Lakes	629
Timbarra	1,772
Tomaree	2,357
Tooloom	4,380
Toonumbar	14,991
Towarri	6,074
Turon	2,970
Ulidarra	680
Wadbilliga	98,530
Wallahah	178
Wallingat	6,557
Warra	2,031

	Area (ha)
Warrabah	3,471
Warrumbungle	23,198
Washpool	65,779
Watagans	7,751
Weddin Mountains	8,377
Werakata	3,337
Werrikimbe	33,309
Willandra	19,386
Willi Willi	29,870
Woko	8,730
Wollemi	493,480
Wollumbin	1,662
Woolooma	495
Woomargama	23,577
Wyrrabalong	620
Yabbra	8,890
Yanununbeyan	3,521
Yarriabini	2,183
Yengo	153,723
Yuraygir	35,403
<b>Total area national parks</b>	<b>4,924,190</b>

## Nature reserves

Aberaldie	284
Agnes Banks	123
Alma	80
Andrew Johnston	21
Big Scrub	
Arakoola	3,180
Araluen	656
Avisford	2,437
Awabakal	228
Baalijin	2,701
Back River	735
Badja Swamps	561
Bagul Waajaarr	520
Ballina	721
Bamarang	370
Bandicoot Island	30
Banyabba	15,210
Barrengarry	21
Barren Grounds	2,024
Barton	529
Bees Nest	1,616
Bell Bird Creek	53
Belowla Island	4
Berkeley	8
Bermagquee	818
Big Bush	640
Billinudgel	739
Bimberi	10,886
Binjura	707
Binnaway	3,699
Bird Island	7

	Area (ha)
Black Andrew	1,559
Bluff River	1,793
Boatharbour	24
Bobundara	204
Bogandyera	9,177
Boginderra Hills	554
Bolivia Hill	1,782
Bollanolla	650
Bondi Gulf	1,800
Boomi	156
Boomi West	149
Boonanghi	4,470
Boondelbah	9
Boorganna	390
Booroolong	865
Borong	195
Bournda	5,862
Bowraville	81
Bretti	2,902
Bridal Veil Falls	151
Brigalow Park	202
Brimbin	52
Broken Head	99
Broulee Island	43
Brundee Swamp	230
Brunswick Heads	206
Brush Island	47
Buddigower	327
Budelah	4,045
Bugan	1,530
Bull Island	1
Bungabbee	169
Bungawalbin	467
Burning Mountain	15
Burnt-Down Scrub	364
Burnt School	285
Burra Creek	270
Burrinjuck	3,248
Bushy Island	< 1
Byrnes Scrub	737
Cambewarra Range	1,886
Camels Hump	545
Camerons Gorge	1,318
Captains Creek	2,290
Careunga	469
Castlereagh	490
Cecil Hoskins	47
Cedar Brush	190
Chambigne	798
Chapmans Peak	72
Clarence Estuary	130
Clarkes Hill	2,201
Cockle Bay	44
Cocopara	4,647
Comboyne	23

	Area (ha)
Comerong Island	660
Coocumbac Island	5
Cook Island	5
Coolbaggie	1,793
Coolongolook	198
Coolumbooka	1,529
Cooperabung Creek	325
Coornartha	1,184
Copperhannia	3,497
Coramba	8
Corrie Island	164
Couchy Creek	218
Courabyra	239
Coxcomb	73
Cudgen	742
Cullendulla Creek	126
Cumbebin Swamp	40
Cuumbeun	709
Dalrymple–Hay	11
Dananbilla	2,432
Dangelong	2,430
Dapper	999
Darawank	575
Davis Scrub	14
Deer Vale	181
Demon	900
Dharawal	347
Donnybrook	276
Downfall	496
Dthinna Dthinnawan	1,491
Dural	26
Durands Island	7
Duval	240
Eagles Claw	1
Egan Peaks	2,145
Ellerslie	1,877
Eugowra	120
Evans Crown	425
Fifes Knob	553
Fishermans Bend	160
Five Islands	27
Flaggy Creek	72
Flagstaff Memorial	18
Flat Island	9
Freemantle	361
Gads Sugarloaf	477
Gamilaroi	114
Ganay	693
Garby	117
Georges Creek	1,190
Gibraltar	161
Girralang	640
Good Good	20
Goonawarra	437
Goonook	930

	Area (ha)
Goorooyarroo	266
Gubbata	162
Gulguer	359
Gungewalla	142
Guy Fawkes River	1,534
Hattons Bluff	18
Hattons Corner	4
Hayters Hill	8
Hexham Swamp	900
Hogarth Range	853
Hortons Creek	330
Illawong	51
Illunie	721
Iluka	136
Imbota	218
Ingalba	4,012
Inner Pocket	236
Ironbark	1,604
Ironmungy	713
Jaaningga	975
Jagun	100
Jasper	355
Jerilderie	37
Jerralong	341
Jingellic	2,137
Joadja	832
Jobs Mountain	702
John Gould	26
Julian Rocks	< 1
Juugawaarri	2,396
Kajuligah	13,660
Kangaroo River	126
Karuah	2,742
Kattang	58
Kemendok	1,043
Kemps Creek	129
Khappinghat	3,514
Khatambuhl	801
Killabakh	2,644
Killarney	435
Kirramingly	1,306
Kooragang	2,926
Koorawatha	1,105
Koorebang	465
Kororo	11
Koukandowie	1,283
Kuma	184
Kybeyan	432
Lake Innes	3,523
Lake Urana	302
Langtree	235
Ledknapper	16,339
Limeburners Creek	9,224
Limpinwood	2,647
Linton	640

	Area (ha)
Lion Island	8
Little Broughton Island	36
Little Llangothlin	258
Little Pimlico Island	16
Long Island	73
Loughnan	385
Macquarie	12
Macquarie Marshes	19,825
Mann River	7,129
Manobalai	3,759
Marshalls Creek	112
Melville Range	843
Meringo	49
Mernot	320
Merriangaah	5,669
Midkin	359
Mills Island	61
Moffats Swamp	151
Monkerai	865
Monkeycot	1,612
Montague Island	82
Moonee Beach	336
Moon Island	1
Moore Park	15
Mororo Creek	80
Morrisons Lake	312
Mother of Ducks Lagoon	181
Mount Clifford	306
Mount Dowling	513
Mount Hyland	2,519
Mount Mackenzie	141
Mount Neville	5,821
Mount Nullum	99
Mount Seaview	1,704
Mount Yarrowyck	170
Muckleewee Mountain	355
Mudjarn	591
Muldiva	10
Mulgoa	213
Mullengandra	150
Mundoonen	1,359
Munghorn Gap	5,934
Munro Island	14
Muogamarra	2,274
Mutawintji	6,688
Muttonbird Island	9
Myalla	143
Nadgee	20,671
Nadgigomar	5,596
Narrandera	71
Narran Lake	14,765
Narrawallee Creek	878
Nearie Lake	4,347
Nest Hill	759
Newington	48

	Area (ha)
Ngadang	160
Ngambaa	10,560
Ngulin	1,250
Nimmo	724
Nocoleche	74,000
Nombinnie	70,000
North Obelisk	36
North Rock	4
North Solitary Island	20
North-West Solitary Island	4
Numeralla	435
Numinbah	858
Oak Creek	404
One Tree Island	1
Pambalong	35
Parma Creek	3,564
Paupong	1,838
Pee Dee	441
Pelican Island	40
Pilliga	80,579
Pitt Town	46
Planchonella	717
Pucawan	274
Pulbah Island	69
Pulletop	145
Quanda	4,784
Queanbeyan	68
Queens Lake	1,402
Quidong	750
Rawdon Creek	560
Razorback	2,595
Regatta Island	102
Richmond River	256
Rileys Island	46
Robertson	5
Rodway	83
Round Hill	13,630
Running Creek	910
Saltwater Swamp	215
Saratoga Island	2
Scabby Range	4,982
Scott	151
Sea Acres	76
Seaham Swamp	11
Seal Rocks	< 1
Serpentine	723
Severn River	5,750
Shark Island	2
Sherwood	5,904
Skillion	691
Smiths Lake	24
Snapper Island	13
Snows Gully	34
South-West Solitary Island	3

	Area (ha)
Spectacle Island	36
Split Solitary Island	4
Stony Batter Creek	564
Stony Creek	80
Stormpetrel	8
Stotts Island	142
Strike-a-Light	407
Susan Island	23
Tabbimoble Swamp	1,070
Tabletop	104
Talawahl	3,150
Tallawudjah	1,247
Tapitallee	95
Tarawi	33,573
Taringa	1,342
The Basin	2,318
The Castles	2,720
The Charcoal Tank	86
The Glen	2,750
The Rock	347
Tilligerry	508
Tinderry	14,623
Tingira Heights	18
Tollgate Islands	12
Tollingo	3,232
Tomalla	605
Towibakh	62
Towra Point	386
Triplarina	158
Tuckean	919
Tucki Tucki	4
Tuggolo Creek	645
Turallo	25
Tweed Estuary	59
Tyagarah	800
Ukerebagh	150
Ulandra	3,931
Undoo	19
Uralba	288
Valla	47
Victoria Park	18
Wadjan	92
Wallabadah	1,132
Wallamba	1,160
Wallaroo	2,780
Wallis Island	584
Wallumatta	6
Wamberal Lagoon	140
Wambina	57
Wambool	194
Wanna Wanna	33
Waragai Creek	186
Watchimbark	744
Watsons Creek	1,260
Wee Jasper	631
Weelah	38

	Area (ha)
Weetalibah	2,146
Wiesners Swamp	103
Willi Willi Caves	8
Wilson	27
Winburndale	10,718
Windsor Downs	363
Wingen Maid	1,077
Wingham Brush	8
Wogamia	277
Woggoon	6,565
Wollondilly River	862
Wongarbon	99
Woodford Island	374
Woollamia	452
Wooyung	87
Woregore	84
Worimi	610
Worrigee	232
Wullwye	155
Yaegl	313
Yahoo Island	46
Yanga	1,773
Yanununbeyan	40
Yaouk	2,924
Yarravel	318
Yarringully	285
Yathong	107,241
Yattheyattah	19
Yessabah	10
Yina	100

**Total area** 859,898  
**nature reserves**

## State conservation areas

Arakoon	114
Avondale	313
Banyabba	3,566
Bargo	5,660
Barnunj	164
Barrakee	174
Barrington Tops	8,446
Bents Basin	48
Berlang	2,319
Bindarri	434
Black Bulga	1,554
Boonanghi	1,242
Bridal Veil Falls	65
Brindabella	2,880
Bulahdelah	138
Bundjalung	4,870
Bungawalbin	1,834
Bungonia	4,007
Burragorang	17,642

	Area (ha)
Butterleaf	712
Camerons Gorge	429
Cape Byron	99
Carrai	6,853
Cascade	412
Chaelundi	1,624
Chatsworth Hill	510
Colymea	1,674
Coneac	449
Copeland Tops	1,692
Corramy	856
Corymbia	495
Cottan–Bimbang	105
Curracabundi	729
Currys Gap	227
Dharawal	6,266
Fishermans Bend	39
Fladbury	114
Frogs Hole	77
Garawarra	949
Georges River	1
Glenrock	516
Gumbaynggirr	2,561
Gundabooka	25,200
Gurranang	111
Guy Fawkes River	5,241
Illawarra Escarpment	2,493
Jackywalbin	661
Jilliby	12,159
Karuah	281
Kooyong	753
Kumbatine	783
Kybeyan	4,070
Lake Innes	321
Lake Macquarie	667
Laurence Road	440
Livingstone	484
Macanally	2,290
Macquarie Pass	166
Majors Creek	706
Maroota Ridge	260
Medowie	1,858
Monga	1,005
Morton	1,050
Mount Canobolas	1,673
Mount Hyland	293
Mullion Range	1,025
Mummel Gulf	1,162
Munmorah	1,515
Nattai	3,383
Nombinnie	46,000
Nymboi–Binderay	585
Nymboida	528
Oxley Wild Rivers	1,439
Paroo–Darling	41,521
Parr	38,121

	Area (ha)
Queens Lake	1,026
Talawahl	136
Tallaganda	5,285
The Cells	4,708
Toonumbar	128
Torrington	30,123
Tumblong	746
Washpool	246
Watsons Creek	520
Wereboldera	2,263
Werrikimbe	204
Whian Whian	2,439
Wollumbin	368
Wombat Creek	1,077
Yanununbeyan	3,823
Yarriabini	9
Yarrigully	114
Yerranderie	12,192
Yurrammie	221
Yuraygir	3,150
<b>Total area</b>	<b>349,881</b>
<b>state conservation areas</b>	

## Regional parks

	Area (ha)
Berowra Valley	3,885
Bomaderry Creek	82
Coffs Coast	379
Leacock	34
Parramatta River	5
Penrith Lakes	1
Rouse Hill	43
Western Sydney	564
William Howe	43
Wolli Creek	8
Yellomundee	485
<b>Total area</b>	<b>5,529</b>
<b>regional parks</b>	

## Karst conservation reserves

	Area (ha)
Abercrombie	1,434
Borenore	136
Jenolan	2,422
Wombeyan	417
<b>Total area</b>	<b>4,409</b>
<b>karst conservation reserves</b>	

## Community conservation areas: Zone 1 national parks

	Area (ha)
Barayamal	179
Breelong	6,851
Bullala	2,516
Burrall Yurrul	1,037
Couradda	362
Crawney Pass	250
Dowe	381
Drillwarrina	1,077
Dthinna Dthinnawan	25,759
Garrawilla	937
Goonoo	9,090
Gunyerwarildi	316
Gwyder River	2,257
Horton Falls	260
Kwiambal	796
Moema	2,028
Mogriguy	399
Murrurundi Pass	215
Nullamanna	296
Pilliga	11,120
Pilliga West	7,927
Somerton	759
Timallallie	39,395
Tinkrameanah	969
Warialda	1,603
Yarragin	3,201
Yarrobil	1,322
<b>Total area</b>	<b>121,302</b>
<b>community conservation areas: Zone 1 national parks</b>	

## Community conservation areas: Zone 2 Aboriginal areas

	Area (ha)
Dandry Gorge	382
Deriah	2,240
Kelvin	2,267
Pilliga East	1,347
Terry Hie Hie	15,382
<b>Total</b>	<b>21,618</b>
<b>community conservation areas: Zone 2 Aboriginal areas</b>	

## Community conservation areas: Zone 3 state conservation areas

	Area (ha)
Beni	1,849
Biddon	3,352
Bingara	1,979
Bobbiwaa	2,688
Bullawa Creek	99
Durrigere	5,463
Goodiman	569
Goonoo	53,752
Goonoowigal	1,055
Gwyder River	2,607
Killarney	1,858
Leard	1,176
Merriwindi	1,730
Pilliga	33,386
Pilliga East	24,669
Pilliga West	34,415
Trinkey	10,229
Warialda	2,913
Wondoba	1,663
<b>Total</b>	<b>185,452</b>
<b>community conservation areas: Zone 3 state conservation areas</b>	

**Total** **6,487,055**  
**DEC-managed lands at 30 June 2006**

## Summary at 30 June 2006

Type	No.	Area (ha)
Aboriginal areas	13	11,711
Historic sites	15	3,065
National parks	174	4,924,190
Nature reserves	390	859,898
State conservation areas	95	349,881
Regional parks	11	5,529
Karst conservation reserves	4	4,409
Community conservation areas: Zone 1 national parks	27	121,302
Community conservation areas: Zone 2 Aboriginal areas	5	21,618
Community conservation areas: Zone 3 state conservation areas	19	185,452
<b>Total</b>	<b>753</b>	<b>6,487,055</b>

\* Represents 8.09% of land area of NSW

## Declared wilderness in NSW

**NP:** National park

**NR:** Nature reserve

**RP:** Regional park

**SCA:** State conservation area

Wilderness area	Reserve name(s)	Size (ha)*
Banyabba	Banyabba NR	17,924
Barrington	Barrington Tops and Mount Royal NPs	58,330
Bimberi	Kosciusko NP, Bimberi and Scabby Range NRs and land in the ACT	60,785
Bindery–Mann	Nymboida, Gibraltar Range and Barool NPs	56,241
Bogong Peaks	Kosciusko NP	28,757
Bramina	Kosciusko NP	10,897
Brogo	Wadbilliga NP	39,900
Buckenbowra	Monga and Deua NPs	9,180
Budawang	Morton and Budawang NPs, Freehold (Voluntary Conservation Area)	75,839
Burra Oulla	Deua NP	17,776
Bundjalung	Bundjalung and Fortis Creek NPs	10,678
Byadbo	Kosciusko NP	80,907
Carrai	Carrai NP	3,503
Cathedral Rock	Cathedral Rock NP	8,453
Chaelundi	Chaelundi NP	10,833
Ettrema	Morton NP	67,005
Genoa	South-East Forest NP	6,161
Goobarragandra	Kosciusko NP	33,532
Grattai	Mount Kaputar NP	4,180
Grose	Blue Mountains NP	37,788
Guy Fawkes	Guy Fawkes River NP and NR, Cathedral Rock NP	84,100

Wilderness area	Reserve name(s)	Size (ha)*
Indi	Kosciusko NP	11,652
Jagungal	Kosciusko NP	67,213
Kanangra–Boyd	Blue Mountains and Kanangra–Boyd NPs, Yerranderie SRA	122,522
Kunderang	Oxley Wild Rivers NP	21,402
Levers	Border Ranges NP	15,266
Limeburners Creek	Limeburners Creek NR	8,351
Lost World	Border Ranges NP, Limpinwood NR	9,068
Macleay Gorges	Cunnawarra and Oxley Wild Rivers NPs, Georges Creek NR	77,741
Mootwingee	Mootwingee NP	47,895
Mount Seaview	Cottan–Bimbang NP, Mount Seaview NR	12,114
Nadgee	Nadgee NR	19,433
Nandewar	Mount Kaputar NP	13,182
Nattai	Nattai NP	29,040
New England	New England and Cunnawarra NPs	55,462
Pilot	Kosciusko NP	80,311
Rusden	Mount Kaputar NP	12,637
Tuross	Wadbilliga NP	20,592
Warrazambil	Border Ranges NP	7,228
Washpool	Washpool, Gibraltar Range and Nymboida NPs	53,092
Werrikimbe	Werrikimbe NP	27,051
West Ettrema	Morton NP	12,770
Western Fall	Kosciusko NP	15,217
Willi Willi	Willi Willi NP, Boonanghi NR	23,289
Woila Deua	Deua NP	26,996
Wollemi	Wollemi and Blue Mountains NPs	359,984
Yowrie	Wadbilliga NP	15,787
<b>Total (46 contiguous areas)</b>		<b>1,888,064</b>

\* Areas are calculated from DEC's digital mapping system (Lambert's projection) and rounded to the nearest hectare.

\*\* Represents 2.39% of the total land area of NSW and 29.5% of total DEC-managed parks and reserves

## Lands acquired under the *National Parks and Wildlife Act 1974*, pending reservation/dedication at 30 June 2006

Park/Location	Area (ha)	Park/Location	Area (ha)	Park/Location	Area (ha)	Park/Location	Area (ha)
Bagul Waajaarr NR	259	Cudgen NR	156	Kosciuszko NP	154	Patches Beach	6
Ben Halls Gap NP	518	Cudgera Creek	60	Kumbatine NP	209	Paroo–Darling NP	521
Billinudgel NR	43	Culgoa NP	14,128	Kybeyan	1,245	South-East Forest NP	451
Bindarri NP	77	Curracabundi	2,590	Kybeyan NR	1,379	South Solitary Island NR	11
Blue Gum Hills	129	Darawank NR	174	Lake Innes	16	Stockton Bight	111
Blue Mountains NP	1,002	Dthinna Dthinnawan NR	140	Lake Macquarie SCA	5	Sturt NP	12,355
Bogandyera NR	332	Duroby	31	Lane Cove NP	58	Sydney Harbour NP	1
Boginderra Hills NR	242	Everlasting Swamp	460	Ledknapper NR	14,187	Tamborooro	10
Boonoo Boonoo NP	700	Gandangara	7	Marangaroo (Mount Walker)	672	Towra Point NR	47
Booroolong NR	102	Garawarra SCA	2	Marramorra NP	< 1	Warrabah NP	510
Bournda NP	7	Gardens of Stone NP	70	Marshalls Creek NR	19	Warrumbungle NP	114
Brigalow Park NR	51	Glenrock SCA	22	Meroo NP	24	Washpool NP	4,805
Brigalow Park NR (Claremont)	202	Goonook NR	86	Minimbah	125	Watchimbark	520
Brisbane Water NP	33	Goulburn River NP	490	Morton NP	1,851	Wollemi NP	366
Brunswick Heads NR	13	Gundabooka SCA	265	Mount Neville NR	754	Wolli Creek RP	< 1
Burratorang SCA	1	Guy Fawkes River NP	10,019	Mount Pikapene NP	17	Woomargama NP	609
Burrall Yurrul	1,341	Hartley HS	< 1	Mount Yarrowyck NR	413	Yanga	76,260
Burrinjuck NR	2,001	Hayters Hill NR	< 1	Mummel Gulf NP	1,871	Yarrahappini	174
Captains Creek NR	544	Heathcote NP	7	Mundoonen NR	110	Yatheyattah NR	16
Cataract NP	1,902	Hill End HS	4	Munmorah SCA	15	Yellomundee RP	< 1
Cataract SCA	569	Illawarra Escarpment SCA	103	Myall Lakes NP	71	Yengo NP	58
Cathedral Rock NP	134	Jervis Bay NP	130	Narran Lake NR	7,240	Yuraygir NP	129
Chaelundi NP	1,878	Kalyarr	7,185	Nattai NP	669	<b>Total</b>	<b>195,208</b>
Coffs Coast RP	3	Karuah NR	650	Nombinnie	7,063		
Copeland Tops SCA	729	Kooragang NR	60	Nymboida NP	5,588		
Crowdy Bay NP	73			Oxley Wild Rivers NP	4,655		

Lands vested in the Minister administering the *National Parks and Wildlife Act 1974* by virtue of Act 1996 No. 131 (Forestry Revocation and National Park Reservation Act)

**Total area: approximately 452 hectares, mainly in south-east NSW**



## Crown land occupied by DEC under reserves or lease for various management purposes at 30 June 2006

Location	Reserve	Area (m <sup>2</sup> )	Purpose
Armidale	R 89685	1,256	Workshop
Armidale	Sp.L.1989/4	2,753	Depot
Bingara	R 87087	2,023	Depot
Broken Hill	R 230017	1,125	Residence
Cobar	R 92637	749	Staff accommodation
Eden	R 91136	1,145	Workshop
Gol Gol	R 91509	2,023	Workshop
Narooma	R 95616	1,992	Workshop
Rylstone	R 190042	2,491	Depot
Tibooburra	R 96931	1,012	Workshop
Tibooburra	R 95882	1,799	Workshop/depot
Tibooburra	R 91376	2,023	Workshop
Ulladulla	R 180018	3,661	Workshop/office
Walcha	R 98162	3,862	Workshop/depot

## Lands acquired under the provisions of the *National Parks and Wildlife Act 1974* and held for management purposes (not reserved) at 30 June 2006

Location	Area (m <sup>2</sup> )	Purpose
Armidale: 145 Miller Street	2,815	Depot
Boambee	4,725	Workshop/depot
Bombala	4,900	Workshop/depot
Bourke: Short, Anson and Tudor streets	3,036	Staff accommodation
Broken Hill	475	Regional office
Broken Hill: 167–173 Argent Street	1,881	Parking area
Bucketty	6,731	Workshop
Bulga	358,000	Office/depot
Cobar: 61 Bradley Street	563	Staff accommodation
Cobar: lots 36 and 37 Wrightville Street and lots 42 and 43 Brickworks Road	1,860	Workshop
Dorrigo	5,210	Workshop/depot
Dungog	2,104	Depot
Ebor	1,700	Workshop/depot
Eden	4,196	Workshop/depot
Gloucester	7,245	Depot
Griffith	1,808	Workshop/depot
Huskisson: Woollamia Road	2,485	Marine Parks Authority office
Jindabyne: Munyang and Cobbon streets, and Snowy River Avenue	10,825	Staff accommodation/visitor centre
Khancoban: 1, 5 and 13 Douglas Street, 1 and 3 Blackburn Street, 8 Whitehead Street, Scammel Street, 19 Read Street and 24 Sheather Street	10,460	Staff accommodation
Khancoban: 5 and 6 Gray Street	2,049	Depot
Khancoban: corner McIlree and Gray streets	1,031	Depot
Menindee	2,023	Staff accommodation
Narooma	2,665	Workshop/depot
Nowra	7,954	Workshop/depot
Oakdale	4,274	Depot
Oberon	1,701	Office
Peak Hill	4,023	Workshop/depot
Rylstone	2,188	Depot
Scone: Hayes Street	4,529	Workshop/depot
Tenterfield	6,327	Depot

Location	Area (m <sup>2</sup> )	Purpose
Tibooburra	506	Office accommodation
Tibooburra	506	Visitor centre
Tibooburra: Sturt Street	1,012	Staff accommodation
White Cliffs: corner Johnston Street and Karara Road	2,805	Visitor centre
Wilcannia: Woore Street	8,090	Workshop
Yetman	4,312	Depot/staff accommodation

## 10. Statement of affairs

Under the *Freedom of Information Act 1989* (FOI Act), DEC is required to prepare a statement of affairs which describes its structure and functions; how the functions affect members of the public; how the public can participate in policy development; documents held by DEC; and how people can access those documents or seek amendment to documents concerning their personal affairs.

### Structure and functions

DEC consists of the following divisions:

- Parks and Wildlife Division
- Environment Protection and Regulation Division
- Policy and Science Division
- Cultural Heritage Division
- Sustainability Programs Division
- Corporate Services Division
- Strategy, Communication and Governance Division.

The Botanic Gardens Trust is also part of DEC but reports separately under the statutory trust. For detailed descriptions of DEC's structure and functions, see chapter 1.

### Effect of functions on members of the public

DEC is the NSW government agency with primary responsibility for working with the community to protect and conserve our environment, including our natural and cultural heritage. It is responsible for the implementation of government conservation and environmental regulatory reform initiatives. DEC is committed to preventing pollution before it occurs, avoiding the creation of waste and managing cultural heritage, wildlife and the protected area system. DEC also recognises that strong and credible regulatory programs and innovative regulatory tools are needed to help address environmental problems. These functions have a broad effect on members of the public, for example through:

- licensing regimes for a range of issues including regulation of pollution from industrial premises through to licences to keep native wildlife
- specifying which recreational and other activities can take place on DEC-managed land while maintaining important conservation values
- receiving reports of pollution incidents and responding appropriately
- monitoring and reporting air quality and water quality at ocean and harbour beaches

- encouraging waste reduction, recycling and the sustainable use of resources.

### Public participation in policy formulation

The health of the environment and the conservation of our cultural heritage depends on community commitment and involvement at all levels from policy development to everyday business, recreational or domestic activities. This includes all sectors: business, industry, environment groups, Aboriginal communities, individuals, state, local and federal government bodies. DEC works with all of these to implement an integrated environment protection framework for NSW, and to protect our cultural heritage.

The community participates in policy formulation through the various consultative bodies described elsewhere in this Annual Report. DEC also seeks public submissions when developing and reviewing policies, plans and programs. DEC's website regularly features calls for public comment and describes how to make submissions on its proposals.

### Documents held by DEC and how to obtain them

DEC holds documents in its metropolitan, regional and area offices. While many documents are available for inspection or purchase, access to some documents may require an application under the FOI Act, the *Privacy and Personal Information Protection Act 1998* or the *Health Records and Information Privacy Act 2002*.

### Freedom of information applications

You can apply under the FOI Act for access to documents held by DEC that are not publicly available. The documents can relate to personal or non-personal information. You can also apply under the FOI Act to correct any information about your personal affairs that may be incomplete, incorrect, misleading or out-of-date.

Contact the FOI/Privacy Officer at PO Box A290, Sydney South 1232, phone (02) 9995 6080 or (02) 9995 6497, or visit DEC's website at [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au) for an application form and information about the FOI Act, the process, fees and charges.

FOI statistics for 2005–06 are provided in Appendix 11.

## Privacy applications

The Privacy and Personal Information Protection Act and the Health Records and Information Privacy Act regulate the way DEC deals with personal and health information and gives people a legally enforceable right of access to their information. Applications can be made for personal information that may be held by DEC. Applications may also be made to amend personal information that may be incomplete, incorrect, misleading, or out-of-date. If you believe that DEC has breached your privacy, you can ask DEC to investigate what occurred.

Contact the FOI/Privacy Officer at PO Box A290, Sydney South 1232, phone (02) 9995 6080 or (02) 9995 6497, or visit DEC's website at [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au) for more information.

## Policy documents

A list of policy documents called the Summary of Affairs is published each June and December in the *Government Gazette* and on the DEC website. These documents include corporate policy documents, scientific policies and manuals, environmental guidelines, field policies and procedures.

Many of these documents are also available on the DEC website, while others may be purchased.

## Publications

DEC produces a range of books, guides, teachers' kits, information pamphlets and posters.

Publications may be obtained over the counter at DEC's office in Goulburn Street, Sydney, and from many regional and area offices, and visitor centres. The DEC website features a list of publications for sale and downloading.

## Photographs

A photographic library is available to the public and other agencies under certain conditions. Fees and charges may apply.

For further information phone (02) 9995 5000, or visit the DEC website.

## Aboriginal Heritage Information Management System (AHIMS)

DEC maintains information on the type and location of Aboriginal objects, places, reports, photographs and slides. Access to AHIMS is available to Aboriginal groups, researchers and interested members of the public. Access may be restricted in some cases due to the sensitivity of some matters. DEC undertakes searches of AHIMS for a fee.

For more information, contact the AHIMS Registrar, Cultural Heritage Division, Hurstville on (02) 9585 6513, (02) 9585 6345 or (02) 9585 6471.

## Historic Heritage Information Management System (HHIMS)

DEC maintains information about recorded historic places on sites it manages. HHIMS holds details on the type and location of historic places, reports and other archival material. Access to HHIMS is available to researchers and interested members of the public.

For more information, contact the HHIMS Registrar, Cultural Heritage Division, Hurstville on (02) 9585 6472.

## Registers

### Protection of the Environment Operations Act (POEO) Public Register

The POEO Public Register is a register of environment protection licences and notices, any exemptions from the provisions of the Act or Regulations, details of convictions for offences under the Act and the results of civil proceedings. For more information contact DEC's Environment Line on 131 555 or email [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au). Also visit the Public Register on the DEC website free of charge.

### Contaminated land

Copies of declarations, orders and notices issued under the *Contaminated Land Management Act 1997* are available at a cost of \$12. A full list or part-list of the regulatory instruments issued under the Act is also available for \$12. A register of contaminated sites is available on the DEC website free of charge. Alternatively, phone 131 555 or email [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au) for more information.

### Chemicals and dangerous goods

Approvals, exemptions and determinations under the *Road and Rail Transport (Dangerous Goods) Act 1997*

Dangerous goods licences

Environmentally Hazardous Chemicals Act licences

Declared chemical wastes and chemical control orders under the *Environmentally Hazardous Chemicals Act 1985*

For more information on the above registers, contact 131 555 or email [info@environment.nsw.gov.au](mailto:info@environment.nsw.gov.au). The registers are also accessible on the DEC website free of charge.

### Threatened species

DEC holds two public registers under the *Threatened Species Conservation Act 1995*: the register for section 91 licences under the Act which contains the applications for licences (section 96) and the licences issued (section 104), and the register of critical habitat declared under section 55 of the Act. These are available at the DEC Goulburn Street office and on DEC's website free of charge. Phone 131 555 for more information.

## Conservation

DEC holds registers of conservation agreements, interim protection orders and wilderness protection agreements. These are available at the DEC Hurstville office: phone (02) 9585 6444 for more information.

## Leases, easements and rights of way on national parks and reserves

Section 151D of the *National Parks and Wildlife Act 1974* requires the agency to keep a register of information on every lease, easement or right of way granted on national parks and reserves. This register is available on the DEC website.

## Other information services

A recorded message on air pollution, 'No burn' notices and 'Don't light tonight' advice is available on:

Sydney: 1300 130 520

Newcastle: 1800 817 838

Wollongong: 1800 819 112

The Beachwatch and Harbourwatch information line provides a daily summary of water quality conditions at ocean and harbour beaches: phone 1800 036 677. It advises the public on whether there is any risk of bacterial contamination from swimming beaches and harbours in Sydney, and the Hunter and Illawarra.

# 11. Freedom of information applications

	2002–03*	2003–04	2004–05	2005–06
<b>FOI requests received:</b>				
New (including transferred in)	92	132	99**	142
Brought forward from previous period	6	9	12	7
<b>Total to be processed</b>	<b>98</b>	<b>141</b>	<b>111</b>	<b>149</b>
Completed requests	85	105	94	109
Requests transferred out	0	3	1	7
Withdrawn requests	4	17	9	18
<b>Total processed</b>	<b>89</b>	<b>125</b>	<b>104</b>	<b>134</b>
<b>Unfinished requests (carried forward)</b>	<b>9</b>	<b>16</b>	<b>7</b>	<b>15</b>
<b>Result of FOI requests:</b>				
Granted in full	39	38	59	49
Granted in part	39	51	15	36
Refused	7	16	20	24
Deferred	0	0	0	0
<b>Consultations:</b>				
Requests requiring consultations	59	61	64	68
<b>Total consultations</b>	<b>217</b>	<b>248</b>	<b>337</b>	<b>361</b>
<b>Requests granted in part or refused – basis of disallowing or restricting access:</b>				
s. 19 application incomplete, wrongly directed	0	0	0	0
s. 22 deposit not paid	0	2	6	3
s. 25(1)(a1) diversion of resources	1	0	0	3
s. 25(1)(a) exempt	48	54	26	36
s. 25(1)(b), (c), (d) otherwise available	0	2	0	1
s. 28(1)(b) documents not held	1	5	9	18
s. 24(2) deemed refused, over 21 days	0	2	0	0
s. 31(4) released to medical practitioner	0	0	0	0
<b>Total</b>	<b>50</b>	<b>65</b>	<b>41</b>	<b>61</b>
<b>Costs and fees of requests processed</b>				
Assessed costs	\$15,526	\$16,850	\$14,542	\$13,785
Fees received	na	\$15,292	\$14,285	\$13,515

	2002–03*	2003–04	2004–05	2005–06
<b>Discounts allowed:</b>				
Public interest	17	11	11	5
Financial hardship: pensioner/child	0	8	8	7
Financial hardship: non-profit organisation	0	3	2	3
<b>Total</b>	<b>17</b>	<b>22</b>	<b>21</b>	<b>15</b>
<b>Days to process:</b>				
0–21 days	29	51	42	55
22–35 days	35	45	38	41
Over 35 days	21	9	14	13
<b>Total processed</b>	<b>85</b>	<b>105</b>	<b>94</b>	<b>109</b>
<b>Processing time:</b>				
0–10 hours	72	87	81	88
11–20 hours	8	10	8	16
21–40 hours	4	5	4	4
Over 40 hours	1	3	1	1
<b>Total processed</b>	<b>85</b>	<b>105</b>	<b>94</b>	<b>109</b>
<b>Reviews and appeals finalised:</b>				
Internal reviews	14	13	9	13
Ombudsman's reviews	0	0	2	1
Administrative Decisions Tribunal appeals	0	3	8***	1
<b>Internal review details – grounds on which requested</b>				
<b>Upheld:</b>				
Access refused	1	2	0	1
Exempt matter	5	7	6	9
Unreasonable charges	0	2	1	0
Charges unreasonably incurred	0	0	0	0
<b>Total upheld</b>	<b>6</b>	<b>11</b>	<b>7</b>	<b>10</b>
<b>Varied:</b>				
Access refused	0	1	0	1
Exempt matter	8	1	2	2
Unreasonable charges	0	0	0	0
Charges unreasonably incurred	0	0	0	0
<b>Total varied</b>	<b>8</b>	<b>2</b>	<b>2</b>	<b>3</b>
<b>Total</b>	<b>14</b>	<b>13</b>	<b>9</b>	<b>13</b>

\* Combined NPWS and EPA statistics

\*\* Incorrectly reported as 132 last year

\*\*\* Eight FOI applications relating to three applicants were combined into three Administrative Decisions Tribunal's proceedings.

## 12. Information Centre and Environment Line statistics

The following table shows a detailed breakdown of inquiries to DEC's Information Centre and predecessor services over the last five years. It includes information calls taken by the telephone service 'Environment Line'. See page 7 for more information about Environment Line.

### Information inquiries to DEC's Information Centre by subject area

Subject	2001–02		2002–03		2003–04		2004–05		2005–06	
	%	No.	%	No.	%	No.	%	No.	%	No.
Air	19	7,127	15	6,020	16	6,224	14	5,570	13	4,818
Chemicals	10	3,915	12	4,695	13	4,862	15	5,689	12	4,480
Land	6.5	2,505	8.0	3,210	8.0	3,112	5.7	2,202	6.4	2,418
Noise	15	5,763	15	5,819	14	5,602	16	6,193	12	4,278
Waste	17	6,670	17	6,742	17	6,612	17	6,535	22	8,205
Water	16	6,109	15	6,101	14	5,328	13	5,018	12	4,345
Other	16	6,333	19	7,543	18	7,158	20	7,691	24	8,980
<b>Total</b>	<b>100</b>	<b>38,422</b>	<b>100</b>	<b>40,130</b>	<b>100</b>	<b>38,898</b>	<b>100</b>	<b>38,898</b>	<b>100</b>	<b>37,524</b>
Flora/fauna	na	na	na	na	na	na	na	na	28	16,518
National parks	na	na	na	na	na	na	na	na	48	28,713
National parks passes	na	na	na	na	na	na	na	na	24	14,260
<b>Total</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>100</b>	<b>59,491</b>
<b>Other inquiries at reception</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>100</b>	<b>30,355</b>
<b>Switchboard inquiries</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>100</b>	<b>60,658</b>

### Calls to Environment Line reporting pollution incidents by type

Incident type	2001–02		2002–03		2003–04		2004–05		2005–06	
	%	No.	%	No.	%	No.	%	No.	%	No.
Air	12	1,292	10	1,079	10	1,051	11	1,078	9.2	746
Air – odour	47	5,315	40	4,248	30	3,191	33	3,238	33	2,662
Chemicals – hazardous waste	1.5	172	1.3	141	2.1	218	1.9	180	1.3	103
Chemicals – illegal dumping	0.5	53	1.3	138	1.3	138	0.9	92	0.8	65
Chemicals – toxic spills	0.4	44	0.3	34	0.7	74	0.3	33	0.5	39
Chemicals – waste	3.5	391	3.0	324	4.3	451	4.2	405	4.2	338
Contaminated land	0.2	21	0.3	30	0.2	26	0.2	23	0.3	23
Cultural heritage	na	na	na	na	na	na	na	na	0.1	6
Noise	3.0	336	4.6	492	3.3	346	4.1	393	3.2	263
Noise – scheduled premises	7.1	794	7.2	763	11	1,123	11	1,045	10.6	867
Pesticides	2.0	228	2.5	261	2.9	308	3.4	331	3.1	255
Radiation	< 0.1	1	0.1	6	0.1	7	< 0.1	2	0.1	6
Threatened species	na	na	na	na	na	na	< 0.1	4	0.9	72
Water	12	1,373	12	1,230	11	1,199	13	1,292	13	1,097
Water – algae	0.2	20	0.5	51	0.3	30	0.2	17	0.4	34
Water – fish kills	1.0	110	0.9	96	0.8	87	0.7	67	0.9	70
Water – oil spills	1.4	161	1.9	201	2.0	210	1.6	153	1.8	147
Water – stormwater	8.2	917	14	1,535	19	2,036	14	1,343	16.6	1,350
<b>Total</b>	<b>100</b>	<b>11,228</b>	<b>100</b>	<b>10,629</b>	<b>100</b>	<b>10,495</b>	<b>100</b>	<b>9,696</b>	<b>100</b>	<b>8,143</b>



## 13. Publications

### Corporate publications

DEC Annual Report 2004–05

DEC Corporate Plan 2006–10

Environmental Trust Annual Report 2004–05

Radiation Advisory Council Annual Report 2004–05

Summary of affairs: Department of Environment and Conservation NSW (June 2006)

### Discussion papers and draft plans

Accreditation scheme for individuals involved in threatened species and biodiversity survey and assessment: Draft for comment

BioBanking: A biodiversity offsets and banking scheme – Working paper

BioBanking: An investigation of market-based instruments to secure long-term biodiversity objectives – Background paper

Learning for sustainability: NSW Environmental Education Plan 2006–09 – Consultation paper

Recommendation for the identification of critical habitat for the eastern suburbs banksia scrub endangered ecological community: Draft for public comment

Regulatory impact statement: Proposed Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2005

Regulatory impact statement: Proposed Protection of the Environment Operations (Waste) Regulation 2005

### Guidelines and advisory documents

Aboriginal scarred trees in NSW: A field manual

Approved methods for the modelling and assessment of air pollutants in NSW (revision)

Approved methods for the sampling and analysis of air pollutants in NSW (revision)

Assessing vibration: A technical guideline

Best practice guidelines for aerial spraying of bitou bush in NSW

Biodiversity certification and banking in coastal and growth areas

Compliance audit handbook (revision)

Considering environmental values of water when issuing prevention notices

Contaminated sites: Guidelines for the NSW Site Auditor Scheme (revision)

DEC style guide

Down to earth: An Earth Works learners guide (reprint)

Educating the community in environmental planning and decision-making

Extended Producer Responsibility Priority Statement 2005–06

Getting more from our resource recovery systems: Model waste and recycling collection contract

Guide to notices

How to use peer education for sustainability: Getting a handle on a slippery fish

Latest information for councils on recycling, waste collection and resource recovery

Managing urban stormwater: Harvesting and reuse

NSW Government National Packaging Covenant II Action Plan: July 2005–June 2006

NSW Government Waste Reduction and Purchasing Policy: Guidelines to assist reporting

NSW local government sustainability health check

Pesticides notification: Developing a pesticide use notification plan for outdoor public places – A guide for local councils

Powers of authorised officers

Preferred resource recovery practices by local councils

Resource guide for local councils: Erosion and sediment control

Using the ANZECC Guidelines and water quality objectives in NSW

Woodsmoke resources for councils and other local authorities

WRAPP guides to conducting an office waste assessment (guide, example report and participants' notes)

### Environmental and technical reports

Air pollution economics: Health costs of air pollution in the Greater Sydney Metropolitan Region

Application of recycled organics in mine site rehabilitation: A review of the scientific literature

Audit of the Sydney drinking water catchment: Report to the Minister for the Environment

Avoiding and offsetting biodiversity loss: Case studies

Bibliography for the World Heritage Central Eastern Rainforest Reserves of Australia

Compliance performance report: Industry sector – Piggeries

Developing recycled organic products for use in viticulture

Environmental compliance report: Liquid chemical storage, handling and spill management –

- Part A Compliance audit
- Part B Review of best practice and regulation
- Part C Final report

Information for the assessment of former gasworks sites

Introducing the Threatened Species Priorities Action Statement (PAS)

Living land, living culture: Aboriginal heritage and salinity

Marine water quality objectives for NSW ocean waters:

- Hunter and Central Coast
- North Coast
- South Coast
- Sydney Metropolitan and Hawkesbury–Nepean

Perisher Range Resorts – environmental management system: Lodge workbook 2005–2006

Persistent Herbicides Risk Management Program

Recovering bushland on the Cumberland Plain (interpretive notes):

- Camden Town Farm
- Elizabeth Macarthur Agricultural Institute, Camden
- Western Sydney Parklands site, Eastern Creek, Doonside
- Western Sydney riparian corridors site, South Creek, Erskine Park

Recycled organics in catchment management: A review of the scientific literature

Recycled organics: On-farm salinity trials

Vertebrate fauna of Manobalai Nature Reserve and adjacent Crown lands

Vertebrate fauna of north-eastern Wollemi National Park

Vertebrate fauna of northern Yengo National Park

Vertebrate fauna of Werakata National Park

## Fire management plans and strategies

### Draft plans and strategies

Draft Baalijin Nature Reserve Fire Management Strategy

Draft Back River Nature Reserve Fire Management Strategy 2004–2009

Draft Bago Bluff National Park Fire Management Strategy

Draft Billinudgel, Marshalls Creek and Brunswick Heads (North) Nature Reserves Fire Management Strategy

Draft Bindarri National Park and State Conservation Area Fire Management Strategy

Draft Bobundara and Myalla Nature Reserves Fire Management Strategy

Draft Bogandyera Nature Reserve Fire Management Strategy 2005–2010

Draft Bretti Nature Reserve Fire Management Strategy

Draft Broadwater National Park Fire Management Strategy

Draft Cathedral Rock National Park and Serpentine Nature Reserve Fire Management Strategy

Draft Clarkes Hill Nature Reserve Fire Management Strategy 2005–2010

Draft Clybucca Historic Site Fire Management Strategy

Draft Cooperabung Creek Nature Reserve Fire Management Strategy

Draft Coorabakh National Park Fire Management Strategy

Draft Coornartha Nature Reserve Fire Management Strategy

Draft Dangelong Range Fire Management Strategy

Draft Goonengerry National Park Fire Management Strategy

Draft Ironmungy Nature Reserve Fire Management Strategy

Draft Jingellic Nature Reserve Fire Management Strategy 2005–2010

Draft Karuah Nature Reserve and State Conservation Area Fire Management Strategy

Draft Khappinghat Nature Reserve and Talawahl Nature Reserve Fire Management Strategy

Draft Kinchega National Park Fire Management Strategy

Draft Koreelah National Park Fire Management Strategy

Draft Kumbatine National Park Fire Management Strategy

Draft Macanally State Conservation Area Fire Management Strategy

Draft Mallee Cliffs National Park Fire Management Strategy

Draft Maria National Park Fire Management Strategy

Draft Medowie State Conservation Area and Moffats Swamp Nature Reserve Fire Management Strategy

Draft Merriangaah Complex Fire Management Strategy

Draft Middle Brother National Park Fire Management Strategy

Draft Moonee Beach Nature Reserve Fire Management Strategy

Draft Mount Clifford Nature Reserve Fire Management Strategy

Draft Mount Clunie and Mount Nothofagus National Parks Fire Management Strategy

Draft Mount Jerusalem National Park and Inner Pocket Nature Reserve Fire Management Strategy

Draft Mungo National Park Fire Management Strategy

Draft Nest Hill Nature Reserve Fire Management Strategy

Draft Ngambaa Nature Reserve Fire Management Strategy

Draft Nightcap National Park, Whian Whian State Conservation Area and Snows Gully Nature Reserve Fire Management Strategy

Draft Numeralla and Undoo Nature Reserves Fire Management Strategy

Draft Nymboi–Binderay National Park and State Conservation Area Fire Management Strategy

Draft Paroo–Darling National Park Fire Management Strategy

Draft Paupong Nature Reserve Fire Management Strategy

Draft Popran National Park (South Portion) Fire Management Strategy

Draft Rawdon Creek Nature Reserve Fire Management Strategy

Draft Sherwood Nature Reserve Fire Management Strategy

Draft The Glen Nature Reserve Fire Management Strategy

Draft Tomalla Nature Reserve Fire Management Strategy 2004–2009

Draft Tooloom National Park and Captains Creek Nature Reserve Fire Management Strategy

Draft Toonumbar National Park and State Conservation Area Fire Management Strategy

Draft Uralba Nature Reserve Fire Management Strategy

Draft Wallamba Nature Reserve Fire Management Strategy

Draft Wallaroo Nature Reserve Fire Management Strategy

Draft Woko National Park Fire Management Strategy

Draft Yabba National Park Fire Management Strategy

Draft Yanununbeyan Reserves Fire Management Strategy

Draft Yarravel Nature Reserve and Skillion Nature Reserve Fire Management Strategy

## Approved plans and strategies

Abercrombie River National Park Fire Management Strategy 2004–2008

Back River Nature Reserve Fire Management Strategy

Bobundara and Myalla Nature Reserves Fire Management Strategy

Broadwater National Park Fire Management Strategy

Brunswick Heads (South) Nature Reserve Fire Management Strategy

Budelah Nature Reserve Fire Management Strategy

Cape Byron Headland Reserve Fire Management Strategy

Cape Byron State Conservation Area Fire Management Strategy

Castlereagh Nature Reserve Fire Management Strategy

Coonarrtha Nature Reserve Fire Management Strategy

Cumbebin Swamp Nature Reserve Fire Management Strategy

Dangalong Range Fire Management Strategy

Darawank Nature Reserve Fire Management Strategy

Goonengerry National Park Fire Management Strategy

Gulaga National Park Fire Management Strategy

Jingellic Nature Reserve Fire Management Strategy 2005–2010

Kirramingly Nature Reserve Fire Management Strategy

Kooraban National Park Fire Management Strategy

Lake Macquarie State Conservation Area:

- Awaba Bay Fire Management Strategy
- Chain Valley Bay Fire Management Strategy
- Morisset Fire Management Strategy
- Myuna Bay Fire Management Strategy
- Point Wolstoncroft Fire Management Strategy
- Wangi Point Fire Management Strategy

Macanally State Conservation Area Fire Management Strategy

Marshalls Creek, Billinudgel and Brunswick Heads (North) Nature Reserves Fire Management Strategy

Montague Island Nature Reserve Fire Management Strategy

Mundoonen Nature Reserve Fire Management Strategy and Fire Operations Map

Nest Hill Nature Reserve Fire Management Strategy and Operations Map

Pelican Island Nature Reserve Fire Management Strategy

Popran National Park (North Portion) Fire Management Strategy

Pulbah Island Nature Reserve Fire Management Strategy

South-East Forest National Park Fire Management Strategy

Tingira Heights Nature Reserve Fire Management Strategy

Tomalla Nature Reserve Fire Management Strategy

Tooloom National Park and Captains Creek Nature Reserve Fire Management Strategy

Toonumbar National Park and State Conservation Area Fire Management Strategy

Wamberal Lagoon Nature Reserve Fire Management Strategy

Wambina Nature Reserve Fire Management Strategy

Wyrrabalong National Park (North Portion) Fire Management Strategy

Wyrrabalong National Park (South Portion) Fire Management Strategy

Yanununbeyan National Park, Nature Reserve and State Conservation Area Fire Management Strategy

Yanununbeyan Reserves Fire Management Strategy and Fire Operations Map

## Plans of management

### Draft plans

Draft Avisford Nature Reserve Plan of Management

Draft Ben Boyd National Park and Bellbird Creek Nature Reserve Plan of Management

Draft Brindabella National Park and State Conservation Area Plan of Management

Draft Burnt-Down Scrub Nature Reserve Plan of Management

Draft Central Monaro Reserves (incorporating Bobundara, Ironmungy, Myalla, Wullwye, Paupong, Ngadang and Nimmo Nature Reserves) Plan of Management

Draft Chaelundi National Park and State Conservation Area Plan of Management

Draft Conjola National Park Plan of Management

Draft Copperhannia Nature Reserve Plan of Management

Draft Goonawarra Nature Reserve Plan of Management

Draft Guy Fawkes River National Park, Nature Reserve and State Conservation Area Plan of Management

Draft Kuma Nature Reserve Plan of Management

Draft Meroo National Park and Barnunj State Conservation Area Plan of Management

Draft Monkerai Nature Reserve Plan of Management

Draft Munro Island Nature Reserve Plan of Management

Draft Narrandera Nature Reserve Plan of Management

Proposed Amendment to Big Scrub Nature Reserve Plan of Management

Proposed Amendment to Sea Acres Nature Reserve

Draft Sherwood Nature Reserve Plan of Management

Draft Southern Richmond Range Group Plan of Management

Draft Wambool Nature Reserve Plan of Management

Draft Winburndale Nature Reserve Plan of Management

### Approved plans

Abercrombie River National Park Plan of Management

Amendments to the Myall Lakes National Park and Little Broughton Island and Stormpetrel Nature Reserves Plan of Management 2006

Basket Swamp National Park Plan of Management

Berkeley Nature Reserve Plan of Management

Berowra Valley Regional Park Plan of Management

Boorganna Nature Reserve Plan of Management

Brimbin Nature Reserve Plan of Management

Byrnes Scrub Nature Reserve Plan of Management

Courabyra Nature Reserve Plan of Management

Davidson Whaling Station Historic Site Conservation Management and Cultural Tourism Plan

Downfall Nature Reserve Plan of Management

Fishermans Bend Nature Reserve Plan of Management

Five Islands Nature Reserve Plan of Management

Gundabooka National Park and State Conservation Area Plan of Management

Ingalba, Big Bush and Pucawan Nature Reserves Plan of Management

Kattang Nature Reserve Plan of Management

Mount Kaputar National Park Plan of Management

Mundoonen Nature Reserve Plan of Management

Nest Hill Nature Reserve Plan of Management

Oxley Wild Rivers National Park and State Conservation Area, Cunnawarra National Park and Georges Creek Nature Reserve Plan of Management

Parks and Reserves of the Northern Richmond Range (including Richmond Range, Toonumbar and Mallanganee National Parks and Hogarth Range Nature Reserve) Plan of Management

Richmond River Nature Reserve Plan of Management

Tapin Tops National Park Plan of Management

Werrikimbe National Park Plan of Management

## Recovery and threat abatement plans

### Draft plans

Draft Feral Horse Management Plan: Oxley Wild Rivers National Park

Draft NSW and National *Wollemia nobilis* (Wollemi pine) Recovery Plan

### Approved plans

*Burhinus grallarius* (Bush stone-curlew) Recovery Plan

*Petrogale penicillate* (Brush-tailed rock-wallaby) Recovery Plan

*Pimelea spicata* R.Br. Recovery Plan

*Prostanthera askania* Recovery Plan

*Zieria involucrate* R.Br. Ex Bentham Recovery Plan

## Education and community relations

A history of Aboriginal people of the Illawarra 1770 to 1970

Aboriginal men's heritage: Walgett and Collarenebri

Aboriginal women's heritage: Walgett and Collarenebri

Achievements in the Hunter region 2004–2005

Annual pass to NSW national parks

Approaching whales and dolphins in NSW

Be a backyard buddy:

- Lucky enough to have an eastern water dragon in your backyard?
- Rainbow lorikeets need friendly gardens for their fun games

Beachwatch and Harbourwatch: State of the beaches 2004–05

Beachwatch Partnership Program: State of the beaches 2004–05

City and Country Environment Restoration Program: Restoring and protecting our natural heritage

Clean your home safely (Arabic, Chinese, English, Greek, Italian, Korean, Macedonian, Spanish, Vietnamese)

Community strategy for the protection and management of Longneck Catchment

Conserving water using compost materials

Dealing with barking dogs (reprint)

Dealing with neighbourhood noise (reprint)

Discovery brochures:

- Blue Mountains National Park
- Coolah Tops National Park
- Goulburn River National Park
- Kanangra–Boyd National Park
- Wollemi National Park

Discovery Hunter (Autumn–Spring 2005, Spring–Summer 2005, Autumn–Winter 2006)

Discovery Mid North Coast (July 2005, September 2005, December 2005–January 2006, April 2006)

Discovery North Coast (Spring 2005, Summer 2005–06, March–June 2006)

Discovery Northern Rivers (Spring 2005, Summer 2006, Easter 2006, Schools program)

Earth Works certificate (reprint)

Easy composting guide (Arabic, Chinese, English, Greek, Italian, Korean, Macedonian, Spanish, Vietnamese)

Easy guide to natural cleaning

Easy mulching guide (Arabic, Chinese, English, Greek, Italian, Korean, Macedonian, Spanish, Vietnamese)

Easy recycling guide (Arabic, Chinese, English, Greek, Italian, Korean, Macedonian, Spanish, Vietnamese)

Easy worm farming guide (Arabic, Chinese, English, Greek, Italian, Korean, Macedonian, Spanish, Vietnamese)

Educating the community about litter: Changing knowledge, attitudes and behaviour 2000 to 2003

Environment Matters 41: New law for notifying the community when public authorities use pesticides in public places

Environment Matters 42: New law for notifying residents about pesticide use in multiple occupancy residential complexes

Fire management in NSW national parks: Frequently asked questions

Fox and wild dog baiting – Upper Hunter area and north coast annual review 2004–2005

Guide to NSW national parks 2006

Hey all you mob! Do you need help in healing country?

Household Chemical CleanOut – (Hunter)

Household Chemical CleanOut – (Illawarra)

Household Chemical CleanOut – (Sydney, English version)

Household Chemical CleanOut – (Sydney, NESB version)

Improving water quality in catchments using compost

Liquid waste fact sheets:

- Handling liquid waste
- Preventing spills
- Reducing liquid waste through cleaner production
- Responding to spills
- Storing liquid waste

Living parks: A sustainable visitation strategy

Northern Branch Regional Advisory Committees conference 2005 proceedings

Make your household items live again: Tread softly 10 tips

Mungo over millennia: The Willandra landscape and its people

Murni, Dhungang, Jirrar Living in the Illawarra: Aboriginal people and wild resource use

NSW City and Country Environment Restoration Program: Strategic Environmental Trust grants

NSW City and Country Environment Restoration Program: Urban Sustainability Program

NSW reprocessing industries survey 2003–04

Paint clean: Environmental information for painters (reprint)

Pest and weed management in NSW national parks: Frequently asked questions

Pest management in NSW national parks fact sheets:

- Feral pigs
- Foxes
- Rabbits
- Wild dogs

Pesticide notification:

- Owners, strata managers and property managers
- Pest management technicians

Priority actions for:

- Chemicals
- Energy
- Green Power
- Recreational driving
- Renovators
- Transport
- Waste and recycling
- Water

Priority actions:

- When boating
- When bushwalking
- When camping

Progress in waste avoidance and resource recovery in NSW

Reducing paper waste at work

Reducing waste from office equipment and supplies

Report on the second annual review of implementation of Learning for Sustainability

Revitalising our urban environments: Creating a sustainable future for country NSW

Revival, renewal and return: Ray Kelly and the NSW sites of significance survey

Stormwater pollution: The difference is you brochure (reprint)

Sustainable Schools Program: Achieving positive change towards sustainable practices

Sustainable Schools Program: Implementing innovative approaches

Sustainable Schools Program: Schools improving our environment

Sustainability Compact between Department of Environment and Conservation NSW and Hewlett-Packard

Sustainability Compact between Department of Environment and Conservation NSW and Sensis Pty Ltd

The Aboriginal people of Monaro

The environment and ethnic communities in 2004: Social research

The environment and ethnic communities in 2004 community profiles:

- Arabic community
- Chinese community
- Greek community
- Italian community
- Korean community
- Macedonian community
- Spanish community
- Vietnamese community

The marvel of mulch

Using compost materials for sustainable viticulture

Watching out for whales and dolphins

Weed management in NSW national parks fact sheets:

- Bitou bush
- Blackberry
- Lantana
- Scotch broom

Wild about Sydney Harbour

Working with ethnic communities to sustain our environment

## New or revised parks and reserves brochures

### National parks

Abercrombie River, Barrington Tops, Blue Mountains, Blue Mountains (Bushwalking in the Katoomba and Leura area; Echo Point and the Three Sisters; Glenbrook and the eastern Blue Mountains), Border Ranges, Bundjalung, Coolah Tops, Gardens of Stone, Goulburn River, Kanangra–Boyd, Mount Warning, Wollumbin and Mebbin, Myall Lakes, Nightcap, Hat Head (Smoky Cape lighthouse), National Parks of Camden Haven, Toonumbar, Richmond Range and Mallanganee, Towarri, Werrikimbe and Willi Willi, Woko, Wollemi, Yuraygir

### Nature reserves

Boorganna, Coastal Islands of Hunter, Iluka Bluff, Little Broughton Island and Stormpetrel, Macquarie (Roto House), Munghorn Gap, Sea Acres (Rainforest Centre)

### Other

Copeland Tops State Conservation Area (SCA), Dunns Swamp, Great Lakes, Hartley Historic Site, Arakoon SCA (Trial Bay Gaol), Yellomundee Regional Park



## Newsletters and magazines

Living Sustainably e-newsletter (December 2005, May 2006)  
 Stockton Newsletter (Nos. 1, 2 and 3)  
 The Business Environment (October 2005)  
 The Melaleuca (newsletter)  
 Woodland wanderings 4(1) (newsletter)  
 Working with local government towards a sustainable future (October 2005, March 2006)

## Posters

Aboriginal people, the environment and conservation  
 Bell miner associated dieback – and the declining health of NSW forests  
 Discovery for schools: Hunter  
 Household Chemical CleanOut (English and NESB posters)  
 Pandanus at risk

## Postcards

Our environment – It's a living thing (set of 3)

## Multimedia

Backyard buddies: Urban wildlife and biodiversity educators' resource kit (CD)  
 Cost/benefits of using recycled organics in council parks and garden operations in NSW (CD)  
 Getting more from our resource recovery systems: Recycling and garden organics (CD)  
 Know your printing paper: A guide to purchasing recycled content office paper (CD)  
 Our environment – It's a living thing (website)  
 Rainforest snails: Teacher resource compilation (CD)  
 Recycled organics cost-benefit calculator (CD)  
 WRAPP guide to conducting an office waste assessment (CD and PowerPoint presentation)

## Panels

Be a 5 star camper  
 Be dingo aware  
 Border Ranges National Park (multiple locations)  
 Bundjalung National Park: Illuka Bluff  
 Cape Byron lighthouse precinct  
 Dark Point Aboriginal Place  
 Guy Fawkes State Conservation Area–Dalmorton (multiple locations)  
 Kumbertine lime kiln  
 Middledyards  
 Muttonbird Island (multiple locations)  
 Myall Lakes (multiple locations)  
 Park user fees (multiple locations)  
 Sea Acres Rainforest Centre  
 Shorebirds (multiple locations)  
 Victoria Park Nature Reserve (multiple locations)

## 14. Papers published

Abbott, L, Colville, A, Lim, RP, Tremblay, L, Northcott, G, Rawson, C, Chapman, J and Boake, M (2005), 'Evaluation of the efficacy of an advanced tertiary sewage treatment plant in removing estrogens using bioassays', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September

Apte, SC, Batley, GE, Bowles, KC, Brown, PL, Creighton, N, Hales, LT, Hyne, RV, Julli, M, Markich, SJ, Pablo, F, Rogers, NJ, Stauber, JL and Wilde, K (2005), 'A comparison of copper speciation measurements with the toxic responses of three sensitive freshwater organisms', *Environmental chemistry*, vol. 2, 320–30

Auld, TD and Denham, AJ (2005), 'A technique to estimate the pre-fire depth of burial of Grevillea seeds using seedlings after fire', *Australian journal of botany*, vol. 53, 401–405

Ayers, D, Seddon, J, Briggs, S, Doyle, S and Gibbons, P (2005), *Interim benchmarks for the BioMetric® Tool*, NSW Department of Environment and Conservation, CSIRO Sustainable Ecosystems, Canberra

Baginska, B, Lu, Y and Prichard, T (2005), 'Modelling nutrient loads to better manage impacts of urbanisation in the Tweed catchment, New South Wales, Australia', *Proceedings of International Congress on Modelling and Simulation Advances and Applications for Management and Decision-making*, 2346–52

Boot, P (2005), 'Transverse snapping on stone artefacts: Experimental and archaeological evidence of damage creation processes' in I Macfarlane, M Mountain and R Paton (eds), *Many exchanges: Archaeology, history, community and the work of Isabel McBryde*, Aboriginal History Monograph 11, Aboriginal History Press, Canberra

Bradstock, RA, Bedward, M and Cohn, JS (2006), 'The modelled effects of differing fire management strategies on the conifer *Callitris verrucosa* within semi-arid mallee vegetation in Australia', *Journal of applied ecology*, vol. 43, 281–92

Bragg, D (2006), 'This goes with that: ROMPS, a compost-dating agency', *Proceedings of Enviro 06 Conference*, Melbourne, 9 May

Briggs, SV (2006), 'Integrating policy and science in natural resources: Why so difficult?' *Ecological management and restoration*, vol. 7, 37–39

Briggs, SV and Freudenberger, D (2006), 'Assessment and monitoring of vegetation condition: Moving forward', *Ecological management and restoration*, vol. 7, S74–S76

Brown, H, Lim, RP, Colville, A, Warne, MStJ, Leusch, F, Lovell, A, Chapman, J and Mulhall, A-M (2005), 'Assessing the endocrine-disrupting effects of sewage-contaminated water in Sydney, Australia, using *Gambusia holbrooki* (Mosquitofish)', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September

Byrne, D (2005), 'Messages to Manila' in I Macfarlane, M Mountain and R Paton (eds), *Many exchanges: Archaeology, history, community and the work of Isabel McBryde*, Aboriginal History Monograph 11, Aboriginal History Press, Canberra

Byrne, D, Goodall, H, Wearing, S and Cadzow, A (2006), 'Enchanted parklands', *Australian geographer*, vol. 37(1), 103–15



- Castinel, A, Duignan, PJ, Pomroy, WE, Lyons, ET, Nadler, SA, Dailey, MD, Wilkinson, IS and Chilvers, BL (2006), 'First report and characterisation of adult *Uncinaria* spp. in New Zealand sea lion (*Phocarcos hookeri*) pups from the Auckland Islands, New Zealand', *Parasitology research*, vol. 98(4), 304–09
- Cattle, J, Vaughan, G, Fuller, S, Foley, R, Pang Way, C and Low, G (2005), 'Unravelling environmental enigmas: Forensic analysis in the DEC', *Chemistry in Australia*, 15–16
- Chapman, J (2006), 'Introduction and theory: Water quality guidelines', *Proceedings of AWA Seminars: Sediment water quality assessment*, Sydney (15 February), Melbourne (23 February), Adelaide (15 March) and Brisbane (6 April)
- Chapman, J (2006), 'Sediment quality guidelines and assessment frameworks', *Proceedings of AWA Seminars: Sediment water quality assessment*, Sydney (15 February), Melbourne (23 February), Adelaide (15 March) and Brisbane (6 April)
- Cherry, H and Downey, PO (2005), 'Managing bitou bush in NSW: The value of a concerted effort', *Proceedings of the 13th NSW Biennial Noxious Weeds Conference*, 20–22 September, Orange
- Cherry, H, Clark, A, Gannaway, D and Petroeschewsky, A (2005), 'Conquering WONS on the edge: Managing weeds of national significance in coastal NSW', *Proceedings of the 14th NSW Coastal Conference*, 8–11 November, Narooma [available at [www.esc.nsw.gov.au](http://www.esc.nsw.gov.au)]
- Chilvers, BL, Wilkinson, IS, Duignan, PJ and Gemmell, NJ (2006), 'Diving to extremes: Are New Zealand sea lions (*Phocarcos hookeri*) pushing their limits in a marginal environment?' *Journal of zoology*, vol. 269, 233–40
- Choung, CB, Hyne, RV, Wilson, SP and Turak, E (2005), 'The effects of abandoned mines on the ecological health of the Tonalli River, NSW', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September
- Claridge, AW and Trappe, JM (2005), 'Sporocarp mycophagy: Nutritional, behavioural, evolutionary and physiological aspects' in J Dighton (ed.), *The fungal community: Its organisation and role in the community*, CRC Press, Boca Raton, Florida
- Claridge, AW, Murray, AJ, Dawson, J, Poore, R, Mifsud, G and Saxon, MJ (2006), 'The propensity of spotted-tailed quolls (*Dasyurus maculatus*) to encounter and consume non-toxic meat baits in a simulated canid control program', *Wildlife research*, vol. 33, 85–91
- Claridge, AW, Paull, D, Dawson, J, Mifsud, G, Murray, AJ, Poore, R and Saxon, MJ (2005), 'Home range of the spotted-tailed quoll (*Dasyurus maculatus*), a marsupial carnivore, in a rainshadow woodland', *Wildlife research*, vol. 32, 7–14
- Colville, A, Lim, RP, Warne, MStJ, Lovell, A, Chapman, J and Mulhall, A-M (2005), 'Identification of endocrine-disrupting compounds (EDCs) in sewage treatment plant effluents', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September
- Dassanayake, H, Warne, MStJ, Lim, RP and Chapman, J (2005), 'The toxicities of sea salt, atrazine, molinate and chlorpyrifos to the fresh water green alga *Pseudokirchneriella subcapitata* and their interactive toxicities', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September
- Davis, R and Koop, K (2006), 'Eutrophication in Australian rivers, reservoirs and estuaries: A southern hemisphere perspective on the science and its implications', *Hydrobiologia*, vol. 559, 23–76
- Dela-Cruz, J, Pritchard, T, Gordon, G and Ajani, P (2006), 'The use of periphytic diatoms as a means of assessing impacts of point source inorganic nutrient pollution in south-eastern Australia', *Freshwater biology*, vol. 51, 951–72
- Dijkstra, K-DB, van Tol, J, Legrand, J and Theischinger, G (2005), 'Case 3324: Tramea Hagen, 1861 (Insecta, Odonata) – Proposed conservation', *Bulletin of zoological nomenclature*, vol. 62(2), 68–71
- Downey, PO and Cherry, H (2005), 'Delivering strategic conservation outcomes through the integrated management of bitou bush, a Weed of National Significance', *Proceedings of Smart Weed Control, Managing for Success: Second Victorian Weeds Conference*, 17–18 August, Bendigo, Weed Society of Victoria, RG & FJ Richardson, Melbourne
- Gale, SA, King, CK and Hyne, RV (2006), 'Chronic sublethal sediment toxicity testing using the estuarine amphipod, *Melita plumulosa* (Zeidler): Evaluation using metal-spiked and field-contaminated sediments', *Environmental toxicology and chemistry*, vol. 25, 1887–98
- Gibbons, P, Ayers, D, Seddon, J, Doyle, S and Briggs, S (2005), *BioMetric® Operational Manual Version 1.8: A terrestrial biodiversity assessment tool for the NSW Property Vegetation Plan Developer*, NSW Department of Environment and Conservation, CSIRO Sustainable Ecosystems, Canberra
- Green, K (2005), 'Winter home range and foraging of common wombats (*Vombatus ursinus*) in patchily burnt subalpine areas of the Snowy Mountains, Australia', *Wildlife research*, vol. 32, 525–29
- Green, K (2006), 'Impacts on fauna from late winter variability in weather in the Snowy Mountains of Australia: Implications for monitoring', in M Price (ed.), *Global change in mountain regions*, Sapiens Publishing, Duncow, Scotland
- Green, K (2006), 'The marine mammals of Heard Island' in K Green and EJ Woehler (eds), *Heard Island: Southern Ocean sentinel*, Surrey Beatty and Sons
- Green, K (2006), 'The return migration of bogong moths, *Agrotis infusa* (Boisduval) (Lepidoptera: Noctuidae) from the Snowy Mountains, New South Wales', *Australian entomologist*, vol. 33(1), 27–30
- Green, K (2006), 'Winter arousal of a high mountain skink, *Pseudemoia rawlinsoni*, following hibernation beneath the snow', *Herpetofauna*, vol. 35(2), 95–97
- Green, K, Good, RB, Johnston, SW and Simpson, LA (2005), 'Alpine grazing in the Snowy Mountains of Australia: Degradation and stabilisation of the ecosystem' in E Spehn (ed.), *Land use changes and mountain biodiversity*, Maximo
- Green, K. and Woehler, EJ (eds) (2006), *Heard Island: Southern Ocean sentinel*, Surrey Beatty and Sons
- Halim, CE, Short, AA, Scott, JA, Amal, R and Low, G (2005), 'Modelling of leaching of Pb, Cd, As, and Cr from cementitious waste using PHREEQC', *Journal of hazardous materials*, vol. A125, 45–61
- Hammill, KA and Bradstock, RA (2006), 'Meandering in the mountains: a landscape-scale study of plant diversity, fire and climate', *Australian plant conservation*, vol. 14(4), 6–7

- Hamill, KA and Bradstock, RA (2006), 'Remote sensing of fire severity in the Blue Mountains: The influence of vegetation type and inferring fire intensity', *International journal of wildland fire*, vol. 15, 213–36
- Hamill, KA and Bradstock, RA (2006), 'Spatial patterns of fire behaviour in relation to weather, terrain and vegetation', *Proceedings of the Bushfire 2006 Conference*, Brisbane Convention Centre, 6–9 June
- Harris, R, Cassis, G, Auld, TD and Hutton, I (2005), 'Patterns in floristic composition and structure in the mossy cloud forest of Mt Gower summit, Lord Howe Island', *Pacific conservation biology*, vol. 11, 246–56
- Hashimoto, T and Saintilan, N (2006), 'Mid-Holocene development of mangrove communities featuring Rhizophoraceae and geomorphic change in the Richmond River estuary, New South Wales, Australia', *Geographic research*, vol. 44(1), 63–76
- Hobbs, DA, Warne, MStJ and Markich, SJ (2005), 'Evaluation of criteria used to assess the quality of aquatic toxicity data', *Integrated environmental assessment and management*, vol. 1, 174–80
- Hogbin, T (2006), 'Kurri what? Developing a recovery program for Kurri sand swamp woodland', *Australasian plant conservation*, vol. 14(3), 6
- Hose, GC, Gordon, G, McCullough, FE, Pulver, N and Murray, BR (2005), 'Spatial and rainfall related patterns of bacterial contamination in Sydney Harbour estuary', *Journal of water and health*, vol. 3(4), 349–58
- Hose, G, Turak, E (2006), *River health in the New South Wales lower north coast, Hunter and central coast catchments*, River health bioassessment report no. 41, Department of Environment and Heritage and NSW Department of Environment and Conservation
- Hyne, RV (2006), 'Bio-availability of sediment-bound contaminants', *Proceedings of AWA Seminars: Sediment water quality assessment*, Sydney (15 February), Melbourne (23 February), Adelaide (15 March) and Brisbane (6 April)
- Hyne, RV (2006), 'Eco-toxicological approaches for assessing sediment-bound contaminants', *Proceedings of AWA Seminars: Sediment water quality assessment*, Sydney (15 February), Melbourne (23 February), Adelaide (15 March) and Brisbane (6 April)
- Hyne, RV and Aistrophe, M (2005), *Development of a passive sampler device for polar pesticides*, report for the Rural Industries Research and Development Corporation, Canberra
- Hyne, RV, Gale, SA and King, CK (2005), 'Laboratory culture and life-cycle experiments with the benthic amphipod *Melita plumulosa* (Zeidler)', *Environmental toxicology and chemistry*, vol. 24, 2065–73
- Jackson, M (2005), 'Sustainable landscaping using recycled organics: Part 1', *Landscape contractor*, Nov–Dec, 49–51
- Jackson, M (2005), 'Sustainable landscaping: Recycled organics', *Master builder*, Jun–Jul, 42–44
- Jackson, M (2006), 'Sustainable landscaping using recycled organics: Part 2', *Landscape contractor*, Jan–Feb, 50–54
- Jackson, MJ, Wong, P and Dorahy, C (2006), 'Repairing degraded land in water catchments: The untapped potential', *Proceedings of Enviro 06 Conference*, 9 May, Melbourne
- Jenkins, DJ, Murray, AJ, Claridge, AW, Story, GL, Bradshaw, H and Craig, PS (2005), 'The contribution of spotted-tailed quolls (*Dasyurus maculatus*) to the transmission of *Echinococcus granulosus* in the Byadbo Wilderness Area, Kosciuszko National Park, Australia', *Wildlife research*, vol. 32, 37–41
- Keith, DA (2005), 'Ocean shores to desert dunes: A new look at the native vegetation in NSW and the ACT', *National parks journal*, 49
- Keith, DA and Gorrod, E (2006), 'The meanings of vegetation condition', *Ecological management and restoration*, vol. 7, S7–S9
- Keith, DA and Scott, J (2005), 'Native vegetation of coastal floodplains: A diagnosis of the major plant communities in New South Wales', *Pacific conservation biology*, vol. 11, 81–104
- Kingsford, RT, Porter, JL and Hunter, SJ (2005), *Summary of aerial survey of wetland birds in eastern Australia – October 2005*, Report to State Wildlife Authorities, NSW Department of Environment and Conservation, Sydney
- Kneipp, K, Norman, P and Briggs, S (2005), *Operational manual for the PVP developer invasive native scrub module*, NSW Department of Natural Resources, Sydney
- Kobayashi, T, Ralph, T, Hesse, P, Bleakley, N, Garcia, A and Ingleton, T (2005), 'Macquarie Marshes: Evidence of recent channel movement and discontinuous biological records in floodplain sediments', *Program and abstracts: Australian Society for Limnology, 44th Annual Congress*, 28 November–2 December, Hobart
- Kobayashi, T, Sanderson, BG and Gordon, GNG (2005), 'A phytoplankton community in a temperate reservoir in New South Wales, Australia: Relationships between similarity and diversity indices and measures of hydrological disturbance', *Marine and freshwater research*, vol. 56, 203–14
- Lam, SW, Chen, K, Lim, TM, Amal, R and Low, G (2005), 'The role of ferric ion in the photochemical and photocatalytic oxidation of resorcinol', *Journal of catalyst*, vol. 234, 292–99
- Leighton, S, Cherry, H, Holland-Clift, S, Cooper, J, Crane, A and Thorp, J (2006), 'Weeds of National Significance Program: Challenges, successes and opportunities' in: C Hanson and K Stewart (eds), *Proceedings of the First Tasmanian Weed Conference, A Decade of Change*, Launceston, October 2005, Tasmanian Weed Society Inc., Devonport
- Li, J, Hibbert, DB, Fuller, S and Vaughan, G (2006), 'A comparative study of point-to-point algorithms for matching spectra', *Chemometrics and intelligent laboratory systems*, vol. 82, 50–58
- Manning, T (2005), 'Endocrine-disrupting chemicals: A review of the state of the science', *Australasian journal of ecotoxicology*, vol. 11, 1–52
- Markich, SJ, Batley, GE, Stauber, JL, Rogers, NJ, Apte, SC, Hyne, RV, Bowles, KC, Wilde, KL and Creighton, NM (2005), 'Hardness corrections for copper are inappropriate for protecting sensitive freshwater biota', *Chemosphere*, vol. 60, 1–8
- Marshman, P, Hose, GC, Lim, RP, Jones, P and Chapman, J (2005), 'Applying water quality guidelines and site investigations: A golf course case study', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September

- May, C, Crossman, B and Alexander, B (2006), 'Impact of the upgrade of the Cronulla sewage treatment plant on water quality at Sutherland beaches', presentation to *First Australian Young Water Professionals Conference*, February, Sydney
- Mazumder, D, Saintilan, N and Williams, R (2005), 'Comparison of fish catches using fyke nets and buoyant pop nets in a vegetated shallow water saltmarsh flat at Towra Point, NSW', *Wetlands Australia*, vol. 23(1), 37–45
- Mazumder, D, Saintilan, N and Williams, R (2006), 'Fish assemblages in three tidal saltmarsh and mangrove flats in temperate NSW, Australia: A comparison based on species diversity and abundance', *Wetlands ecology and management*, vol. 14(3), 201–09
- Mazumder, D, Saintilan, N and Williams, R (2006), 'Trophic relationships between itinerant fish and crab larvae in a temperate Australian saltmarsh', *Marine and freshwater research*, vol. 57, 193–99
- McAlpine, CA, Bowen, ME, Lunney, D, Callaghan, JG, Rhodes, JR, Mitchell, DL, Pullar, DV and Possingham, HP (2006), 'Testing alternative models for the conservation of koalas in fragmented rural–urban landscapes', *Australian ecology*, vol. 31, 529–44
- McCready, S, Greely, CR, Hyne, RV, Birch, GF and Long, ER (2005), 'Sensitivity of an indigenous amphipod (*Corophium colo*) to chemical contaminants in laboratory toxicity tests conducted with sediments from Sydney Harbour, Australia, and vicinity', *Environmental toxicology and chemistry*, vol. 24, 2545–52
- McLoughlin, L (2005), 'The role of community education in developing environmentally sustainable cities', *Environmental City 11, State of Australian Cities Conference*, November, Brisbane [available at [www.griffith.edu.au/conference/soac2005/](http://www.griffith.edu.au/conference/soac2005/)]
- McLoughlin, L and Young, G (2005), 'The role of social research in effective social change programs', *Australian journal of environmental education*, vol. 21, 57–70
- Micevska, T, Warne, MStJ, Pablo, F and Patra, R (2006), 'Variation in, and causes of, toxicity of cigarette butts to a cladoceran and Microtox', *Archives of environmental contamination and toxicology*, vol. 50, 205–12
- Molsher, RL, Dickman, C, Newsome, AE and Muller, W (2005), 'Home ranges of feral cats (*Felis catus*) in central-western New South Wales', *Wildlife research*, vol. 32, 587–95
- O'Dwyer, TW, Buttemer, WA and Priddel, DM (2006), 'Investigator disturbance does not affect chick growth or survivorship in the threatened Gould's petrel, *Pterodroma leucoptera*, Ibis', vol. 148, 368–72
- Ooi, MKJ, Whelan, RJ and Auld, TD (2006), 'Persistence of obligate-seeding species at the population scale: The effects of fire intensity, fire patchiness and long fire-free intervals', *International journal of wildland fire*, vol. 15, 261–69
- Pennay, M (2005), 'Methods for fixing radio transmitters to microbats', *Australasian Bat Society newsletter*, vol. 25, 38–39
- Pennay, M (2006), 'Roosting and foraging ecology of the bristle-nosed bat, *Mormopterus Species 6*', *12th Australasian Bat Society Conference*, 18–21 April, Auckland, New Zealand
- Pennay, M and Freeman, J (2005), 'Day roost of little pied bat, *Chalinolobus picatus* (Gould) (Microchiroptera: Vespertilionidae) in northern inland New South Wales', *Australian zoologist*, vol. 35(2), 166–67
- Phyu, YL, Warne, MStJ and Lim, RP (2005), 'Toxicity and bioavailability of atrazine and molinate to the fresh water shrimp (*Paratya australiensis*) under laboratory and simulated field conditions', *Ecotoxicology and environmental safety*, vol. 60, 113–122
- Phyu, YL, Warne, MStJ and Lim, RP (2005), 'Does the use of more environmentally realistic toxicity data change water quality guidelines for atrazine and molinate?', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September
- Phyu, YL, Warne, MStJ and Lim, RP (2005), 'Effect of river water, sediment and time on the toxicity and bioavailability of atrazine and molinate to the marine bacterium *Vibrio fischeri* (Microtox)', *Water research*, vol. 39, 2738–46
- Phyu, YL, Warne, MStJ and Lim, RP (2006), 'Toxicity and bioavailability of atrazine and molinate to a freshwater fish (*Melanotaenia fluviatilis*) under laboratory and simulated field conditions', *Science of the total environment*, vol. 356, 86–99
- Pitt, KA, Koop, K and Rissik, D (2005), 'Contrasting contributions to inorganic nutrient recycling by the co-occurring jellyfishes, *Catostylus mosaicus* and *Phyllorhiza punctata* (Scyphozoa, Rhizostomeae)', *Journal of experimental marine biology and ecology*, vol. 315, 71–86
- Priddel, D and Wheeler, R (2005), 'Fecundity, egg size and the influence of rainfall in an isolated population of malleefowl, *Leipoa ocellate*', *Wildlife research*, vol. 32, 639–48
- Priddel, D, Carlile, N and Wheeler, R (2006), 'Establishment of a new breeding colony of Gould's petrel (*Pterodroma leucoptera leucoptera*) through the creation of artificial nesting habitat and the translocation of nestlings', *Biological conservation*, vol. 128, 553–63
- Priddel, D, Carlile, N, Fullagar, P, Hutton, I and O'Neill, L (2006), 'Decline in the distribution and abundance of flesh-footed shearwaters (*Puffinus carneipes*) on Lord Howe Island, Australia', *Biological conservation*, vol. 128, 412–24
- Priddel, D, Hutton, I, Olson, S and Wheeler, R (2005), 'Breeding biology of masked boobies (*Sula dactylatra tasmani*) on Lord Howe Island, Australia', *Emu*, vol. 105, 105–13
- Pritchard, TR and Koop, K (2005), 'Satellite remote sensing in marine ecosystem assessments' in PJ den Besten and M Munawar (eds), *Ecotoxicological testing of marine and freshwater systems: Emerging techniques, trends and strategies*, Ecovision World Monograph Series, Taylor & Francis, 195–228
- Pritchard, TR, Holden, C and Healy, T (2005), 'Variability of coastal dynamics of New South Wales, Australia and its relevance to anthropogenic impacts', *Refereed proceedings of the 17th Australasian Coastal and Ocean Engineering Conference*, Institute of Engineers, Australia, 61–66
- Rawson, C, Lim, RP, Warne, M and Doyle, C (2005), 'Effects of exposure to sewage contaminated waters on the appearance of the modified hemal spines of male *Gambusia holbrooki*', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September

- Rawson, C, Lim, RP, Warne, M, Laginestra, E, Tremblay, L and Chapman, J (2005), 'Use of a binding assay to evaluate the estrogenic potential of water bodies on a remediated site', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September
- Regan, TJ, Burgman, MA, McCarthy, MA, Master, LL, Keith, DA, Mace, GM and Andelman, SJ (2005), 'The consistency of extinction risk classifications', *Conservation biology*, vol. 19, 1969–77
- Rhodes, JR, McAlpine, CA, Lunney, D and Callaghan, J (2005), 'Evaluating natural resource management strategies under parameter uncertainty: An outranking approach applied to koala conservation' in A Zerger and RM Argent (eds), *MODSIM 2005 International Congress on Modelling and Simulation*, Modelling and Simulation Society of Australia and New Zealand [available at [www.mssanz.org.au/modsim05/papers/rhodes.pdf](http://www.mssanz.org.au/modsim05/papers/rhodes.pdf)]
- Rhodes, JR, Wiegand, T, McAlpine, CA, Callaghan, J, Lunney, D, Bowen, M and Possingham, HP (2006), 'Modelling species' distributions to improve conservation in semiurban landscapes: Koala case study', *Conservation biology*, vol. 20, 449–59
- Robertson, BC, Chilvers, BL, Duignan, PJ, Wilkinson, IS and Gemmell, NJ (2006), 'Dispersal of breeding, adult male *Phocarcos hookeri*: Implications for disease transmission, genetic management and species recovery', *Biological conservation*, vol. 127, 227–36
- Rogers, K, Saintilan, N and Cahoon, D (2005), 'Surface elevation dynamics in a regenerating mangrove forest, Homebush Bay, Australia', *Wetlands ecology and management*, vol. 13(5), 587–98
- Rogers, K, Saintilan, N and Heijnis, H (2005), 'Mangrove encroachment of saltmarsh in Westernport Bay: The role of sedimentation, subsidence and sea-level rise', *Estuaries*, vol. 28(4), 551–59
- Rogers, K, Saintilan, N and Wilton, K (2006), 'Vegetation change and surface elevation dynamics of the estuarine wetlands of southeast Australia', *Estuarine coastal and shelf science*, vol. 66, 559–69
- Saintilan, N and Rogers, K (2005), 'Storm-wave boulder deposition on the Beecroft Peninsula, Jervis Bay', *Geographic research*, vol. 43(4), 429–32
- Sanecki, G and Green, K (2005), 'A technique for detecting winter active small mammals in the subnivean space using hair tubes', *European journal of wildlife research*, vol. 51, 41–47
- Sanecki, GM, Cowling, A, Green, K, Wood, H and Lindenmayer, DB (2006), 'Winter distribution of small mammals in relation to snow cover in the subalpine zone, Australia', *Journal of zoology*, vol. 269, 99–110
- Sanecki, GM, Green, K, Wood, H and Lindenmayer, DB (2006), 'The implications of snow-based recreation for small mammals in the subnivean space in south-east Australia', *Biological conservation*, vol. 129, 511–18
- Scott, J, Beydoun, D, Amal, R, Low, G and Cattle, J (2005), 'Landfill management, leachate generation, and leach testing of solid wastes in Australia and overseas', *Critical review in environmental science and technology*, vol. 35, 239–332
- Seddon, J, Doyle, S and Briggs, S (2005), *Biodiversity in mixed farming landscapes in central western NSW: Report for Grain and Graze*, NSW Department of Environment and Conservation, CSIRO Sustainable Ecosystems, Canberra
- Seddon, J, Gibbons, P, Ayers, D, Doyle, S and Briggs, S (2005), *BioMetric© Incentive Module Version 1.0: Prototype biodiversity assessment tool for the Border Rivers/Gwydir catchment management area – user manual*, NSW Department of Environment and Conservation, CSIRO Sustainable Ecosystems, Canberra
- Stauber, JL, Markich, SJ, Batley, GE, Wilde, KL, Creighton, NM, Rogers, NJ, Hyne, RV, Apte, SC and Bowles, KC (2005), 'Towards a predictive approach for metal regulation: Hardness corrections are under-protective for copper to freshwater biota', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September
- Straw, P and Saintilan, N (2005), Shorebird habitat management in Australia: The threat of mangroves' in P Straw (ed.), *Status and conservation of shorebirds in the east Asian–Australasian flyway: Proceedings of the Australasian Shorebirds Conference*, Wetlands International Global Series no. 18, 87–91
- Tasker, EM and Baker, J (2005), 'Fire and feathers: Managing fire-sensitive birds on a flammable continent' in P Olsen and M Weston (eds), *Fire and birds: Fire management for biodiversity*, Supplement to *Wingspan*, vol. 15(3), 28–30
- Tasker, EM and Bradstock, RA (2006), 'The influence of cattle grazing practices on forest understorey structure in north-eastern New South Wales', *Australian ecology*, vol. 31, 490–502
- Tasker, EM, Baker, J and Whelan, RJ (2006), 'Applying recent advances in vital attributes analysis to management of fire for biodiversity conservation', *Proceedings of the Bushfire 2006 Conference CD*, Griffith University, Brisbane
- Theischinger, G and Richards, SJ (2005), 'Two new species of *Drepanosticta laidlaw* from Papua New Guinea (Zygoptera: Platystictidae)', *Odonatologica*, vol. 34(3), 307–12
- Theischinger, G and Richards, SJ (2006), 'Two new species of *Nososticta hagen* in Selys from Papua New Guinea (Zygoptera: Protoneuridae)', *Odonatologica*, vol. 35(1), 75–79
- Theischinger, G and Richards, SJ (2006), 'Two new Zygoptera species from Papua New Guinea (Protoneuridae, Coenagrionidae)', *Odonatologica*, vol. 35(2), 199–204
- Thompson, L and Briggs, SV (2005), *Dryland salinity and remnant woodlands in the South Western Slopes and Riverina*, Johnstone Centre report no. 115, Charles Sturt University, Wagga Wagga
- Tran, TA, Hyne, RV, Pablo, F and Doble, P (2005), 'Evaluation of limiting membranes for a solid-phase passive sampler device for polar organic herbicides in the aquatic environment', *Abstracts of ASE 2005: Australasian Society for Ecotoxicology Conference*, University of Melbourne, 25–28 September
- Trappe, JM and Claridge, AW (2005), 'Sequester fungi: Evolution of reproductive and spore dispersal strategies through interaction with animals and mycorrhizal plants' in J Dighton (ed.), *The fungal community: Its organisation and role in the community*, CRC Press, Boca Raton, Florida



Trappe, JM and Claridge, AW (2006), 'Leppia: A missing link between northern and southern hemisphere truffles?' *Inoculum*, vol. 57, 14

Trappe, JM, Claridge, AW and Jumponnen, AM (2005), 'Fire, hypogeous fungi and mycophagous marsupials', *Mycological research*, vol. 109, 516–18

Treagus, R and Beazley, CJ (2005), 'Noise monitoring program for assessing the impact of maximum traffic noise levels', *Proceedings of the Annual Conference of the Australian Acoustical Society*, 9–11 November, Busselton, Western Australia

Walker, L and Wellman, L (2006), 'Protecting a coastal icon: A cooperative approach to controlling pandanus dieback in northern New South Wales', *Australasian plant conservation*, vol. 14(3)

Walsh, JL, Keith, DA, McDougall, KL and Summerell, BA (2006), 'Phytophthora root rot: Assessing the potential threat to Australia's oldest national park', *Ecological management and restoration*, vol. 7, 55–60

Wilkinson, IS, Duignan, PJ, Castinel, A, Ginberg, A, Chilvers, BL and Robertson, BC (2006), '*Klebsiella pneumoniae* epidemics: Possible impact on New Zealand sea lion recruitment' in AW Trites, SK Atkinson, DP DeMaster, LW Fritz, TS Gelatt, LD Rea and KM Wynne (eds), *Sea lions of the world: Conservation and research in the 21st century*, 385–405

Yang, XJ, Low, G and Foley, R (2005), 'A novel approach for the determination of detection limits for metal analysis of environmental water samples', *Analytical and bioanalytical chemistry*, vol. 381, 1251–63

Zerger, A, Gibbons, P, Jones, S, Doyle, S, Seddon, J, Briggs, SV and Freudenberger, D (2006), 'Regional scale vegetation condition mapping: Integrating predictive modelling, GIS and remote sensing', *Ecological management and restoration*, 537–534

## 15. Overseas visits by staff

Name	Project/purpose	Destination	Cost to DEC	Notes
Lynden Bartrim	Provide assistance with the declaration of Conis Santana National Park and conduct the first visit of the Regional Natural Heritage Program	East Timor	\$1,700	\$2,300 covered by Commonwealth Regional Natural Heritage Program
Ron Billyard	Provide assistance with the declaration of Conis Santana National Park and conduct the first visit of the Regional Natural Heritage Program	East Timor	\$800	\$6,000 covered by Commonwealth Regional Natural Heritage Program
Ron Billyard	Provide assistance with the declaration of Conis Santana National Park and conduct the second visit of the Regional Natural Heritage Program	East Timor	\$3,500	\$5,000 covered by Commonwealth Regional Natural Heritage Program
Ross Bradstock	Attend GCTE Landscape Fire Modelling and Living with Fire in Chaparral workshops	Canada and USA	\$1,200	
Margaret Burnes	Attend International Rangers Federation Fifth World Congress	Scotland	\$4,788	
Sarah Carr	Attend Introduction to Distance workshop	New Zealand	\$2,185	
Berenice Carrington	Attend Matauranga Taketake/ Traditional Knowledge Conference	New Zealand	\$2,684	
Bob Conroy	Attend annual AFAC and Bushfire CRC conference	New Zealand	\$2,787	
Phil Craven	Attend third biennial Australasian Shorebird Conference	New Zealand	\$2,139	
Alison Curtin	Attend ninth meeting of the Contracting Parties to the Convention on Wetlands (Ramsar Convention)	Uganda	\$3,018	

Name	Project/purpose	Destination	Cost to DEC	Notes
Anthony Dixon	Attend 10th International Waste Management and Landfill Symposium	Sardinia	\$4,100	
Carmen Dwyer	Attend OECD Pesticide Compliance workshop	Canada	\$3,000	
Teresa Gay	Provide assistance with the declaration of Conis Santana National Park and conduct the first visit of the Regional Natural Heritage Program	East Timor	\$7,000	
Mark Gorta	Attend workshop on waste levy with New Zealand authorities	New Zealand	Nil	All costs met by New Zealand authorities
Andy Hawkins	Attend OECD Pesticide Compliance workshop	Canada	\$3,000	
David Hebblethwaite	Participate in second phase of the Vietnam Water Resources Management Program	Vietnam	Nil	Asian Development Bank Water Management Program, implemented by Hydrosult Inc.
Cath Ireland	Attend International Rangers Federation Fifth World Congress	Scotland	\$5,771	
Terry Korn	Provide assistance with the declaration of Conis Santana National Park and conduct the first visit of the Regional Natural Heritage Program	East Timor	\$800	\$2,100 covered by Commonwealth Regional Natural Heritage Program
Terry Korn	Provide assistance with the declaration of Conis Santana National Park	East Timor	\$3,500	
Keith McDougall	Make keynote presentation at Mountain Invasions Research Network (MIREN) meeting	Austria	\$1,700	Other costs met by MIREN
Liz Moore	Attend third session of the Preparatory Committee for the development of a Strategic Approach to International Chemicals Management	Austria	\$7,258	
Gareth Morse	Lead/train a team in the construction of a walking track, including boardwalks	Cambodia	Nil	All costs met by World Bank
David Noble	Present and plant Wollemi pines in Eastern Europe	Czech Republic, Slovakia and Hungary	\$846	Other costs met by Wollemi Pine International
Jennifer Stace	Attend Second National Water Quality Training Conference	USA	\$5,547	
Kathryn Taylor	Attend National Radiological Emergency Preparedness Conference and visit the Nuclear Regulatory Commission	USA	\$8,400	



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