Conserving natural and cultural values across the landscape

The DEC Corporate Plan 2004–06 identified the following strategic focus areas and outcomes required to achieve our corporate goal of ‘Conservation of natural and cultural values across the landscape’.

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

In this chapter

**Protecting and restoring biodiversity**
- Corporate plan priorities for 2004–06 34
- Protecting biodiversity 35
- Threatened species recovery planning and threat abatement 37
- Wildlife management and regulation 38
- Protecting wetland systems 38
- Aboriginal communities and biodiversity 39

**Protecting Aboriginal cultural heritage**
- Corporate plan priorities for 2004–06 40
- Aboriginal cultural heritage planning and support 41
- Repatriation 42
- Protecting significant sites, objects and materials 42
- Researching Aboriginal heritage 43

**Managing and improving the reserve system**
- Corporate plan priorities for 2004–06 46
- Building the reserve system 47
- Managing the reserve system 49
- Protecting the reserve system 53

**Sustainable public use of the reserve system**
- Corporate plan priorities for 2004–06 55
- Managing facilities 55
- Visitors 55
- Commercial activities 57
Corporate plan priorities for 2004–06

Reforming threatened species conservation

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

During 2004–05 DEC developed a package of new threatened species regulations and amendments to the legislation. The package was passed in parliament in November 2004 and commencement will be timed to coincide with the native vegetation regulations in 2005–06.

Reforms include:

- new criteria for listing threatened species, populations and communities, which were developed by a working group of internationally recognised scientists based on IUCN global Red List criteria
- the Priority Action Statement (PAS), a new provision to identify the strategies and, where known, specific actions needed to promote the recovery of threatened species and abatement of each key threatening process.

NSW Biodiversity Strategy

Review, develop and lead implementation of the next stage of the NSW Biodiversity Strategy, ‘Living NSW’

DEC is developing a successor to the original NSW Biodiversity Strategy published in 1999. The next strategy will take into account changes to NSW arrangements for threatened species, catchment, water and vegetation management, the on-going decline of biodiversity, and emerging threats, particularly climate change.

Supporting CMAs 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 2004–05, DEC developed tools for spatial information, including property vegetation plans for catchment management authorities (CMAs) and councils. DEC’s biometric tool is a key part of the biodiversity and threatened species element of the Property Vegetation Plan Developer, trialled this year (page 35). During the year DEC published a booklet for CMAs on implementing water quality objectives in their planning and investment decisions. DEC also prepared Aboriginal heritage regional assessment guidelines for CMAs, which will be finalised in late 2005–06.

DEC is also providing staff to most CMAs by secondment as a way of providing knowledge and support.

Addressing climate change

Work to address the impacts of climate change on biodiversity

DEC contributed to the development of the National Biodiversity and Climate Change Action Plan, which has been adopted by all states and the Australian Government, and is now coordinating implementation of the plan in NSW (page 36).

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

During 2004–05, 23 new voluntary conservation agreements were signed and 21 new wildlife refuges gazetted, as part of the DEC Conservation Partners Program that gives formal protection to natural and cultural heritage of high conservation value on private and other public lands under the National Parks and Wildlife Act 1974 (page 36).
DEC also began a review of the effectiveness of programs and of additional mechanisms for improving conservation on private and unreserved public lands, including strategies linking protected area establishment with natural resource management.

Improving wetland system protection

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

During the year DEC developed a five-year strategy for protecting wetlands and worked with other NSW government agencies to finalise the NSW Wetland Policy and establish wetland recovery plans for the Macquarie Marshes and the Gwydir Wetlands (page 38).

DEC also provided support to sustainability assessments of NSW coastal lakes and began consultation with government agencies regarding a draft Ramsar Plan 2005–08. The draft Ramsar Plan sets out nomination, management and communication objectives for the implementation of the Ramsar Convention in NSW.

Protecting biodiversity

Biodiversity conservation policy and strategies

DEC participated in the development of the NSW Government’s natural resources management reforms to ensure that there is an upfront consideration of biodiversity and threatened species in decision-making.

DEC has progressed its trialling and reporting of the NSW Biodiversity Strategy 1999–2004. This provides useful information for the development of the successor Biodiversity Strategy. DEC has developed the approach for progressing the new strategy, including defining appropriate consultative strategies and linkages with other legislative and natural resources policy reforms.

The Native Vegetation Act 2003 puts an end to broadscale clearing of native vegetation unless it can be demonstrated that it improves or maintains environmental outcomes. The Act provides for a Property Vegetation Plan (PVP) process and a decision support tool, the PVP Developer. DEC devised and developed the biometric and threatened species modules of the Developer. For the first time landholders and CMA staff will be able to work together to value the cost of a clearing proposal, the value of proposed offsets and the value of agreed management actions so that decisions on clearing or incentives can be made in a transparent, comparable and scientifically sound manner. DEC is now actively involved in preparing CMA staff for implementation of the new tool.

DEC is also providing advice to CMAs and local government on assessing regional conservation values and priorities to assist them in preparing regionally based plans that improve outcomes for biodiversity. During 2004–05 DEC worked with the Northern Rivers and Hunter-Central Rivers CMAs in the preparation of their three-year investment strategies and draft catchment action plans, to ensure that recovery planning and threat abatement is appropriately recognised and targeted for CMA investment in the long term. At June 2005 DEC had eight staff seconded to CMAs, which will eventually be increased to 13.

DEC participated in a national working group to respond to a Natural Resource Management Ministerial Council request to ‘address the identified biodiversity decline, focusing on high priority, system-wide threats and the most cost-effective measures that will lead to long-term improvements to biodiversity assets, taking into account existing programs and the need to avoid duplication.’ A report was prepared for submission to Ministers with recommendations for a national program to improve biodiversity outcomes in relation to the causes of habitat loss, the impacts of invasive species and the likely impacts of climate change on biodiversity.

DEC has been working with the Department of Lands to implement the government’s Crown land reforms by developing a robust process for the assessment of conservation values for Crown lease applications. An interim process has been agreed for the assessment of priority crown leases, and the framework established for the assessment of all applications, to help ensure environment protection and conservation are appropriately considered.

CASE STUDY

Eastern pygmy possum

During 2004–05 a small-mammal survey in Munmorah State Conservation Area (SCA) on the central coast of NSW recorded a threatened eastern pygmy possum, the first in the reserve. DEC staff also recorded brown antechinus, New Holland mice and swamp rats. Similar surveys in Mount Royal National Park recorded a number of small mammals including a quoll, northern brown bandicoots, bush rats, swamp rats, New Holland mice and eight potaroos. These annual surveys help to assess the impact of fire and feral predators on small mammal populations.

This eastern pygmy possum was the first to be recorded in Munmorah State Conservation Area.
Climate change and biodiversity

Climate change will have significant impacts on some species and ecosystems over the next century, and in some cases these impacts are already occurring. The National Biodiversity and Climate Change Action Plan 2004–07 has been adopted by all states and the Australian Government. DEC is coordinating the NSW response to the plan and reviewing its own conservation programs to take greater account of the potential impacts.

DEC is collaborating in research to improve our ability to understand the links between climate change, bushfire risk and biodiversity. During 2004–05, DEC continued to monitor ice break-up on alpine lakes and the duration of ephemeral ice ecosystems, snow depth and temperature beneath the snow cover, vertebrate fauna responses to 30 per cent reduction in snow cover over the last 40 years, sites with snow-patch communities, and transects to sample invertebrate responses. DEC is planning to extend this monitoring effort to other ecosystems in the reserve system that will be threatened by even a low to moderate level of warming.

Bushfire risk management research

DEC is taking a lead role in a Bushfire Cooperative Research Centre project, in conjunction with the Australian National University and Australian Defence Force Academy, examining the optimal mix of management activities (e.g. prescribed burning, road networks and access) needed to minimise risk in protecting human life and conserving biodiversity.

A further project is examining historical fire activity in the Sydney Basin. Models which relate fire activity to weather, vegetation and management factors will provide insight into the determinants of fire activity and the degree to which they can be influenced through management. In 2004–05 the NSW Biodiversity Strategy project Guidelines for ecologically sustainable fire management were released.

Conservation on private land

The Conservation Partners Program delivers formal protection for high conservation value natural and cultural heritage on private and other public lands through commitments under conservation agreements or wildlife refuges. The program also coordinates landholder involvement in conservation through non-statutory property registration schemes, which includes Land for Wildlife.

During 2004–05:

- the Minister for the Environment signed 23 voluntary conservation agreements (VCAs) covering an area of 1657 hectares
- the Governor declared 21 wildlife refuges, covering an area of 1084 hectares
- 37 landholders registered their properties for Land for Wildlife, covering 195 hectares of which 136 hectares are retained natural wildlife habitat. At June 2005, a further 36 landholders were working towards registration, covering 369 hectares.
The NSW Environmental Trust–funded Voluntary Conservation Biodiversity and Inventory Project was completed in 2004–05 following 23 property visits this year. The inventory found that all properties had remnant native vegetation and riparian areas or wetlands, the majority had threatened or regionally significant species, and all had woodlands and/or rangelands where grazing regimes were managed for conservation. The project also involved working with landholders having wildlife refuges to build capacity in conservation management in high priority conservation areas of western NSW, such as the Darling Riverine Plain Bioregion.

**Threatened species recovery planning and threat abatement**

Eight recovery plans were prepared by DEC and approved by the NSW Minister for the Environment in the last 12 months. This brings the total to 65 recovery plans, covering 79 threatened species, populations and ecological communities, and two threat abatement plans covering two listed key threatening processes.

Thirteen draft recovery plans were placed on public exhibition and a further 25 draft plans were completed or close to completion at 30 June 2005. One draft threat abatement plan, *Invasion of native plant communities by bitou bush/boneseed* (*Chrysanthemoides monilifera*), was placed on public exhibition in the last twelve months.

Recovery plans approved by the Minister for the Environment during the past year include one endangered fauna population, the koala *Phascolarctos cinereus* at Hawks Nest and Tea Gardens, and nine plant species: *Darwinia biflora*; *Davidsonia jerseyana* (Davidson’s plum); *Grevillea beadleana*; *Rapanea* sp. A Richmond River; *Eidothea hardeniana* (Nightcap oak); *Grevillea caleyi* (Terry Hills grevillea); *Daphnandra* sp (Illawarra socketwood); *Irenepharsus trypherus* (Illawarra irene); and *Zieria granulata* (Illawarra ziera).

**CASE STUDY**

The Nightcap oak recovery plan

The Nightcap oak is a large rainforest tree (up to 40 metres high), which remained undiscovered in the Nightcap Range in north-eastern NSW until 2000. It is a primitive member of the ancient Proteaceae family and has features that recall a time when Australia had a much wetter climate. Only around 100 adult trees have been found in a single small area. The Nightcap oak is now listed as endangered under the Threatened Species Conservation Act, and critically endangered on the Commonwealth Environment Protection and Biodiversity Conservation Act.

The recovery plan was approved in 2004 and its actions will protect the habitat of the species from fire and weeds, and include conducting monitoring and research to ensure the on-going viability of the species in the wild. Trees have been planted in both the Sydney and Coffs Harbour Botanic Gardens for education purposes as well as for ex situ conservation.
Recovery plans exhibited over the last twelve months include:

- nine plant species: Quassia sp. Mooney Creek, Pimelea spicata (pink pimelea), Corchorus cunninghamii, Persoonia nutans (nodding geebung), Fontainea oraria, Olearia focktoniae (Dorrigo daisy-bush), Calotis moorei (Moore’s burr-daisy), Zieria ingramii and Zieria obcordate

- six fauna species: Isoodon obesulus (southern brown bandicoot), Litoria raniformis (southern bell frog), L. aurea (green and golden bell frog), Ninox strenua (powerful owl), Tyto tenebricosa (sooty owl) and T. novaehollandiae (masked owl). The latter three species comprise the large forest owl multi-species recovery plan.

As a result of drought impacts on kangaroo populations, quotas were reduced for the 2004 calendar year compared to 2003. In 2004, only 68 per cent of the available state-wide quota was actually harvested. The commercial take as a proportion of the available quota varied, being higher in the more eastern and northern zones than the Far West of NSW. This was related to market forces as well as seasonal conditions.

In the trial commercial harvest zone in south-east NSW, approximately 79 per cent of the available quota was harvested, indicating a high level of interest by landholders and strong support from the kangaroo industry. DEC will continue to monitor the impact on kangaroo populations through to the end of the trial in 2007.

Wildlife management and regulation

DEC is responsible for the care and protection of wildlife in NSW. This includes responding to incidents involving wildlife and assisting people in their interactions with wildlife. For example, DEC has developed procedural guidelines for staff and the public on disentangling large whales, skills that were put to the test during 2004–05 when three entangled whales were successfully freed.

During 2004–05, DEC issued 18,745 licences and consents in relation to keeping, breeding and trade of native animals, for research on wildlife, and for other miscellaneous purposes, including wildlife rehabilitation, capture and relocation of reptiles and possums, taxidermy, and pest bird control.

Kangaroo Management Program

The goal of the Kangaroo Management Program is to ensure that viable populations of kangaroo species are maintained throughout their ranges. The commercial harvest of kangaroos is limited by an annual quota, based on population estimates to ensure it remains sustainable. The program includes monitoring and research to ensure its goal is being met.

Protecting wetland systems

DEC has developed a five-year strategy to deal with the significant challenges of protecting wetlands. DEC’s Wetland Initiative identifies inland and coastal wetlands for DEC focus and action. This includes establishing and managing a network of protected areas to protect coastal wetlands, improving environmental flow, management of DEC water licences, influencing planning decisions affecting wetlands, and improving our information on the ecological character of NSW wetlands.

In May 2005 the NSW Government committed $13.4 million toward a NSW Wetland Recovery Plan, developed by DEC in partnership with Department of Infrastructure, Planning and Natural Resources and the Department of Primary Industries. The first stage of the plan will fund a range of water recovery and water efficiency projects to deliver long-term benefits to the Macquarie Marshes and Gwydir Wetlands. NSW is seeking matching funding from the Australian Water Fund to support this important work.

Towra Wetlands

Thanks to 10 years of collaborative effort and funding from the Environmental Trust, Towra Wetlands are protected again by the replenishment of sand to the degraded foreshores of Towra Point Nature Reserve. This is an example of successful resource sharing from state and federal funding, with substantial support from Friends groups and the volunteer community. The beach nourishment project has recreated Towra Spit Island, a critical breeding site for the endangered little tern. The 2004–05 breeding season, which immediately followed the dredging works, was the most successful on record for the Botany Bay site.
Aboriginal communities and biodiversity

DEC builds and maintains strong working relationships with Aboriginal communities to identify and protect cultural heritage values in biodiversity protection. DEC provides CMAs, land managers and local councils with knowledge and support to develop and implement strategies that protect Aboriginal peoples’ interest in biodiversity.


DEC is working on Aboriginal cultural heritage regional studies with Bega Valley and Eurobodalla shire councils and local Aboriginal organisations to identify and assess Aboriginal cultural values in each local government area. The studies use archival and historical research, Aboriginal community oral history, recording of important sites and places, and archaeological sensitivity mapping.

Wild resources

During 2004–05 DEC commissioned a project to identify the economic value of native flora and fauna, or ‘wild resources’, for Aboriginal communities at Wallis Lake on the NSW south coast, as part of the NSW Comprehensive Coastal Assessment.

The value of wild resources harvested by Aboriginal people in the Wallis Lake catchment was estimated to be between $468 and $1200 per adult per year. This amount represented between three and eight per cent of the gross income of the Aboriginal community. Harvesting was also found to make a significant contribution to the dietary intake of what is a relatively poor community.

Virtually all harvested resources were used by the harvester’s household or distributed to family. The study reinforces, for natural resource and conservation managers, that Aboriginal communities see harvesting wild resources as having economic and dietary importance, rather than as a recreational activity.

The impact of salinity

In June 2005 DEC released *Living Land, Living Culture: Aboriginal Heritage and Salinity*. The book looks at the effects of salinity and other environmental problems on Aboriginal cultural heritage in NSW. It explores how environmental degradation can affect cultural places such as historic sites, peoples’ ‘country’, their bush foods and medicines, their wellbeing and their sense of community identity.

DEC worked closely with members of the Wiradjuri Aboriginal community and the book sets out ideas and strategies for dealing with Aboriginal peoples’ concerns about salinity. The core message of the book, that we need to link the management of natural and cultural heritage and understand the relationship between people’s sense of place and the condition of the environment around them, can now be used to guide DEC and other agency program development.

Aerial surveys of waterbirds

In 2004–05 we completed the 22nd aerial survey of waterbirds across eastern Australia. This cooperative program is supported by the wildlife authorities of NSW, Victoria, SA, Queensland and the University of NSW. In October of each year, waterbirds are counted from the air on about 2000 wetlands across ten 30-kilometre-wide survey bands. This survey provides one of the country’s most important long-term datasets on the health and biodiversity of river and wetland environments. It is also providing information on up to 50 waterbird species including several threatened species. The 2004 survey highlighted the severe impact of the current drought. Total waterbird numbers on Macquarie Marshes were the lowest ever recorded.

The number of waterbirds averaged 30,000 in the 1980s, and was never below 100, but in 2004 less than 20 birds were recorded.
Corporate plan priorities for 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 Aboriginal Cultural and Heritage Action Plan*

In 2004–05 DEC coordinated development and implementation of the NSW Culture and Heritage Action Plan, part of the NSW Government Aboriginal Affairs Policy 2003-2012: Two Ways Together. The policy provides a framework for government agencies to work with Aboriginal communities and each other to improve the social, economic and cultural wellbeing of Aboriginal peoples.

The Culture and Heritage Action Plan recognises the link between the ability of Aboriginal peoples to protect, practice and promote their culture and heritage, and overcoming disadvantage in all aspects of life (page 41).

Reviewing approaches to protection

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

DEC has begun reviewing the way Aboriginal cultural heritage is regulated in NSW following the recent planning reforms introduced through the Environmental Planning and Assessment Amendment (Infrastructure and other Planning Reform) Act 2005. As part of the review, DEC acknowledges the concerns of some stakeholders that there is a high cost associated with archaeological works required to support a consent to destroy an Aboriginal object or place, which in some cases has impeded understanding and conservation of Aboriginal cultural heritage. DEC also prepared guidelines on Aboriginal cultural heritage assessment needs and submitted these to the Department of Infrastructure, Planning and Natural Resources to progress the new planning framework.

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*

DEC’s repatriation program returns Aboriginal ancestral remains, cultural material and information to Aboriginal communities across the state. In 2004–05 DEC facilitated the return of 40 ancestral remains and one collection of cultural material held under the National Parks and Wildlife Act 1974 to five NSW Aboriginal communities, including the Yorta Yorta and Worimi Nations, and Metropolitan and Dubbo Local Aboriginal Land Councils (page 42). DEC also coordinated the return of a further 33 remains not held under the Act, as part of a repatriation partnership strategy involving institutions including the Australian Museum, National Museum of Australia and the University of Sydney.

Protecting places of significance

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

At 30 June 2005, 43 Aboriginal places had been declared under the National Parks and Wildlife Act. During 2004–05 DEC continued to identify and assess Aboriginal significant sites. The declaration of an area as an Aboriginal place formally recognises and protects the cultural attachment people have to the land. The Rock Nature Reserve, near Wagga Wagga, was declared an Aboriginal place in April 2005 (page 42).

In April 2005, DEC also released the Manual for the identification of Aboriginal remains to assist police officers and DEC staff with field identification of Aboriginal ancestral remains. The manual ensures the participation of Aboriginal communities in the management and conservation of their ancestral remains and associated cultural material.
Aboriginal cultural heritage planning and support

DEC has a key responsibility to protect and manage Aboriginal cultural heritage on behalf of Aboriginal communities, and to assist them to retain access to, and control of, that heritage. DEC is guided by the following principles:

• respect for both traditional and contemporary Aboriginal knowledge and culture
• recognition of the need for stories and traditions to give archaeological evidence context in the natural landscape
• acknowledgment that Aboriginal cultural heritage cannot be separated from nature
• respect for Aboriginal peoples as the owners and interpreters of their heritage
• challenging the common assumption that authentic cultural values have been lost in NSW.

DEC works with other government agencies to implement the Culture and Heritage Action Plan’s four key areas: land management, access and use; country, place and cultural material; Aboriginal culture and heritage expression; and cultural solutions.

Catchment management authorities

During 2004–05 DEC cultural heritage staff provided technical and cultural advice to the Murrumbidgee Catchment Management Authority to assist its Indigenous reference group with the development of an Aboriginal cultural heritage module for property vegetation planning. The module provides for identifying Aboriginal sites and places of significance; a mechanism for trade-offs between Aboriginal heritage values; and increased awareness of culturally significant flora.

DEC staff also worked with the Namoi Catchment Management Authority, and coordinated an information and training workshop for landowners and interested people in relation to site surveys and statutory responsibilities relating to protection of biodiversity that is culturally significant to Aboriginal peoples.

Aboriginal Discovery Program

The Aboriginal Discovery Program aims to enhance community appreciation and understanding of Aboriginal cultural heritage and the importance of its protection in the landscape. The program employs and develops local Aboriginal peoples’ capacity to share their stories in a culturally appropriate way through guided walks, talks and tours.

In 2004–05, 77 Aboriginal Discovery rangers delivered 552 guided activities state-wide and 23 Aboriginal volunteers were involved with training and assistance.

In addition, during 2004–05 DEC developed and delivered curriculum–based Aboriginal cultural activities for school students, including both on-park excursions and school visits by Aboriginal Discovery rangers.

Training programs

During 2004–05, DEC conducted Discovery tour guide training for 104 people from local Aboriginal communities. The Mungo Discovery Program provided employment and ongoing training for 25 people from the three traditional tribal groups associated with Mungo National Park. Local elders who attended this training program commented that ‘they appreciated the opportunity to share and pass on their knowledge to the younger generation’. In the Hunter, as a result of an Environmental Trust grant and regional financial support, 67 local Aboriginal people participated in training, and 10 course graduates were employed for 10 months as trainee Discovery Rangers.

A training program was conducted for a second year by DEC officers in the Macleay area for Aboriginal bush regenerators at Arakoon State Conservation Area. Following the training program, the local Aboriginal community was involved in bush regeneration and walking track construction at Saltwater National Park.

CASE STUDY

Nanima Mission pollution control

In 2003 DEC identified that the Nanima Mission Aboriginal Community, near Wellington, had been affected by pollution run off from the nearby waste management centre and illegal dumping in a nearby creek. This year DEC, in partnership with a number of community organisations, local government and the Wellington Aboriginal community conducted a major clean-up and tree planting.
Repatriation

The repatriation of the Jack Absolom collection to the Wilakali people near Broken Hill was completed in December 2004 at the Broken Hill Local Aboriginal Land Council. The collection contained a large number of objects traditionally used by Aboriginal people for food gathering and preparation. Mr Absolom collected the objects during his travels in and around the Broken Hill area in the early 1960s. The NPWS bought the collection in the 1970s and has held it since then as part of its Aboriginal heritage protection initiative.

Protecting significant sites, objects and materials

DEC identifies and investigates sites of Aboriginal cultural significance and makes recommendations for their declaration as Aboriginal places under the National Parks and Wildlife Act. This is a way of formally recognising and protecting the cultural attachment Aboriginal peoples have to land. At 30 June 2005, 43 Aboriginal places had been declared.

The most recent Aboriginal place declaration, the Rock Nature Reserve, near Wagga Wagga, was made in April 2005. The Rock is significant for the Wiradjuri people. It has a secret-sacred status for male initiation rites (the burbung) and is related to other significant sites through song lines.

DEC is currently investigating a number of Aboriginal place nominations, including the Coast Hospital Cemetery in Botany Bay National Park (NP); Quarantine Station in Sydney Harbour NP; Bujiva Bay in Mougamarra Nature Reserve; Towlers Bay in Ku-ring-gai NP; and Brou Lake near Narooma.

DEC assisted the Wonnarua Nation Aboriginal Corporation to undertake an assessment of burials associated with the St Clair Aboriginal Mission site in the Hunter Valley. The project

CASE STUDY

Metro Repatriation Project

DEC coordinated the Metro Repatriation Project in partnership with Metropolitan and La Perouse Local Aboriginal Land Councils, the Australian Museum and the National Museum of Australia. It was the largest single transfer of ancestral remains to a metropolitan NSW Aboriginal community by Australian museums.

The remains originated from a broad geographic area across the Sydney Metropolitan Region and many of the remains could not be reburied in their original locations. DEC and the land councils established a number of ‘resting places’, located within national parks, for burial of the repatriated ancestral remains. The Aboriginal communities will use the resting places in the future for the burial of other repatriated ancestral remains.
was guided by the methods identified in *Lost but not forgotten: a guide to methods of identifying Aboriginal unmarked graves*, published by DEC in 2003. Burials were located, mapped and recorded using ground-penetrating radar.

**Conserving rock art**

DEC is responsible for the protection of Aboriginal rock art throughout NSW. Rock art includes engravings, cave paintings and drawings, and is fragile and highly valued by Aboriginal communities. DEC’s rock art conservation projects in 2004–05 included:

- uncovering and recording engravings at Vaucluse House
- pigment conservation and monitoring at Pokolbin State Forest
- recording and conservation of engravings at Waratah Track in Ku-ring-gai Chase National Park
- rock art monitoring at Colo Heights
- treatment of vandalism in a rock art shelter near Emu Plains.

**Reseorching Aboriginal heritage**

**Aboriginal women’s heritage**

In 2004–05 DEC completed the Women’s Heritage Series, a series of six booklets recording the oral histories of women from Bourke, Nambucca, Nowra, Wollongong, Port Stephens and Tumut. The booklets focus on individual women’s life histories, providing an insight into local landscapes with the strongest cultural associations for women. In April 2005 the publications won the prestigious Energy Australia National Trust Heritage Award 2005 in the Trust’s Cultural Heritage category. DEC is currently finalising the publications of two other booklets that record the oral histories of local Aboriginal women from Wagga Wagga and the Nepean region in Sydney’s south-west. The booklets have helped empower local Aboriginal communities in defining and mapping their own heritage. They have provided a means by which older Aboriginal women can pass on to the younger generation a knowledge of community history. This has also

---

**Parsing and Interpretation**

- **Number of Aboriginal place declarations (for sites of Aboriginal cultural significance) made under NSW National Parks and Wildlife Act**

  **Definition:** This indicator measures the number of places across NSW that were declared as Aboriginal places under the National Parks and Wildlife Act following DEC and community consultation on their level of cultural significance.

  **Aboriginal place declarations**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000–01</td>
<td>7</td>
</tr>
<tr>
<td>2001–02</td>
<td>5</td>
</tr>
<tr>
<td>2002–03</td>
<td>4</td>
</tr>
<tr>
<td>2003–04</td>
<td>3</td>
</tr>
<tr>
<td>2004–05</td>
<td>2</td>
</tr>
</tbody>
</table>

  **Interpretation:** To date, a total of 43 Aboriginal places have been declared and 18 Aboriginal place nominations are currently being investigated. The number of declarations does not always reflect the level of on-going investigative work as investigations may not be completed in a single reporting year or may find that a nominated place does not meet legislative requirements for declaration.

---

**CASE STUDY**

**Prosecution for destruction of scarred tree**

Scarred trees are trees from which a section of the bark and wood has been removed to make canoes, shields, containers (coolamons) and other utensils and weapons. Other scarred trees have toeholds cut in them, for hunting possums or gathering honey. Scarred trees are significant because they are testimonies to traditional Aboriginal activities, gathering places and beliefs.

On 20 April 2005, DEC successfully prosecuted Cowra Shire Council for knowingly destroying a scarred tree during clearing for a subdivision site in North Cowra. The council’s actions breached sections 90(1) and 175(1) of the National Parks and Wildlife Act. This was a landmark case as it was the first successful prosecution for a breach of a section 90 consent.

Cowra Shire Council have undertaken to construct a shelter for the tree, in consultation with the local Aboriginal community.
allowed the recording of numerous women’s heritage sites for the State’s heritage inventories, which in the past have tended to favour the heritage of Aboriginal men.

The three-year Aboriginal Women’s Fishing Project, initiated in 2005, will assess traditional Aboriginal cultural fishing practices in NSW. The project will encourage wider recognition of the traditional and cultural fishing heritage of Aboriginal peoples and communities, including their access to, and use of, fisheries resources.

Aboriginal post-contact heritage

In 2005 DEC completed the publication Mapping attachment: a spatial approach to Aboriginal post-contact heritage, which represents an important shift in the approach to Aboriginal heritage assessment and management in NSW. Aboriginal post-contact sites (post 1788) are significantly under-represented in heritage registers in NSW and the book demonstrates ways of recording these sites. The book includes maps and plots areas of previously unrecorded Aboriginal fishing places, camping places, hunting places, houses, swimming holes and pathways.

In late 2004 DEC published Shared landscapes, which reveals the major role of Aboriginal peoples in the pastoral industry of NSW and introduces the heritage sites associated with this experience.

DEC recognises that Aboriginal peoples are the custodians of their heritage and they are best placed to protect and manage their heritage values. To assist Aboriginal peoples to record and publish their heritage, DEC produced Talk to print, a guide for recording and publishing oral histories.

In 2005 DEC published the biography of Ray Kelly, the first Aboriginal employee of the National Parks and Wildlife Service. Revival, renewal and return: Ray Kelly and the NSW Sites of Significance Survey represents the history of Aboriginal heritage conservation and it is a significant record of DEC’s corporate history. Ray Kelly worked on the Sites of Significance Survey from 1973 to the mid 1980s.

Aboriginal cultural values in the NSW coastal zone

During 2004–05 DEC completed an audit to improve understanding of the range of Aboriginal cultural values of the NSW coastal zone, including their significance, condition and key threats. The audit was conducted in 24 coastal local government areas from the Queensland border to Gosford and from Wollongong to the Victorian border.

The audit found that:

- the condition of Aboriginal cultural heritage items along the NSW coastal zone is generally poor
- there are increasing natural and human-made threats to these items
- there is a need for qualitative data on the condition of recorded items
- there is a need for improved data and information on items and values associated with conservation reserves.

The audit recommended that the NSW coastal zone be recognised as an Aboriginal landscape and that Aboriginal cultural heritage management incorporate a holistic approach, including regional assessments.

Aboriginal heritage in the Illawarra

In June 2005, DEC published two studies of Aboriginal cultural heritage in the Illawarra in partnership with local Aboriginal communities. A history of the Aboriginal people in the Illawarra from 1770 to 1970 provides a history of the Illawarra Aboriginal people from before European invasion to the evolution of the late twentieth-century Aboriginal political institutions. Murni, Dhungang Jirrar: Living in the Illawarra, the result of interviews with Aboriginal people combined with extensive background research, explores the spiritual and practical significance of marine, intertidal, estuarine, woodland and forest habitats to the Aboriginal peoples of the Illawarra.

**Paroo River**

In 2004–05, DEC conducted cultural mapping of Aboriginal traditional and contemporary values of the Paroo River. The studies assisted DEC’s nomination of the wetlands of Nocoleche Nature Reserve and Paroo–Darling National Park to the Ramsar Convention in Uganda in 2005. The Ramsar Convention is an international agreement that recognises wetlands for their significant ecological and hydrological values and provides for the sustainable traditional uses of wetland resources.

King Charlie waterhole on the Paroo River, now protected as part of Nocoleche Native Reserve.
Community access to Aboriginal heritage information

DEC collects, manages and protects the heritage information of Aboriginal peoples and communities, including oral stories, language, songs, skills, knowledge of sites, historical and genealogical information, and information about plants and animals.

DEC's activities in this area in 2004–05 included:

- negotiations with Aboriginal communities to return Aboriginal knowledge collected by DEC during the Sites of Significance Survey, which commenced in 1973, to the descendants of Aboriginal people who participated in the survey
- developing means to support Aboriginal community access to the Aboriginal Heritage Information Management System (AHIMS)
- commissioning of a report on the management of Aboriginal knowledge, which will establish best-practice standards for the collection of Aboriginal heritage information
- completion of a number of knowledge management and sharing projects, including cultural renewal and expression camps for Aboriginal women and young people, and Aboriginal communal collection and ownership of oral histories and other stories
- commencement of the development of appropriate referral processes to enable contact between communities in relation to Aboriginal heritage knowledge.
Corporate plan priorities for 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

As part of DEC's strategy to build the reserve system, 118,896 hectares was formally added to it during 2004–05. In March 2005 the six-millionth hectare was reserved, which means that 7.6 per cent of NSW is now protected in the reserve system (page 47).

More than 350,000 hectares of land was reserved for conservation in the Brigalow Belt and Nandewar Conservation Area (page 48).

Assessing the reserve system

Systematically assess the natural and cultural values of the reserve system

During 2004–05, DEC completed assessments for five wild rivers that remain largely in their pristine state: the Kowmung, Upper Brogo, Upper Hastings and Forbes rivers and Washpool Creek. We also drafted the Wild Rivers Policy, which sets out requirements for consultation, acceptable use of wild rivers, management planning and monitoring, and managing Aboriginal cultural heritage. Other natural values assessment work included flora and fauna surveys (page 49); marine park planning and mapping (page 52); land wilderness assessments within the Brigalow Belt South and Nandewar bioregions as part of the Western Region Assessment (see page 48). Aboriginal cultural heritage regional studies were also conducted in 2004–05 (page 43).

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

In June 2005, DEC released State of the Parks 2004 as part of an on-going program to better understand and respond to the condition of, and pressures facing, the park system (page 49).

DEC has commenced development of a park management framework, which will help ensure continual improvement in DEC's management of the cultural and natural heritage of NSW.

Managing cultural heritage within the reserve system

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

During the year DEC reviewed its Cultural Heritage Strategic Research Framework and continued to develop a Heritage Asset Management Strategy (page 52).
Building the reserve system

Additions to the reserve system

At 30 June 2005, DEC managed 677 parks and reserves in NSW under the banner of the National Parks and Wildlife Service (NPWS). We are continuing to use this internationally recognised name in all of our parks and publications for visitors and the general public.

DEC acquires land for the conservation and protection of natural and cultural heritage values under the provisions of the National Parks and Wildlife Act 1974. In 2004–05 118,896 hectares was formally added to the reserve system which, in March 2005, included its six-millionth hectare.

More than 350,000 hectares of land was also reserved in community conservation areas in the Brigalow Belt South and Nandewar bioregions (page 48).

Significant additions to the reserve system during the year include:

- a major addition to the eastern edge of Guy Fawkes River National Park through the acquisition of strategic Crown leases and freehold property in the mountainous region of the eastern escarpment, consolidating important links through regional corridors and key fauna habitats to Chaelundi National Park
- enhancement of the Dananbilla/Illunie Protected Area Network in the South Western Slopes Bioregion, including additions to Dananbilla (84 hectares) and Koorawatha (47 hectares) nature reserves and the establishment of the Illunie (721 hectares) and Gungewalla (142 hectares) nature reserves. The network addresses the critical protection of the grassy woodlands of the NSW south-west slopes
- Illawarra Escarpment Corridor additions to Garawarra State Conservation Area (49 hectares), Illawarra Escarpment State Conservation Area (485 hectares) and Royal National Park (11 hectares). These additions comprise part of a wildlife corridor stretching from Nowra to Royal National Park, contributing to a chain of conservation reserves extending from Queensland to the Victorian border
- the new Kalyarr National Park (8173 hectares), 30 kilometres west of Hay, protecting environments typical of the western part of the Riverina Bioregion, which are poorly represented in the conservation reserve system.

Land acquisitions

2004–05 was the second year of a three-year acquisition program focusing on meeting the criteria of acid sulphate hotspots, fish breeding habitats, coastal lakes, and wetlands in the Directory of Australian Wetlands. Four wetland properties totalling 634 hectares were acquired on the NSW north coast.

PERFORMANCE INDICATOR

Area of land managed by DEC for conservation outcomes

Definition: This indicator measures:
- the percentage of land in NSW that is managed to achieve conservation outcomes
- the area in hectares of the reserve system managed by DEC
- the area in hectares of marine parks managed by DEC as part of the Marine Parks Authority
- the percentage of each NSW Interim Biogeographic Regionalisation of Australia (IBRA) bioregion managed by DEC.

Land and marine areas (percentage) managed by DEC

<table>
<thead>
<tr>
<th>NSW IBRA Bioregion</th>
<th>% protected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Alps</td>
<td>81.8</td>
</tr>
<tr>
<td>Brigalow Belt South</td>
<td>2.6</td>
</tr>
<tr>
<td>Broken Hill Complex</td>
<td>2.0</td>
</tr>
<tr>
<td>Channel Country</td>
<td>9.4</td>
</tr>
<tr>
<td>Cobar Peneplain</td>
<td>2.1</td>
</tr>
<tr>
<td>Darling Riverine Plains</td>
<td>1.5</td>
</tr>
<tr>
<td>Mulga Lands</td>
<td>3.2</td>
</tr>
<tr>
<td>Murray–Darling Depression</td>
<td>5.5</td>
</tr>
<tr>
<td>NSW North Coast</td>
<td>23.2</td>
</tr>
<tr>
<td>NSW South Western Slopes</td>
<td>1.7</td>
</tr>
<tr>
<td>Nandewar</td>
<td>2.0</td>
</tr>
<tr>
<td>New England Tableland</td>
<td>8.6</td>
</tr>
<tr>
<td>Riverina</td>
<td>0.7</td>
</tr>
<tr>
<td>Simpson Strzelecki Dunefields</td>
<td>11.1</td>
</tr>
<tr>
<td>South East Corner</td>
<td>42.3</td>
</tr>
<tr>
<td>South Eastern Highlands</td>
<td>14.4</td>
</tr>
<tr>
<td>Sydney Basin</td>
<td>37.0</td>
</tr>
<tr>
<td>Total NSW landscape</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Interpretation: During 2004–05, over 118,000 hectares of land was formally added to the reserve system. DEC now manages over six million hectares of land in NSW, which represents 7.6% of the state’s total area. DEC also manages 163,250 hectares in marine parks as part of the Marine Parks Authority. Revised IBRA (version 6) bioregion boundaries were used in calculating the proportion of NSW bioregions protected figures, and in some cases may have resulted in an apparent reduction from the figure provided in previous years.
A three-year program of purchasing private properties within the declared World Heritage eucalypt forests of the Greater Blue Mountains Area and the Central Eastern Rainforest Reserves commenced this year with the purchase of a 668-hectare property to link the Nattai and Blue Mountains national parks.

In 2004–05, significant properties were also acquired for addition to Ledknapper (14,187 hectares), Narran Lake (7240 hectares) and Macquarie Marshes (6887 hectares) nature reserves and Mount Kaputar National Park (300 hectares).

In addition, DEC continued to negotiate the purchase of Yanga Station, the single largest freehold property in NSW (80,000 hectares), for the establishment of a new national park.

Through the Dunphy Wilderness Fund and the Northern Regional Forest Agreement, DEC has also acquired Crown leases to consolidate the Guy Fawkes River (2836 hectares), Nymboida (1732 hectares) and Currajongbundu (2640 hectares) national parks, the Copeland Tops State Conservation Area (219 hectares) and the Cataract State Conservation Area and National Park (2244 hectares).

### Conserving wilderness areas

Wilderness is defined as 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 is capable of restoration.

During the year, approximately 193,000 hectares in the Yengo areas were assessed and 134,900 hectares have been identified as containing wilderness values. At June 30, DEC had considered all public submissions on the assessment report.

Assessment of the Mount Kaputar, Bebo and Pilliga regions for wilderness values was completed in 2004–05. These assessment areas lie partly or wholly within the Brigalow Belt South and Nandewar bioregions, which have been under investigation as part of a Western Regional Assessment (WRA).

### Dunphy Wilderness Fund

The Dunphy Wilderness Fund (DWF) is overseen by representatives from DEC, Nature Conservation Council, Colong Foundation for Wilderness and the Foundation for National Parks and Wildlife. The Foundation has taken the lead in a public fundraising campaign for the fund and last year it raised funds to acquire a 1000-hectare property adjacent to Washpool National Park.

### CASE STUDY

#### Brigalow and Nandewar community conservation area

The single biggest addition to the reserve system in Western NSW was made this year when Parliament passed the *Brigalow and Nandewar Community Conservation Area Act 2005*. This Act was the culmination of an extensive process of five years of scientific study, community consultation and socio-economic analysis by DEC staff.

More than 350,000 hectares of land was reserved for conservation in a Community Conservation Area (CCA), a new type of reserve made up of four zones, three of which will be managed for conservation by DEC.

The CCA increases existing levels of permanent protection from 3.4% cent to 9.5% for the Brigalow Belt South Bioregion and from 0.9% to 2% for Nandewar.

The decision to conserve this land will protect habitat for a wide range of animals, from koalas and squirrel gliders, to turquoise parrots, glossy black cockatoos and significant remnant colonies of mallee fowl.

More than 20,000 hectares of the CCA is zoned for management consistent with an Aboriginal area under the National Parks and Wildlife Act.

The Bill came with an $80-million package to ensure an appropriate balance between conservation and sustainable industries which provide jobs in the timber, gas, minerals and apiary sectors.

The Brigalow Belt South Bioregion is a stronghold for the vulnerable barking owl including the highest population of the species in NSW.
Managing the reserve system

DEC is developing a park management framework to help ensure continual improvement in DEC’s management of the cultural and natural heritage of NSW through improved information management. In implementing the recommendations of the Audit Office Performance Audit, the framework will incorporate plans of management and the State of the Parks program.

State of the Parks 2004

In June 2005, DEC released State of the Parks 2004, a public report based on a rigorous survey of all aspects of management of the NSW park system. The report is part of an on-going State of the Parks program to better understand and respond to the condition of the park system and the pressures it faces. While this is a complex process, and will be further refined over time, the system has attracted national and international attention for the valuable contribution it has made to understanding management effectiveness in protected areas.

Overall, the report demonstrates that DEC is doing a good job in managing NSW’s large and diverse parks system. DEC will continue to put emphasis on the management of pest animals, weeds, fire, visitors and cultural heritage. More details are available on DEC’s website at www.environment.nsw.gov.au.

Plans of management

DEC is required by the National Parks and Wildlife Act to prepare a plan of management for each park and reserve. In 2004–05, the Minister for the Environment adopted 20 new plans of management for 42 areas, including:

- the Tweed Caldera parks and reserves
- Lake Macquarie State Conservation Area
- Berowra Valley Regional Park
- the Gibraltar Range group of parks

In addition, 23 plans covering 28 areas had been placed on public exhibition but were not yet adopted at 30 June 2005.

Assessing wildlife values

At 30 June 2005, nearly 500,000 hectares of reserves had been surveyed as part of the reserve flora and fauna survey program. The program to comprehensively survey all fauna groups and vegetation across the reserve system will allow DEC to understand the contribution made by national parks to the conservation of species, and will inform conservation priorities and park management.

Fauna survey reports that detail the outcome of the program are available for the reserves at Nattai, Bargo, Southern Blue Mountains, Kanangra-Boydd, North-eastern Wollemi, Northern Yengo, Werakata, Lane Cove and Manobalia. Supporting vegetation mapping and habitat models have also been produced for Illawarra Escarpment State Conservation Area and the Nattai and Bargo reserves.

These surveys have identified new locations and habitats for brush-tailed rock-wallaby, regent honeyeater, koala, squirrel gliders, large forest owls, broad-headed snake and many others. Some of these populations are now subject to specific habitat management programs and park managers use the survey findings in their pest, fire and education activities.
Aboriginal community involvement

Helping Aboriginal peoples to re-establish their relationship with the landscape is one of DEC's key areas of work. For thousands of years, maintaining culture has sustained Aboriginal families and societies and assisted them to care for the land and environment. A major influence on Aboriginal disadvantage is the loss of a sense of place (country) and spiritual connectedness. The recognition, promotion and practice of culture and maintaining the links between people and country are central to overcoming many of the issues facing Aboriginal communities in NSW.

Co-management

Under co-management arrangements, Aboriginal peoples gain responsibility for park management or advise DEC on its management of the park. Formal co-management options include DEC returning a protected area to its original Aboriginal owners and leasing it back, memorandums of understanding between DEC and Aboriginal communities, Indigenous Land Use Agreements, and Aboriginal participation on existing management committees or on specifically created Aboriginal advisory committees.

Significant achievements under these co-management arrangements in the last year included:

- a memorandum of understanding signed in February 2005 between DEC and the Bogan River – Peak Hill Traditional Owners that establishes an Aboriginal Advisory Group and a commitment to work cooperatively in the management of the Goobang National Park and Snake Rock Aboriginal Area.
- development and exhibition of the draft Plan of Management for Arakwal National Park, involving extensive input from the Arakwal people.
- commencement of lease negotiations for the creation of a new Aboriginal-owned reserve at Stockton Bight.

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. This indicator shows the number of formal co-management agreements in place with Aboriginal communities for the management of protected areas, including Indigenous Land Use Agreements and Memorandums of Understanding.

Note that DEC also engages in a broad range of informal joint management mechanisms. However, given the localised nature of many of them, these informal arrangements are difficult to measure accurately and have not been included in this indicator.

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

![Graph showing number of formal agreements with Aboriginal communities for co-management of protected areas over the years 2000-01 to 2004-05.]

**Interpretation:** During 2004-05, co-management agreements were formalised for the Mt Grenfell Historic Site; the Goobang National Park and Snake Rock Aboriginal Area Memorandum of Understanding with Bogan River – Peak Hill Traditional Owners; and Pilliga Nature Reserve Memorandum of Understanding. Successful co-management arrangements exist for Mutawintji (since September 1998), Arakwal (October 2001), Mungo (March 2001) and Kinchega (July 2002) national parks.

**Case Study:**

**Mount Grenfell Historic Site**

In July 2004, Mt Grenfell Historic Site, an Aboriginal rock art site near Cobar, was returned to the Ngiyampaa Wangaaypuwan people and leased back to the Minister for the Environment.

In 2005 the Mt Grenfell Historic Site Board of Management was jointly appointed by the Minister for Environment and the Minister for Aboriginal Affairs, enabling DEC and Ngiyampaa people to manage the site together.

DEC and the Aboriginal owners have also agreed on a three-year infrastructure and maintenance program, which will assist in laying a foundation for cooperative management. The first year of that program has involved cultural heritage assessments, oral history programs and ethnobotanical surveys.

Elaine Ohlsen and Environment Minister Bob Debus signing the handback agreement.
Community conservation

Parks are part of the landscape of the broader community. Partnerships with neighbours and communities are essential for good park management and to improve support for our conservation efforts. DEC has established a number of management planning systems to ensure that we identify, prioritise and achieve our conservation outcomes in consultation with the community.

National Parks and Wildlife Advisory Council

The National Parks and Wildlife Advisory Council is constituted under the National Parks and Wildlife Act 1974 and advises the Minister for the Environment on a range of issues, including the management of national parks and reserves, the protection of wildlife, conservation agreements and wilderness areas. Its membership is set out under the Act and is representative of parks' key stakeholder groups. A full list of members and the groups they represent can be found at Appendix 5, page 143.

Under the Act, the council has specific responsibilities to consider and advise the Minister for the Environment on plans of management and any representations received in response to public exhibitions of a park management plan. During 2004–05, the council considered and reported on 20 plans of management for 25 DEC-managed areas.

Advisory committees

Advisory committees provide on-going community and neighbour involvement in DEC operations in parks. As representatives of the local community, the advisory committee members maintain contact with other groups and organisations such as local government, Aboriginal communities, tourism associations, conservation groups, neighbours and outdoor recreation groups. For a full list of regional advisory committees and members, see Appendix 5, page 143.

In 2004–05, the reconstitution of all advisory committees was finalised, with members of these newly constituted committees appointed by the Minister until June 2008.

The Annual Advisory Committees Conference was held in Sydney on 13–15 May with the major themes of climate change and engaging the community.

CASE STUDY

The Wilcannia project

During 2004–05, DEC implemented a two-year employment project to train members of the Wilcannia Aboriginal community in natural and cultural heritage management, and provide opportunities for direct involvement in management activities across the Paroo Darling National Park. Training for ten participants involved a variety of field-based maintenance, administrative duties and guiding activities, with training tailored to individual needs and primarily sourced through local providers in far west NSW.

Peery Lake, protected by Paroo-Darling National Park, where DEC trained members of the local Aboriginal community in park management.
Conservation Volunteers Program

Volunteers are essential partners in achieving conservation and give many hours of work each year in conservation activities across NSW, both on- and off-park. During 2004–05, DEC and Conservation Volunteers Australia worked together to engage the broader community in practical, educative and on-ground conservation projects in 19 national parks and nature reserves. These projects achieved outstanding results including:

- 402 volunteer days
- planting 2196 trees
- propagating 200 plants
- repairing 28,000 metres of tracks
- removing 700 metres of fences
- removing exotic weeds from 11.2 hectares of land.

Marine park planning and mapping

DEC jointly manages marine parks with the Department of Primary Industries through the Marine Parks Authority (MPA), which is responsible for their selection, declaration, management and zoning. In 2004–05, the MPA focused on finalising zoning and operational plans for Lord Howe Island Marine Park and Cape Byron Marine Park and habitat mapping at Solitary Islands Marine Park.

Following detailed and extensive public consultation, the final zoning plan regulation and a plain English guide were developed with a Draft Operational Plan for the Lord Howe Island Marine Park, coming into force in December 2004. The zoning plan protects the biodiversity of the Lord Howe Island area while continuing to provide access to popular activities like recreational fishing, diving, guided tours, boating and surfing.

Major activities at Cape Byron Marine Park included release of the draft zoning plan and draft operational plan for public consultation on 6 August 2004. As at 30 June 2005, analysis of the more than 3000 submissions and preparation of a submissions report by the authority was underway.

The focus of marine park habitat mapping in 2004–05 has been Solitary Islands Marine Park and collection of additional information in the Manning Shelf bioregion. A bathymetric sidescan sonar (125 kHz GeoSwath hydroacoustic system) has now been mounted on coastal vessels to survey seabed habitats in NSW marine parks and other coastal waters.

Performance Indicator

Number of historic heritage sites where conservation works have been undertaken

**Definition:** This indicator measures the number of historic heritage sites on parks and reserves where DEC has undertaken conservation works under its Heritage Assets Maintenance Program (HAMP). Through HAMP, DEC provides coordinated program funding for historic heritage maintenance and conservation at historic places within the conservation reserve system. 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.

**Interpretation:** The number of sites where conservation work was undertaken increased substantially in comparison to previous years. 52 projects, worth more than $2 million, were completed in 2004–05, an increase of 26 projects. The large increase reflects the tighter guidelines and processes put in place in 2002–05 for the review of project progress and the reallocation of unspent project funds. The reallocation alone enabled an additional 12 projects to be completed by 30 June 2005.

The projects funded through HAMP in 2004–05 included:

- the preparation of conservation management plans for a variety of historic places, including the Royal National Park Cabins, Goat Island, Neilsen Park, Youlsdales Hut, Mount Maid Gold Mine, Trial Bay Gaol, Kosciuszko Huts, Maynggu Ganai, Seaman’s Hut and Veneables Hut
- conservation works at Hartley Historic Site, Bantry Bay, Bobbin Head, Scheyville, South Head Searchlight, Middle Head Cottages, Trial Bay Gaol, Greenscape Lightstation, Throsby Park, Kinchega, Olive Downs and a wide range of buildings at Hill End Historic Site
- maintenance and catch-up works at Cape Byron, Hill End Historic Site, Audley Post Office, Constables Cabin and Gap Bluff Cottages.

---
Protecting the reserve system

Fire management

DEC is responsible for the management of some of the most rugged and remote bushfire-prone country in the world. Under the National Parks and Wildlife Act 1974 and the Rural Fires Act 1997 DEC has statutory responsibilities relating to the protection of human life, property, and natural and cultural heritage values from bushfires on lands it manages. Under the provisions of the NSW Biodiversity Strategy, DEC is also a lead agency in improving fire management regimes across the state.

DEC has more than 900 trained fire-fighters and over 450 incident management trained staff with a full range of vehicles, plant, equipment and aircraft for fire management operations, particularly in remote areas.

Prevention and mitigation

During 2004–05, DEC was able to conduct prescribed burning and fuel reduction activities over more than 36,000 hectares on parks and reserves, and around an additional 5000 hectares on neighbouring lands. In addition hazard reduction through other means, such as slashing, was carried out over around 11,000 hectares on parks.

Regular maintenance was also undertaken on over 12,500 kilometres of DEC fire trails during the year.

Prescribed burning operations on DEC-managed lands

<table>
<thead>
<tr>
<th>Year</th>
<th>Area burned (ha)</th>
<th>Number of burns</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000–01</td>
<td>19,733</td>
<td>82</td>
</tr>
<tr>
<td>2001–02</td>
<td>31,703</td>
<td>103</td>
</tr>
<tr>
<td>2002–03</td>
<td>42,827</td>
<td>173</td>
</tr>
<tr>
<td>2003–04</td>
<td>65,451</td>
<td>340</td>
</tr>
<tr>
<td>2004–05</td>
<td>41,037</td>
<td>148</td>
</tr>
</tbody>
</table>

Since 2000–01, DEC has given high priority to increasing its hazard reduction program. As hazard reduction burning activities are weather dependent it is often difficult to achieve all planned activities. Prevailing weather patterns during 2003–04 were particularly favourable for hazard reduction burning activities. Consequently DEC was able to complete more of its reduction program with a greater number of burns and significantly increased area of hazard reduction during that year. Weather during 2004–05 was less conducive to hazard reduction burning hence the number of operations and area treated returned to normal levels.

Wildfires on parks and reserves

<table>
<thead>
<tr>
<th>Year</th>
<th>Fires on reserves</th>
<th>Reserve area burned (hectares)</th>
<th>% of reserve burned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995–96</td>
<td>189</td>
<td>15,192</td>
<td>0.35</td>
</tr>
<tr>
<td>1996–97</td>
<td>194</td>
<td>12,670</td>
<td>0.27</td>
</tr>
<tr>
<td>1997–98</td>
<td>466</td>
<td>236,152</td>
<td>4.73</td>
</tr>
<tr>
<td>1998–99</td>
<td>189</td>
<td>14,195</td>
<td>0.28</td>
</tr>
<tr>
<td>1999–2000</td>
<td>166</td>
<td>6,715</td>
<td>0.13</td>
</tr>
<tr>
<td>2000–01</td>
<td>396</td>
<td>217,980</td>
<td>4.15</td>
</tr>
<tr>
<td>2001–02</td>
<td>356</td>
<td>595,388</td>
<td>11.04</td>
</tr>
<tr>
<td>2002–03</td>
<td>433</td>
<td>1,001,854</td>
<td>16.98</td>
</tr>
<tr>
<td>2003–04</td>
<td>263</td>
<td>38,120</td>
<td>0.64</td>
</tr>
<tr>
<td>2004–05</td>
<td>211</td>
<td>16,887</td>
<td>0.27</td>
</tr>
</tbody>
</table>

Each year DEC updates its Fire Management Manual to ensure it remains relevant and effective. This year’s update will be released in 2005.

Our fire-fighter health and fitness program is an important safety initiative, based on national and international standards consisting of annual medical assessment and fitness tests. All DEC fire-fighters are required to undertake and pass a task-based assessment before the beginning of the oncoming fire season.

DEC is a registered training authority (RTO) for delivery of fire and incident management training under the Public Safety Training Package. As an RTO, DEC delivers nationally recognised fire and incident training and assesses competencies of fire-fighters and incident managers within the organisation.

DEC uses reserve fire management strategies as the basis for preparing fire management works schedules and bushfire suppression maps, two essential tools in DEC’s approach to fire management planning. DEC works with District Bushfire Management Committees across the state to ensure that our strategies are compatible with each district’s bushfire management plans. During 2004–05, 34 reserve fire management strategies were adopted, bringing the total to 89. In addition, a further 110 reserve fire management strategies were being finalised at 30 June 2005.

We are committed to cooperative and coordinated fire-fighting 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 has representation on 97 per cent of the state’s District Bushfire Management Committees.
2004–05 Bushfire Season

In 2004–05, 211 fires affected DEC-managed parks and reserves, of which 40 spread to parks from neighbouring lands and 20 fires escaped DEC estate. In addition, DEC firefighters assisted on 49 off-park fires. 2004–05 was a relatively quiet fire year, as high humidity and weather conditions kept the threat of bushfires to a minimum over the warmer months.

Causes of wildfire

Pest animal and weed control

Management of pest animals and weeds is a high priority for DEC and expenditure on their control reached a record $18 million in 2004–05. The State of the Parks Report 2004 showed that our pest animal and weed control programs were either effectively holding the line or reducing pest animal and weed impacts in more than 90 per cent of our parks.

As pest animals and weeds are a common area of concern for farmers and conservationists alike, DEC works with neighbours and other land managers on cooperative pest animal and weed control programs.

Widespread and abundant locust hatchings during spring 2004 were declared an agricultural emergency under the State Disaster Plan. To support a multi-agency locust control campaign, DEC undertook locust control in national parks for the first time in its history.

DEC is the host agency for the National Bitou Bush and Boneseed Program, part of the Weeds of National Significance initiative. During 2004–05, a draft threat abatement plan for bitou bush in NSW was placed on public exhibition and we continued the release and assessment of biological control agents.

The Shorebird Program is one of the most important examples of across-tenure pest animal control in NSW. Each year DEC, Department of Lands, local councils, rural lands protection boards and private landholders combine to control foxes and monitor breeding success at the 22 most important breeding sites of four threatened shorebirds: the little tern, pied oystercatcher, beach stone-curlew and hooded plover. Prior to these fox control programs, 100 per cent mortality had been observed at many sites. In 2004–05, mortality rates due to foxes were significantly reduced, with estimates of 7.6 per cent, 10.5 per cent, 25 per cent and 4.2 per cent for these species respectively.

DEC is conducting research to develop more effective methods of controlling wild dogs. For example, in southern NSW, a synthetic lure has been developed to attract wild dogs and foxes to bait stations.

During 2004–05, DEC also conducted research to measure the impact of aerial 1080 baiting on the spotted-tailed quoll (*Dasyurus maculatus*), the native animal considered to be most at risk from being harmed by these baits. The results from the first stage of this project suggest that the impacts on this threatened species, in areas where aerial baiting has occurred over a long period, are minimal.
Corporate plan priorities for 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

During 2005 DEC received public submissions on our sustainable visitation plan, Living Parks (right). The plan recognises the importance of parks for people and, through excellence in visitor management, facilities and services, aims to enhance the experience of park visitors and improve community awareness of the natural and cultural heritage values of the state’s parks.

Total asset management

Put in place a total asset management approach for reserves

DEC prepared and has begun to implement the six stages of a new asset maintenance system. The key components for notification and work orders will be the first stage of implementation.

The new computerised Asset Maintenance System was piloted in Gosford, enabling DEC staff to process all maintenance and land management operations through the new system. The Gosford office is now able to obtain reports on all aspects of field operations, including resource and plant utilisation, workload, forward maintenance programs, and safety inspections.

Managing facilities

In 2004–05, DEC continued to build, upgrade and maintain its visitor facilities across the state to provide an improved community experience and maintain conservation outcomes in visitor areas. Significant achievements included:

- refurbishment of the Sea Acres Rainforest Centre and café as well as extensive up-grading of the 1.3-kilometre timber boardwalk and information/interpretive signs
- rejuvenation of Barrenjoey Lighthouse
- completion of major campground facilities in Myall Lakes National Park including walking tracks, a surf viewing platform, information shelters and boards
- installation of advanced composting and batch toilet systems in Yuraygir National Park to replace all pit toilets
- construction of a new visitor centre and office at White Cliffs, designed on ‘clean and green’ principles and featuring grid-connected solar power generation, rainwater recycling and energy-efficient air conditioning.

Lane Cove River Tourist Park also became one of only four ‘silver gumnut’ standard providers under the NSW Caravan and Camping Association umbrella, a significant recognition of the value of the visitor facilities.

Visitors

Living Parks

Living Parks is a sustainable visitation plan that recognises the importance of parks for people. It aims to enhance the experience of park visitors and improve community awareness of the natural and cultural heritage values of the state’s parks through excellence in visitor management, facilities and services. The plan reflects the NSW Government’s commitment to conserving and protecting unique natural and cultural values, while ensuring sustainable and culturally appropriate enjoyment of parks.
Living Parks provides opportunities to establish new partnerships between DEC, the private and public sectors, Aboriginal communities and the general community. It also provides a framework for sustainable investment in NSW parks, to provide benefits for local and regional economies and to generate opportunities for Aboriginal involvement in visitor management.

The draft plan was released for consultation between February and April 2005. Sixty-eight submissions were received and these are being considered by a state-wide working group in drafting the final plan.

### Education programs

The National Parks Discovery Program is a state-wide program that provides education opportunities through walks, talks and tours in parks as well as through a range of outreach activities. It fosters understanding and appreciation of the diversity of natural, Aboriginal cultural heritage and historic heritage values in national parks and reserves, and encourages behaviours that help sustain the environment. DEC employs local people with appropriate backgrounds as Discovery coordinators and Discovery rangers and supports volunteer programs to deliver these programs to local communities, visitors and schools.

Some 2639 Discovery programs were conducted across NSW in 2004–05 and, for the first time, the number of participants exceeded 100,000.

Envirothon is an environmental interpretation competition for Year 11 students in NSW public schools undertaken by DEC in partnership with the Department of Education and Training. In 2004–05, more than 250 students from across the state competed in regional competitions conducted by DET Environmental Education Centres, with over 60 students and staff engaged in the final of the competition. The state final of Envirothon 2004 was conducted during December and was won by Coffs Harbour High School.

### Access and services for people with a disability

During the year DEC made improvements to providing access and services for people with disabilities, including:

- wheelchair access, including wheelchair-accessible picnic facilities, installed in Berowra Valley Regional Park. These facilities are an example of new visitor-friendly furniture for all park visitors, outlined in the new Park facilities design manual completed in 2004–05
- a new boardwalk enabling access by wheelchair to the state’s tallest tree, the Grandis, in Myall Lakes National Park. The boardwalk, opened by Great Lakes Shire Council Mayor John Chadbon, included new interpretative materials and improved car parking
- wheelchair access to all camping facilities at Rummery Park camping area in Whian Whian State Conservation Area

In addition, DEC renewed contracts with Autism Spectrum, providing DEC employment to teams of people with disabilities.
Commercial activities

Tourism

DEC and the Department of Tourism, Sport and Recreation were major sponsors of the 11th National Ecotourism Australia Conference held in the Blue Mountains in November 2004. The conference is the peak Australian Ecotourism conference and attracted delegates from government, research institutions and industry, both local and overseas.

The NSW Government’s ‘Our Natural Treasures’ Nature Tourism Plan identifies the need for improved internet-based communications for nature-based experiences. During 2004–05, DEC participated on the inter-agency Nature Based Tourism Working Group to examine ways to improve inter-agency web-based information relating to recreation and tourism opportunities on public reserve lands. The working group identified a strategy to improve communications and is improving linkages between existing DEC, Forests NSW and Tourism NSW websites as well as updating the Best Bush Map.

DEC continues to participate in research undertaken by the Sustainable Tourism Cooperative Research Centre. Research projects in 2004–05 included:

- assessment of interpretation outcomes: the development and refinement of methodology and evaluation tools for tourism practitioners
- systematic and strategic collection and use of visitor information in protected area management
- visitor surveillance and compliance in protected areas
- managing legal risk in protected areas tourism
- sustainable visitor use of protected areas – visitor impact indicators
- protected areas impact modelling.

Following the success of the research-based ecotourism offered at Montague Island, DEC is working cooperatively with Conservation Volunteers Australia to promote ‘homestead eco-tourism’ in the far west of the state, focusing on properties such as Mt Wood.

Park use fees

DEC’s park use fee program helps to maintain and improve visitor facilities and services, as well as assisting in conserving threatened species and their habitats, protecting sites of cultural and heritage significance, and carrying out pest and weed control programs. The program includes day entry, annual pass and camping fees. Day entry fees apply to only 44 of 677 parks and reserves across the state.

In 2004–05, DEC raised over $17.1 million from these fees including $11,676,000 in day use and annual pass fees and $5,428,000 in camping fees and cabin letting.

Leasing and property management

DEC has an extensive commercial property and leasing portfolio, which generated $11,563,000 in revenue during 2004–05.

During the year, DEC undertook commercial negotiations with Perisher Blue Pty Ltd through the Department of Commerce to determine if agreement could be reached for the development rights and lease over the 800-bed village at Perisher Valley.

The government is committed to the conservation of the Quarantine Station and has determined that the adaptive re-use of the site provides the best opportunity to ensure the long-term conservation and presentation of its heritage values. In January 2005, following extensive public consultation and exhaustive conservation studies and planning, an amendment was made to the 2000 Conditional Agreement for Lease of the North Head Quarantine Station between the Minister and Mawland Hotel Management Pty Ltd. The purpose of the proposed lease arrangement is to ensure that the site is conserved, maintained, adapted and used in a way that fits the cultural significance of the site.

Other key achievements during 2004–05 included:

- new leases granted for a cafe/restaurant at Berowra Waters and for the cafe within the Jindabyne Visitor Centre
- licences issued for the Smoky Cape Bed and Breakfast and for air space for the Scenic Skyway in Blue Mountains National Park
- a number of successful conservation leases for Hill End Historic Site, including Dennington’s Cottage and English Cottage.

A five-year restoration of Dennington Cottage was completed during 2004–05. The project, commenced in 2000, involved restoring the original building to a standard consistent with the Conservation Management Strategy for the premises. In 2002, the works won a gold Heritage Award. All these conservation works were funded by the lessee in return for the granting in 2005 of a long-term lease for the property.

DEC was one of the sponsors for the review of telecommunication fees on Crown lands by the Independent Pricing and Regulatory Tribunal of NSW during the year. It is hoped the introduction of a standardised fee will assist in the on-going licensing of telecommunication facilities on reserved lands.
Sustainable consumption, production, resource use and waste management

The DEC Corporate Plan 2004–06 identified the following strategic focus areas and outcomes required to achieve our corporate goal of ‘Sustainable consumption, production, resource use and waste management’.

<table>
<thead>
<tr>
<th>Strategic focus area</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability reflected in government and business decisions and operations</td>
<td>Government is a recognised leader in sustainable management of its processes, operations and public assets</td>
</tr>
<tr>
<td></td>
<td>Business adopts sustainability as a core value</td>
</tr>
<tr>
<td>Resource conservation improved</td>
<td>Individuals and businesses minimise resource use and environmental impacts, recover resources and appropriately dispose of harmful waste</td>
</tr>
</tbody>
</table>

In this chapter

Sustainability reflected in government and business decisions and operations

- Corporate plan priorities for 2004–06
- Sustainability in government
- Sustainability in business

Improving resource conservation

- Corporate plan priorities for 2004–06
- Supporting the waste avoidance and resource recovery strategy
- Markets for recycled resources
- Community education and support
Corporate plan priorities for 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_

During 2004–05, DEC contributed to the on-going development of the Sydney Metropolitan Strategy, in areas including transport, recycled water, planning for new release areas, and the building sustainability index (BASIX), to ensure environment protection and conservation are considered upfront in the planning process.

In the north-west and south-west Sydney growth sectors, DEC worked with the Department of Infrastructure, Planning and Natural Resources to identify and protect significant portions of endangered Cumberland Plain vegetation, and to develop planning controls such as water-sensitive urban design, that assist in delivering improved ecosystem health for South Creek.

Promoting sustainability in the public sector
_Guide purchasing and resource use by government agencies towards more sustainable practices_

DEC worked at the individual and whole-of-government level to promote sustainable buying and resource use in state government. Under the NSW Government Waste Reduction and Purchasing Policy (WRAPP), DEC released Guidelines to assist reporting WRAPP progress for 2003–2005 and provided training to staff from 50 government agencies (page 61).

DEC developed and launched www.greengoods.nsw.gov.au to make green purchasing easier through sourcing goods and providing other assistance. DEC also assisted the Department of Commerce in developing sustainability requirements for NSW Government contracts worth approximately $300 million.

DEC partnered with the Local Government and Shires Association to launch the Local Government Buy Recycled Alliance (page 61). The Buying Green Expo organised by DEC brought together leaders in ‘green’ purchasing, from the international to the local government level, with suppliers of ‘green’ products (page 61).

Minimising DEC’s own environmental impact
_Minimise DEC’s own environmental impact in terms of energy, water and paper consumption_

The world-first Australian Building Greenhouse Rating Scheme ranked DEC as the leading NSW agency for energy efficiency in office buildings. For further information on the scheme and on our ‘Buy recycled’ program and Fleet Environmental Improvement Plan to reduce fuel consumption and vehicle emissions, see page 75.

Promoting sustainability in business
_Work with businesses to move them towards sustainable practices_

This year, DEC continued the successful Industry Partnership Program, which since 2001 has worked with 460 businesses in 15 industry sectors to tackle sustainable practices across a range of areas including waste, pollution and energy (page 62). We also formed alliances with leading players in industry sectors, such as commercial property owners and managers, to help enhance sustainability.

We worked with industry to improve access to recycling services and assist the development of recycled products to substitute for virgin materials (page 62).

DEC continued to work with industry to ensure it takes responsibility for the waste its products generate and to develop schemes for waste named in the Extended Producer Responsibility Priority Statement 2004 (page 62).
Sustainability in government

Government’s WRAPP performance

State government agencies and state-owned corporations purchase a wide variety of goods and services for their operations and the state’s capital works. DEC assists these agencies to reduce waste and implement ‘green’ procurement policies. A key part of this is the development and implementation of a waste reduction and purchasing plan by each agency under the NSW Government Waste Reduction and Purchasing Policy (WRAPP).

Biennial reporting of WRAPP performance means that DEC will receive figures for 2004 and 2005 later in 2005. Data reported for 2002 and 2003 indicated that substantial opportunities remain to divert further large quantities of material for recycling (such as cardboard and office paper), and to close the loop by increasing purchase of recycled content.

Local Government Buy Recycled Alliance

The Local Government Buy Recycled Alliance, developed by DEC in partnership with the NSW Local Government and Shires Association, encourages local government to purchase goods containing recycled content and improve access to recycled content suppliers. By 30 June 2005, 12 councils had signed up as members and others were involved through regional organisations of councils or waste groups.

During the year DEC put together a resource kit that is now available to any NSW council on request and the Buy Recycled Website contains a comprehensive list of potential suppliers.

The alliance is in its early stages, but is expected to deliver real improvement in green purchasing by councils in coming years.

National Buying Green Conference and Expo

In November 2004, DEC hosted the National Buying Green Conference and Expo with the theme ‘Buying green means business’. The conference brought together makers of ‘green’ products and leaders in ‘green’ purchasing, including 239 delegates from local government, state government, federal government, academic institutes, the community, commerce and industry.

CASE STUDY

Recycled materials in road construction

Government agencies are working hard to use their buying power to increase markets for recycled materials. Partnerships between DEC and major infrastructure providers such as the Roads and Traffic Authority (RTA) are providing market opportunities for used tyres, glass and recycled organics.

In 2004-05 RTA trialled the use of scrap rubber tyres in asphalt, which can increase the durability and lifespan of pavement and reduce maintenance costs. The project aims to divert one million tyres from NSW landfill every year. DEC and the RTA are also exploring the use of crushed glass recovered from waste to use in concrete production to replace diminishing resources of sand and aggregate.

DEC and the RTA have conducted successful trials of recycled organic material in roadside landscaping. Changes to RTA specifications in the future will produce a market for recycled organics in road-making of an estimated at 47,000 m³ in 2005-06 for new roads alone.
Sustainability in business

Building business partnerships and alliances

DEC is building on the success of its Cleaner Production Industry Partnership Program and other industry collaboration to work with businesses to avoid the creation of waste and pollutants, including avoiding the use of toxic raw materials and reducing the use of resources, materials, energy and water, and the volume and toxicity of waste and emissions.

Since 2001, when the program began, partner organisations have collectively achieved financial savings of almost $9 million and annual environmental savings of:

- 32,400 kilowatt hours of electricity and 8000 gigajoules of gas
- 34,000 tonnes of CO₂
- 8900 tonnes of raw materials
- 200 megalitres of water
- 8100-tonne reduction in waste to landfill.

We also continued to form three-to-five year alliances with peak industry bodies and individual organisations from high priority sectors. These alliances enable the development of strong working relationships and joint strategies that will deliver environmental improvement. They include an alliance started during the year with six of the top ten commercial property management companies who own or manage commercial office property in Sydney, including AMP Capital Investors, Colonial First State Property, General Property Trust, ING Real Estate, Macquarie Asset Services and Stockland. Use of innovative tools assisted the companies to identify and prioritise actions to enhance sustainability. We have identified projects in areas such as sustainability policy and planning, resource efficiency (energy, water and waste), supply chain management and environmental reporting.

Importantly, the expertise and contacts gained through the Industry Partnerships Program will be channelled into further partnerships with business, focusing on a range of sustainability issues. During the year DEC also began negotiations for a new sustainability program with a number of leading Australian businesses to deliver significant environmental outcomes and leadership in their industry sector, which will be announced in 2005–06.

Increasing recycling in businesses

An assessment report was conducted during the year based on a substantial survey where DEC had previously contacted 7700 businesses in south-east NSW to establish whether they wanted or needed recycling services in an effort to connect them with recycling service providers. This information has proved to be crucial to the development of new collections and increasing the rate of waste recovery in the region.

The assessment report found that:

- one in five shopfront businesses surveyed stated they had been approached by a recycling service in the previous year
- eight out of ten small-to-medium shopfront businesses in the region are recycling at least one of their waste products.

Product stewardship/extended producer responsibility

Extended producer responsibility (EPR) requires producers to take physical or financial responsibility for the environmental impacts of their products throughout their life cycle. This includes both the ‘upstream’ impacts from their choice of materials and the manufacturing processes they use, and the ‘downstream’ impacts associated with the use and disposal of products. EPR is generally applied to post-consumer and other difficult to manage wastes.

DEC released its first annual extended producer responsibility priority statement in early 2004. DEC identified 16 priority wastes of concern, including:

- nine top priorities – computers, televisions, nickel cadmium batteries (excluding mobile phone batteries), used tyres, plastic bags, agricultural/veterinary chemicals and containers, mobile phones and batteries and packaging wastes, and
- a further seven wastes of concern – cigarette litter, office paper, polyvinyl chloride (PVC), other electrical products (excluding computers, televisions and mobile phones), treated timber, end-of-life vehicle residuals, and household hazardous and chemical wastes.

EPR is critical to making real progress on the NSW Waste Strategy. An expert reference group was appointed to assess each waste of concern and provide advice regarding the next stages of EPR. The expert reference group has been meeting with the priority industry sectors during the year and expects to submit its report to the Director General and Minister in late 2005.

DEC has also been working at the national level to ensure that, where possible, there is a coordinated jurisdictional and industry effort. National processes, through the Environment Protection and Heritage Council, are currently dealing with electricals (televisions and computers), tyres, plastic bags, agriculture and veterinary chemicals and containers, mobile phones, and packaging. NSW is taking the lead jurisdictional role with electrical products.
National Packaging Covenant

The Environment Protection and Heritage Council agreed to a revised National Packaging Covenant on 1 July 2005. During 2004–05, DEC played a key role in ensuring that the new covenant provides a much stronger framework with clear environmental goals and targets and greater measurability, governance and compliance procedures. The revised covenant commits signatories to a national recycling target of 65 per cent for packaging and no further increases in packaging waste disposed to landfill by the end of 2010.

The covenant builds on a commitment from all major packaging groups (manufacturers, retailers and fillers) to deliver specific recycling targets by 2010 and to deliver other improvements across the whole lifecycle of packaging, from material selection to better design and increased recyclability.

In 2004–05, the Covenant Jurisdictional Recycling Group, coordinated by DEC, also completed two significant projects to increase recyclability. A glass compaction study will help predict glass breakage in mixed recycling collections, which can compromise recovery of materials. A second study explored the opportunities for broken glass to be reutilised in various products where it would replace virgin materials, such as sand.
Corporate plan priorities for 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

The NSW Waste Avoidance and Resource Recovery Strategy 2003 provides the framework and targets for our waste-related actions (page 65). The strategy drives many of DEC’s activities, including improving recycling and increasing markets for recycled products. During 2004–05 DEC formed the Litter and Illegal Dumping Alliance and focused on education to minimise waste (page 65).

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 assists the development and adoption of ‘Waste Not’ development control plans (DCP) by local councils. At 30 June 2005, 45 councils across Sydney had adopted ‘Waste Not’ DCPs that require development applications to demonstrate how construction and demolition wastes generated from a development will be recycled or reused. This is particularly important for multi-unit dwellings. This year, DEC supported 15 councils to implement the DCP.

For DEC’s contribution to the Sydney Metropolitan Strategy and the Metropolitan Water Plan, see pages 21 and 60.

Developing a sustainability framework

Develop a sustainability framework for a more integrated approach to managing environmental issues

During 2004–05, DEC undertook substantial preparatory work to create a framework for sustainability. At 30 June, work was underway across DEC to map its contribution to long-term environmental sustainability and to assess how it can adopt more sustainable practices in its own operations.
Supporting the waste avoidance and resource recovery strategy

The NSW Waste Avoidance and Resource Recovery Strategy 2003 provides the framework and targets for our waste-related actions. It involves government, industry and the community in working towards four key outcomes:

- preventing and avoiding waste
- increasing use of renewable and recovered materials
- reducing toxicity in products and materials
- reducing litter and illegal dumping.

The 2004 report showed that good progress is being made to increase recycling by households and by the construction sector. However, a real opportunity remains to improve the performance of the commercial and industrial sector. An audit of waste from that sector carried out by DEC in 2004 showed that substantial quantities of recyclable materials were sent to landfill, including cardboard and timber. DEC also carried out an audit of the contents of green plastic bags from landfill in August 2004 (see page 66).

In November 2004, DEC formed the Litter and Illegal Dumping Alliance as part of the strategy. The alliance brings together government agencies, non-government organisations and industry groups to contribute to a full understanding of litter, illegal dumping and illegal landfilling issues and behaviour. It will coordinate and prioritise actions to tackle specific litter types and dumped materials and sources. For more on DEC litter programs, see page 24.

Collecting waste data

DEC needs to know more about waste generation and where waste goes in order to inform industry and to design effective programs. During 2004–05, DEC built on its data collection in a number of ways.

In 2005 we carried out an audit of construction and demolition waste being disposed to landfill in the Sydney Metropolitan Area. Audits are an important part of characterising the ‘waste stream’, particularly waste being lost to landfill. The audit used a new methodology designed to provide significantly more accurate results. At 30 June, the data was being analysed to be fed back to industry.

We published a report on the NSW reprocessing industry, bringing together data from 2001–03. By comparing data across the years, we gained a better picture of trends in materials being processed and the recycling capacity in NSW.

In November 2004, DEC released the New South Wales litter report 2004, the first in a series of biennial reports on littering in NSW. The survey introduced a methodology that will be used in subsequent surveys to build a picture of long-term trends in litter composition and littering behaviours. This information will provide an indicator of the effectiveness of government, industry and community initiatives to reduce litter.

The survey assessed both weight and volume of litter collected, as well as looking at littering behaviour in a cross-section of sites across NSW. It found that:

- the ‘clean’ rating system used in the survey gave NSW a similar rating to that measured in Victoria, which is at the upper end of the moderately clean rating
- beaches, parks and waterfronts performed better than roadsides, public transport sites and landmark sites
- by both weight and volume, the largest category of litter collected was cigarette butts (38.8% by weight)
- by weight the next highest categories were glass (21.5%), paper (11.6%), organics (10.1%), and plastic (9.6%)
- by volume the next highest categories were paper (27.6%), plastic (25.3%), non ferrous metals (4.7%), organics (4.0%), and glass (3.5%).
This year DEC surveyed material dropped off at transfer stations in green plastic bags following an audit of waste from the commercial industrial sector in 2003. Paper (mixed paper and newsprint, 27.9%), food (27.4%), and plastic products (25%) made up three quarters of waste by weight in the bags. The results represent a change in the waste profile from the 2003 survey by increasing the overall proportion of cardboard/paper (to 22%), food (to 9.5%) and plastics (to 14%) thrown away by the commercial and industrial sector. The information will be fed back into strategies to improve resource recovery from these businesses.

In August 2004, DEC brought a new Waste Data System online that allows waste facilities in the Sydney, Hunter and Illawarra regions to report their waste data and waste levy requirements. The waste levy, at $21.20 per tonne of waste disposed in Sydney and $13.20 in the Hunter and Illawarra, is the NSW Government’s principal economic incentive for reducing waste and promoting resource recovery.

Local government forums

In May 2005, DEC staff and 126 officers from 54 councils engaged in a series of forums in Sydney, Nowra and the Hunter to discuss a range of topics including sustainability education, waste contracts, and recycling systems. DEC presented some of the latest resources available to councils, including illegal dumping research and model waste contracts. The forums were also an opportunity for councils to discuss the challenges ahead and what they needed to meet those challenges. DEC received feedback that helped to identify gaps and critical areas for councils.

Model waste contract for councils

Tendering for waste services is a complex process that will typically take councils over a year to prepare. In May 2005 DEC finalised a model contract for waste services for use by councils, after close collaboration with councils. The comprehensive document distils the experience of individual councils and incorporates good practice performance measures developed through research on kerb-side recycling collections and other studies. Twenty-two councils have already registered to receive the model contract.

A service development timeline also complements the contract and provides checklists, time frames and tips for successfully completing the tender, selection and start of a new waste service contract.

CASE STUDY

City to Soil

A new system was trialled in Queanbeyan to take household organic waste and turn it into high-quality compost delivered to the farm gate. The economics of the City to Soil system were assessed after the trial. The results showed multiple benefits to households, council and farmers.

Queanbeyan City Council made low-tech changes to its residential waste collection to incorporate a separate collection of household food and garden waste. Barcodes and readers were used to record returns from each household. The material was then composted to Australian Standard and delivered to a trial farm site. Applied to the farm site, the locally made compost increased crop yield by 230% in the first year and a further 82% in the second year.

City to Soil demonstrated food and garden waste can be separately collected with relatively low levels of contamination from other waste, composted and sold within a 200-kilometre radius to farmers for about $50 per tonne. This was around $25 less per tonne than landfilling the waste in Queanbeyan. The benefits to depleted soil are immediate. Lastly, the cost savings of dealing with the waste can be passed back to participating households through the individual barcoding system.

The City to Soil project was a finalist in the 2004 Banksia Awards. The project has created interest both in Australia and overseas. A number of other organisations are interested in adopting the principle of processing urban resources for the benefit of agricultural soil quality.
Strengthening kerb-side recycling collections

In 2005, DEC published a resource kit to assist councils in making decisions about collecting garden organic waste and directing that waste to new ‘alternative waste technologies’. The costs of councils providing a separate garden waste collection are surprisingly small and can actually reduce overall waste management costs.

The benefits of kerb-side recycling have also been summarised for councils in easy-to-understand material that can be used in community education and to support council decision-making. A ‘calculator’ helps councils demonstrate the energy, greenhouse and water savings that kerb-side recycling can deliver.

Supporting voluntary regional waste groups

The seven voluntary regional waste groups cover 85 councils and over 90 per cent of NSW. This year, over $1 million of funding from the Waste Fund was used to support rural and regional waste groups to assist the development and delivery of waste avoidance and resource recovery plans addressing the four key outcomes of the Waste Strategy. For example, during the year councils formed regional arrangements to provide kerb-side recycling in Parkes, which had previously had no service, and increases in the area covered in Blaney, Cabonne and Forbes. Some groups also ran programs to collect metal from farms for recycling in the northern inland regional area. DEC provides further support to regional waste groups through hosting forums, promoting networks and providing access to DEC expertise.

Regional waste issues include rationalising landfill operations, negotiating regional contracts for resource recovery encompassing agricultural material, and overcoming transport logistics. The voluntary regional waste groups recently calculated that since their formation in 2002, they had enabled the diversion from landfill of:

- 760,000 plastic bags
- 115,900 tonnes of household chemical waste
- 44,700 tonnes of construction and demolition materials.

Markets for recycled resources

Increasing markets for recycled organics products

Following an analysis of markets for recycled organic products in 2003–04, this year DEC has been working with agencies with the potential to take up significant tonnages of material. DEC has partnered with the Hawkesbury–Nepean Catchment Management Authority (HNCMA), Roads and Traffic Authority, Forests NSW and Department of Primary Industries to establish sites demonstrating the use and benefits of recycled organics in catchment protection, roadside landscaping, salinity and mine site rehabilitation.

For example, a scientific trial at a Department of Primary Industries facility and a large-scale site at Bungonia demonstrated that recycled organics can help reduce soil erosion by up to 85%, and can play an important role in protecting soils and improving water quality in catchment areas.

DEC worked in partnership with the HNCMA on a large-scale trial to demonstrate how successful recycled organics can be in catchment protection works. As a result of the trial, HNCMA guidelines for catchment works will be changed to require the use of recycled organics.

Attitudes to buying recycled

During the year DEC conducted social research into attitudes and behaviour towards buying recycled content products to better understand how we can influence recycled content buying decisions. The research took in the public sector, local government and small-to-medium size businesses and was a first for NSW.

CASE STUDY

Reducing illegal dumping campaign

During 2004–05, DEC developed and trialled a campaign to reduce illegal dumping around multi-unit dwellings. Our ‘Dumping. It’s Dumb’ campaign and resource materials for councils was based on extensive research and was trialled by Kogarah Council. The campaign led to an overall reduction in the average number of illegal dumps of 23% compared with the same period one year earlier.

A poster for the illegal dumping campaign trialled by Kogarah Council.
The awareness of participants of the environmental importance of recycled content products was quite high, but this did not translate into buying recycled content goods. The research helped identify some of the perceived barriers, including that recycled content is thought of as lower quality. Organisations also had little information about recycled goods and their specifications.

Community education and support

Attitudes about the environment

DEC conducts vital research into what the community thinks about the environment and uses the results to inform the education initiatives that we design and carry out.

This year, research into attitudes in the eight largest ethnic communities in NSW showed that significantly more people from non-English speaking backgrounds (NESB) rated environment as ‘very’ important than in DEC’s 2003 community-wide survey, ‘Who Cares about the Environment?’. Overall, people can also discuss environmental issues in more detail than in 1996. The number of people who are ‘unsure’ or ‘don’t know’ about environmental issues has decreased markedly. When combined with issues of water conservation and urban growth/population issues, the environment is seen as a significantly more important issue in NSW today than it was in 1996. The full report will be published in 2005–06 and will be available on DEC’s website.

We also conducted telephone interviews and a survey into illegal dumping. Key findings include:

- for 95% of urban councils, illegal dumping is either a moderate or major problem, compared to 41% of rural councils. Illegal landflling is less likely to be a problem
- urban councils spend an average of $1.68 per person per year on illegal dumping issues, while rural councils spend an average $0.69 per person per year, 90% of this spending being on clean-up and enforcement
- 44% of waste dumped is household waste. In rural areas this is mostly rubbish, and in urban areas is mostly furniture and whitegoods.

Changing community behaviour

In 2004–05, DEC provided $1.4 million to councils across NSW to deliver sustainability education programs within organisations and with householders, focused on delivering environmentally responsible behaviour changes that tackle local issues. Councils work in partnership with DEC individually or as groups to design and deliver education resources in their local areas. Independent research tracking the response to the campaigns found that they reduced consumption of resources such as energy and water, protected the environment from pollution, minimised impacts through waste avoidance and recycling, and improved biodiversity through conservation and restoration of areas for native plants and animals. The program was funded as part of the NSW Environmental Trust’s funding for the ‘Our Environment – It’s a Living Thing’ program.

DEC also supported council networks in providing training, education materials and funding for household sustainability education, targeted at behaviour change in the home.

Educating the community

The ‘Our Environment – It’s a Living Thing’ community education campaign entered its fourth year in 2005. The campaign is making a real difference to environmental awareness and promoting positive behaviour in the community. Research in the past four years has shown increases in the community’s water- and energy-saving behaviours and increased recycling and reuse of resources.

DEC is part of the first major government/non-government partnership in NSW to undertake an integrated and coordinated education program to promote sustainable living. This year, DEC entered a new phase in the program that will cover the wide range of issues involved in sustainability including waste, ‘buying green’, household chemicals and sustainable consumption. The aim of the initiative is to bring the resources of government and the non-government sector together to deliver a consistent high-quality education program, using the expertise of each group as effectively as possible.

Sustainable schools

Since 2003, DEC and the NSW Department of Education and Training have worked together to introduce school environmental management plans (SEMPs). We worked with 188 pilot schools to develop plans that identified how the schools were managing resources – waste, purchasing, energy, water, the school grounds – and how they were linking environmental issues into curriculum.

At the end of the pilot program in 2004, the program had implemented an environmentally friendly purchasing training program for all purchasing officers in government schools (around 6000). SEMPs were in place for 70 per cent of the pilot schools and 71 per cent reported that the progress they had made towards sustainability would endure for a year or more.
A credible, efficient and effective organisation

The DEC Corporate Plan 2004–06 identified the following **strategic focus areas** and **outcomes** required to achieve our corporate goal of ‘A credible, efficient and effective organisation’.

<table>
<thead>
<tr>
<th>Strategic focus area</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>One integrated DEC</td>
<td>The Department completes the transformation of constituent agencies into DEC</td>
</tr>
<tr>
<td></td>
<td>DEC values and develops staff and provides a safe and healthy workplace</td>
</tr>
<tr>
<td></td>
<td>The Department is recognised for the quality of its communication, service delivery and corporate governance</td>
</tr>
</tbody>
</table>

In this chapter

One integrated DEC

Corporate plan priorities for 2004–06  70
Organisational development  71
Corporate governance  72
Environmental performance  75
Social performance  76
Economic performance  77
Corporate plan priorities for 2004–06

Building staff knowledge and capacity

*Building staff knowledge and accountabilities and the capacity to deliver services across the Department, emphasising conservation, environmental and cultural heritage concepts, values and practices*

During 2004–05 DEC worked on establishing an organisation-wide approach to learning and development, incorporating the opportunities and needs of all work areas (page 72).

DEC is also working to establish an effective staff performance management system that recognises achievements and supports the delivery of DEC services and programs.

Cultural heritage change program

*Review and implement the Cultural Heritage Change Program and the government’s ‘Two Ways Together’ plan*

DEC reviewed its Cultural Heritage Strategic Policy in 2004–05. A staff Aboriginal Affairs Reference Group was established to assist and advise on implementing ‘Two Ways Together’ across DEC, including addressing Aboriginal cultural heritage training needs.

Effective cross-divisional links

*Establish effective cross-divisional links within DEC*

DEC established a staff steering group in November 2004 to work on DEC and cross-divisional issues (page 71).

The annual gathering of Aboriginal staff held in Woody Head this year began work on a strategic plan and charter for the Aboriginal Network, which supports Aboriginal staff across DEC. Drafts were prepared during 2004–05, to be finalised in 2005–06.

During the year DEC conducted a series of workshops at regional centres, where the DEC executive and staff discussed regional environmental, operational, cultural and reform issues as well as corporate and divisional priorities and goals.

New industrial awards

*Develop and implement new industrial awards for the Department*

During the year DEC worked with unions to develop a draft integrated DEC award as the basis for on-going negotiation. Interim award arrangements from conciliation in the Industrial Relations Commission in February 2004 will continue to apply until the integrated award is finalised.
Integrating corporate support services

Establish and implement effective integrated corporate support services across the Department, including policies, procedures, systems and infrastructure

In 2004–05 DEC established a number of corporate support policies and strategies relating to records management, human resources, financial management, procurement, motor vehicles, office accommodation, and information management and communication technology. DEC also established a shared service centre that provides payroll, recruitment, and creditor and debtor transaction processing services, and implemented DEC-wide human resources and financial management information systems.

Occupational health and safety

Set and achieve challenging targets for occupational health and safety

DEC implemented an OHS management system to ensure we meet or exceed standards. This year DEC trained its executive in the new OHS requirements; undertook the self assessment requirement for the new Department; reviewed detailed audits for the former NPWS and BGT; and prepared a DEC OHS policy and consultative committee structure.

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 met its overall 2004–05 budget and delivered on the budget savings and revenue strategies required by the NSW Government's 2004–05 mini-budget. DEC's first corporate plan, which establishes goals and priorities for 2004–06, was released in September 2004.

Organisational development

DEC has appointed a coordinator for reform projects designed to develop our organisation. In November 2004 DEC established a cross-divisional staff steering group to support these projects and to provide feedback to executive members. Issues addressed by the group include corporate branding, corporate culture and integration.

Cross-divisional links for conservation

A holistic approach to the conservation of threatened species has been adopted with the establishment of formalised working relationships between Parks and Wildlife Division (PWD) and the Environment Protection and Regulation Division (EPRD). For example in the Northern Rivers Region, the Shorebird Threatened Species Recovery Plan has been integrated with the Fox Threat Abatement Plan. Species such as the pied oystercatcher and little tern are now managed by a combined PWD and EPRD working group.

DEC structure and staff placement

The creation of DEC in September 2003 presented significant workforce planning challenges in order to integrate and consolidate structures and practices across four formerly separate agencies. Roles and functions across DEC had to be defined and delineated in the context of the new Department. Duplicated areas (in particular, human resources, finance, information technology, administration and facilities, legal services, information and publishing, executive services, public affairs, corporate governance, and ministerial and parliamentary services) were subjected to significant restructuring. This occurred simultaneously with significant budget savings requirements.

At 30 June 2005, the restructuring process was nearing completion and the majority of positions and staff placements were aligned to the new structure and divisional roles. During 2004–05, DEC evaluated and developed, reviewed and assessed position descriptions for 226 positions.

DEC also reviewed the application of industrial instruments to ensure appropriate classification of positions under interim award arrangements. The unions have worked closely with DEC, meeting regularly in the Joint Consultative Restructure Sub-committee to develop and oversee the progress of the restructure.

In October 2004 DEC established an Employee Relations intranet page, including fact sheets and frequently asked questions, to provide consistent interpretation and application of DEC awards, policies and conditions of employment for all recruitment and other human resources processes.
Learning and development

In 2004–05 12 managers completed the highly successful Management Development Program, which is designed to provide managers with the opportunity to develop and enhance their leadership and people management skills. Through a combination of structured learning and mentoring activities, managers had an opportunity to discuss management issues with colleagues and were introduced to new ideas and management techniques. DEC engaged high-quality external facilitators with particular areas of expertise to provide this training, substantially reducing the ‘per head’ cost.

Following a highly competitive selection process three staff from DEC were allocated places in the Public Sector Executive Development Program offered by the NSW Premier’s Department, in conjunction with the Australian and New Zealand School of Government and the University of Sydney. These programs provide an opportunity for senior managers to broaden their skills and develop attributes to lead effectively in the public sector.

DEC continued to support fire training programs during 2004–05, in order to maintain skills to nationally endorsed standards. DEC continues to ensure that employees have the necessary support from supervisors and managers when undertaking this training. During the year, 557 employees were awarded Certificate II in Public Safety (Firefighting Operations). At 30 June, a further 287 employees were undertaking the requirements to attain this qualification.

DEC is the first environmental or conservation regulator in Australia to be accredited as an Environmental Auditor Training Provider by the Registrar Accreditation Board/Quality Society of Australasia International (RABQSA). During 2004–05, 21 DEC officers obtained certification as provisional environmental auditors through our competency-based environmental auditor training.

In 2004–05 DEC’s Legal Services Branch also provided evidence and offence provisions training to Environment Protection and Regulation staff and a one-day basic investigation training course to Parks and Wildlife staff.

Corporate governance

DEC has continued the development and review of our corporate governance arrangements to ensure our compliance with statutory requirements and the systematic management of risk and performance in our operations.

Performance management

DEC’s Corporate Plan 2004–06 now in place is being used to guide wider planning and decision-making across DEC, including strategic, operational and functional plans for each division. The corporate plan is available at www.environment.nsw.gov.au.

During the year, DEC’s corporate performance measures were reviewed to strengthen their link to the corporate plan and improve the relevance, quality and timeliness of data. Performance reports, which are provided regularly to DEC management and key external stakeholders, now use a common set of indicators to guide performance monitoring of DEC and improve our accountability to stakeholders.

During 2004–05, DEC led by the Parks and Wildlife Division commenced development of a Future Directions Statement for the Protected Area System. The statement informs corporate and divisional planning to improve DEC’s capacity to respond to changing ecological, social and economic circumstances in relation to protected areas and wildlife management, including:

- the impacts of climate change
- increased urbanisation
- changing park use patterns
- native vegetation loss and fragmentation
- increased pressures on waterways and wetlands.

To develop Future Directions, DEC has considered recent national and international trends in protected area management, especially those identified at the World Parks Congress in 2003. It has also taken into account recent institutional and policy changes within NSW.

Corporate reporting

DEC submitted all financial statements to the Audit Office by the statutory deadline in August 2004. All content of the annual report, except the final Environment Protection Authority (EPA) financial statements, was prepared by the statutory deadline of 31 October 2004.

Tabling of DEC’s Annual Report for 2003–04 was delayed pending receipt of an audit opinion of its financial statements. This opinion was qualified in relation to the EPA financial statements. However, the audit opinion related to how DEC’s financial statements were presented, not to how DEC managed its finances, and nor was it a reflection of financial exposure.
Risk management and compliance

During 2004–05, DEC undertook a corporate risk assessment. The outcomes of this work will form the basis of an integrated risk management strategy including a new three-year audit program, a program for improved management controls, and a fraud and corruption prevention strategy.

DEC’s comprehensive internal audit program helps to ensure the compliance, efficiency and effectiveness of DEC programs and processes. DEC appoints independent auditors to conduct internal audits. This audit activity is overseen by either DEC’s Internal Audit Committee or by the statutory Conservation Audit and Compliance Committee established under the National Parks and Wildlife Act.

We completed 17 audits during the year. Major issues addressed included:
- revenue systems and cash handling (regional offices) – recommended improved controls and staff security
- computer room (physical security and protection from environmental factors) – recommended improved safety and protection arrangements
- Kangaroo Management Program – confirmed compliance with legislative requirements but included a number of minor recommendations to improve management arrangements
- Cleaner Production (Industry Partnership) Grant Scheme – affirmed all management, probity and accountability compliance requirements
- contaminated sites – affirmed site remediation administrative standards, but recommended measures to minimise potential conflicts of interest regarding appointment of independent site auditors
- protection of historical heritage values – affirmed internal funding allocation procedures for maintenance of historic sites within national parks
- Waste Levy Audit Program – resulted in a strong endorsement of the current audit program
- Environment Protection Licensing (Public Register) – confirmed accuracy and currency of information of the public register.

External reviews provide DEC with an independent assessment of our probity and impact. During 2004–05 the Audit Office of NSW carried out comprehensive audits of our annual financial statements and associated financial systems. The Audit Office also completed a major performance audit, Managing air quality, which concluded that there has been significant progress in controlling air pollutants since the introduction of the government’s ‘Action for air’ strategy in 1998. NSW met four key national reduction goals ahead of target but two goals, regarding ozone and particles, are proving more difficult to achieve. A solution requires inter-agency effort to reduce private car usage and improve the transport planning and coordination effort.

DEC takes seriously complaints and other performance feedback in order to improve our service delivery and prevent problems recurring. In 2004–05 DEC received 25 significant complaints. These matters were all subject to investigation and 19 were finalised during the year. Two matters received but not resolved in 2003–04 were also finalised. No evidence of improper conduct was found in relation to any of these complaints, although some changes to systems or procedures were recommended in three matters.

Freedom of information

DEC is committed to transparent and accountable decision-making. Members of the public are able to access many documents held by DEC through its website, by request or by purchase. Other documents can be obtained by applying under the Freedom of Information Act 1989.

Freedom of information (FOI) statistics for 2004–05 are shown in Appendix 11, page 166. DEC received 99 new FOI requests this year, a 25 per cent decrease compared to 2003–04. 104 applications were processed during the year.
Many DEC applications are complex and usually capture documents provided by third parties, such as individuals, organisations and businesses. The overwhelming majority of FOI exemptions were made to protect those third parties’ personal and business affairs. Very few documents created by DEC were exempted.

There were nine internal review decisions made during 2004–05. In two cases, the original FOI decision was varied. The other seven decisions were affirmed. Two review requests were received from third parties attempting to prevent the release of documents by DEC.

Eight FOI decisions proceeded to the Administrative Decisions Tribunal (ADT). The ADT affirmed DEC’s decisions in all cases.

Two complaints were made to the Ombudsman’s Office about DEC’s FOI decisions. One related to a DEC decision to exempt documents for which legal professional privilege was claimed. This privilege was maintained despite a recommendation by the Deputy Ombudsman that DEC release the documents. DEC redetermined the second matter and released documents in line with the Ombudsman’s recommendation.

Due to the large scope and complexity of many FOI applications, 16 were not completed within the statutory timeframe, although ten of these were less than eight days overdue. 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 our structure and functions, how the public can participate in policy development, and documents held by DEC and how they can be accessed or amended, is located on the website.

Privacy

DEC works to ensure the protection of privacy rights for both staff and clients, and in May 2005 began developing a comprehensive new privacy management plan for DEC.

During 2004–05, DEC received two applications for access to personal information, and all of the information requested was released. DEC also received a complaint under the Privacy and Personal Information Protection Act 1998 and the Health Records and Information Privacy Act 2002, regarding conduct that disclosed some personal and health information to a third party. The internal review officer found that the disclosures were made pursuant to requirements under the Workplace Injury Management and Workers Compensation Act 1998 and so, with one minor exception relating to inadvertent unauthorised disclosure, did not breach any privacy principles. DEC reminded all staff of the importance of protecting personal information from accidental unauthorised disclosure.

This year the ADT affirmed decisions DEC made in 2003–04 to exempt information from disclosure to an applicant on the grounds that the information was either subject to legal professional privilege or that the personal information in question related to persons other than the applicant.

A large number of applications were from members of parliament, journalists, solicitors, companies, and community and political organisations. DEC rarely receives FOI applications from people seeking information held about their personal affairs.

While 23 per cent of the FOI applications received were subject to exemptions from release, in most cases those exemptions covered a minor number of documents. For 89 per cent of applications determined, over 80 per cent of the documents requested were released (see performance indicator, page 73).
Ethical conduct

During the year DEC produced its first Code of Ethical Conduct (Appendix 12, page 168).
The code is also published on DEC’s website at www.environment.nsw.gov.au/about/ethics.htm.
The Code of Ethical Conduct describes the ethical framework that should guide the actions, decisions and behaviour of all DEC employees. It applies to everyone engaged by DEC, whether by permanent appointment, temporary appointment, on work experience, volunteer work or as contractors. The code stresses DEC’s strong commitment to maintaining a workforce that displays the highest standards of conduct and ethics through its diverse range of workplaces.

Animal Ethics Committee

DEC’s Animal Ethics Committee (AEC) approves and monitors all research and teaching using vertebrate animals conducted by DEC employees and contractors, ensuring that DEC meets its obligations under the Animal Research Act 1985. The AEC (Appendix 5, page 141) assesses applications for conduct of animal research and must be convinced that the scientific or educational benefits of use outweigh the potential impact on the animal. To achieve this, the AEC ensure that the use of animals for scientific purposes and teaching complies with the Australian code of practice.

A total of 14 new projects were approved by the AEC during the year and 77 were renewed. In addition, the committee reviewed spotlighting procedures as well as procedures for dealing with injured animals and feral animals trapped as a by-catch of research.

Environmental performance

Efficient accommodation

A large proportion of DEC’s operational staff are based in regional areas of NSW.

In formulating DEC’s approach to office accommodation planning, our strategy includes:

- pursuing co-location opportunities wherever possible
- an annual review of the suitability of existing sites
- supporting the Department of Commerce in its planning of new government office buildings (GOBs).

We have already achieved real benefits through our occupation of office space at GOBs in Armidale, Coffs Harbour, Dubbo, Grafton, Newcastle, Tamworth and Wollongong. As a Department, we have undertaken co-locations/consolidation at the Kariong, Buronga, Newcastle, Grafton, Dubbo and Queanbeyan offices.

Our energy policy continues to include initiatives to reduce energy usage wherever possible, and DEC is at the forefront of energy efficiency in our major tenancies. During 2004–05, we achieved five-star Australian Greenhouse Building Ratings for our Goulburn Street, Sydney and Bridge Street, Hurstville tenancies where we have installed highly efficient fluorescent lighting systems and after-hours automatic light switching. DEC also achieved ratings of 4 and 4.5 stars at our Coffs Harbour and Queanbeyan offices and continues to strive for additional energy efficiencies and water savings strategies in all tenancies.

Green fleet

Given the large area of the state it manages, DEC has one of the largest motor vehicle fleets in the NSW Government. We lease 922 passenger and four-wheel-drive vehicles through StateFleet, as well as 184 trucks, vans and motorcycles used in the field for operational purposes.

DEC has embraced the principles of the NSW Cleaner Vehicles Action Plan. Our Fleet Environmental Improvement Plan includes reducing the environmental impact of DEC motor vehicles by choosing vehicles with a higher environmental rating wherever possible, and by only using 4WD vehicles for dedicated operational purposes.

At 30 June 2005, DEC’s fleet included 14 hybrid vehicles, which represents 4 per cent of our total passenger fleet of 346 vehicles and exceeds the NSW Government target of 1 per cent for passenger fleets over 100 vehicles.

Sustainable procurement

DEC’s Procurement Plan for 2004–07 incorporates aggregated procurement strategies, such as the use of preferred supplier agreements (PSA) as well as improved procurement capabilities and processes to achieve cheaper and more sustainable goods and services. During 2004–05 DEC established PSAs for photocopiers and stationery supplies.

DEC has a ‘Buy Green’ policy and we undertake to include sustainability in all our purchasing decisions. This initiative is an integral part of our stationery supplier agreements where staff are encouraged to buy recycled and environmentally friendly products.

In addition to energy savings initiatives outlined above, DEC purchases green power, ranging from 100 per cent to 6 per cent of supply across our depots, workshops and office accommodation.

WRAPP

As part of its Waste Reduction and Purchasing Policy (WRAPP) Plan, DEC recycles paper, cardboard, glass, PET, and aluminium and steel cans. During 2004–05, we sought to reduce our use of non-environmentally friendly products and have implemented a ban on polystyrene packaging from suppliers, especially with regard to IT and other office equipment. All staff were encouraged to use recycled products when making purchases and wherever possible, consideration is given to reuse of building materials in construction contracts.
Like all NSW Government agencies, DEC is required to prepare biennial reports under WRAPP. During the year, DEC continued to work on developing a WRAPP database, which will allow us to better capture the information we need to report our progress.

Clean Harbour Partners Program

In 2004–05, DEC continued its membership of Sydney’s Clean Harbour Partners Program, which undertakes voluntary but necessary actions and precautions to prevent pollution from their business or premises entering the stormwater system.

Social performance

Occupational health and safety

Occupational health and safety (OHS) management was a key focus for DEC in 2004–05, and we implemented a number of programs, including a review of workplace injury management, to ensure DEC meets or exceeds OHS management standards.

DEC completed an assessment based on the the NSW OHS and Injury Management Improvement Standard to identify gaps and facilitate the establishment of improvement plans. In May 2005, an independent WorkCover Authority audit confirmed our good practice in the use of tailored self-assessment tools for potentially high-risk work units to ensure risk management principles are applied systematically.

During the year DEC began implementing an over-arching OHS Policy, supported by new staff OHS consultative arrangements, to drive and support the refinement of DEC’s OHS management.

In 2004–05, DEC also took the opportunity to begin sharing OHS risk management innovations and techniques across the whole Department, such as the systematic OHS management approach developed by Parks and Wildlife Division and the Botanic Gardens Trust’s ‘Take Five’ technique to reinforce safety before each job.

Equal employment opportunity

As shown in the Distribution Index in Appendix 6, page 147, Aboriginal and Torres Strait Islander DEC employees are more frequently represented in lower income brackets (in comparison with the general workforce), as they are more likely to be employed in field positions. Staff in these positions have regular contact with Aboriginal communities, and having Aboriginal and Torres Strait Islanders in these positions is of great value to the community and DEC. DEC is endeavouring to increase the representation of Aboriginal and Torres Strait Islanders in professional positions through formal employment program initiatives, such as the Aboriginal Cadet Ranger Program.

During the year DEC employed 16 Aboriginal cadet rangers across the Broken Hill, Bourke, Griffith, Buronga, Byron Bay, Murwillumbah, Tumut, Narooma, Ulladulla and Greater Metropolitan regions. Cadets participated in structured work placements under mentoring arrangements and were provided with financial assistance in gaining tertiary qualifications. Offers of permanent appointment were made to cadets who successfully completed the program. The cadet program was conducted according to broad guidelines developed by the NSW Office of Employment Equity and Diversity (OEED).

During the year DEC also employed 16 Aboriginal trainee field officers. We conducted field-based traineeships in conjunction with TAFE NSW, which involved enrolment in Certificate II in Conservation and Land Management combined with on- and off-the-job training for 12 months. The 2005 graduates were from Great Lakes, Alstonville, Murwillumbah, Hastings, Gloucester, Kyogle, Byron Bay, Bourke, Cobar, Wilcannia, Buronga, Narooma, Nowra and Sydney.
Aboriginal affairs

The staff Aboriginal Affairs Reference Group was formed in March 2005 to assist and advise DEC’s Executive on Aboriginal affairs. The group consists of one representative from the executive/senior managers group and three representatives nominated by DEC’s Aboriginal Staff Network. Its functions include:

- developing, monitoring and reviewing a DEC Aboriginal Affairs Plan to assist the coordination across all DEC divisions of DEC’s responsibilities under the NSW Government’s Aboriginal Affairs Policy 2003–2012: Two Ways Together
- being a source of ideas and exchange of information on Aboriginal Affairs issues
- ensuring information regarding DEC’s Aboriginal Affairs responsibilities and activities is circulated within all DEC divisions
- reviewing DEC policies relating to Aboriginal affairs.

DEC also honoured NAIDOC with a number of events and provided support to the Aboriginal Network.

Spokeswomen

The Spokeswomen’s Program aims to provide assistance to women to achieve their potential within the NSW public sector through a program devised and implemented by the women themselves. The Spokeswomen’s objective is to provide relevant information and support for women as well as advice to management on matters that affect women in the workplace. This year was the inaugural year for DEC’s Spokeswomen’s Program. Each division has at least one elected spokeswoman, who together have adopted the NSW Action Plan for Women.

Women in fire-fighting forum

DEC’s Spokeswomen’s Program sponsored several DEC staff to attend the inaugural NSW Women in Firefighting Forum in May 2005. This forum, held in response to a need identified by women, provided women firefighters in Australia with the opportunity to discuss and celebrate the important, exciting and sometimes dangerous work they do. Forum participants unanimously supported the establishment of an Australian Women’s Firefighters Association.

International Women’s Day

On Tuesday 8 March, DEC spokeswomen celebrated the economic, political, environmental and social achievements of women as part of International Women’s Day. The Spokeswomen’s Program sponsored a table at the NSW Women’s Breakfast in Sydney, where DEC spokeswomen enjoyed the opportunity to meet and share experiences with Director General Lisa Corbyn and other female DEC executives.

In South West Rocks, Northern NSW, female DEC staff celebrated the day with local Aboriginal women. Local business owner Diana Clark gave an inspirational talk to the women about achieving dreams, and two pandanus palms were planted on the foreshore of Trial Bay in honour of all women.

Parks and Wildlife Division female staff uniform

Thanks to lobbying from DEC Spokeswomen, in 2004–05 Parks and Wildlife uniforms for female field staff were revised to provide better fitting trousers, designed for women. The trousers have proved very popular and may also be trialled by female staff in the Botanic Gardens Trust.

Staff development days

In May 2005 the Spokeswomen’s Program offered staff development seminars to female staff throughout NSW. The ‘Lifestyle Management’ seminar addressed managing change, work, and home life along with improving women’s environment, health and wellbeing. ‘Positive Career Management’ addressed women making changes in their careers to support their on-going employability.

Ethnic affairs priority statement

DEC is developing a Department-wide Ethnic Affairs Priorities Statement which will build on the former agency statements. For more on the work DEC is doing with the state’s diverse communities, see pages 50, 51, 56 and 68.

Economic performance

Financial management

In 2004–05 DEC’s financial emphasis was on finalising projects commenced in the first year of the restructure and building on these initial gains by refining and enhancing the tools and capability necessary for the effective management of DEC’s finances and assets.

Significant projects concluded during the year included:

- finalising the staff structure for Corporate Finance Branch
- developing the first integrated DEC budget for the 2004–05 financial year, together with the delivery of monthly budget reports to the executive on the performance of the agency and its divisions
- preparing the first set of consolidated statutory financial statements for the new agency for 2003–04
- executive approval of a number of key financial policies including the 2004–05 Financial and Budget Management Framework; the On-line Purchasing Policy; the Corporate Purchasing Card Policy; and the Car Pool FBT Policy
- implementation of the SAP financial system at the Botanical Gardens Trust in December 2004
- facilitation of the Parks and Wildlife Division financial management structure, including the development and evaluation of position descriptions and appointment of the Divisional Financial Controller and three of the four management accountants
- revaluation of assets, including camping grounds, picnic areas and lookouts
- consolidation of DEC purchasing cards into a single costing system.
On-going activities and new initiatives undertaken to maintain the systems and policies required for effective financial management, and to ensure the agency's statutory and central agency obligations are met, included:

- continuous update and improvement of DEC's Financial and Budget Management Framework
- considerable work to assess the impact of newly released international accounting standards on the agency
- further development of uniform financial policies and practices to address the requirements of the new Department
- submission of the first integrated DEC fringe benefit tax return
- acquisition of SAP Solution Manager to improve system support, facilitate project and change management and provide improved capability for training SAP users.

Financial statements for DEC and its associated legal entities were submitted to the Audit Office by the statutory deadline for the year ended 30 June 2004.

Insurance

DEC's insurance cover is obtained through the Treasury Managed Fund managed by GIO.

### Areas of risk and relevant insurance premiums

<table>
<thead>
<tr>
<th></th>
<th>2003–04</th>
<th>2004–05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers compensation</td>
<td>3,539</td>
<td>2,409</td>
</tr>
<tr>
<td>Property</td>
<td>1,496</td>
<td>2,086</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>1,179</td>
<td>827</td>
</tr>
<tr>
<td>Public liability</td>
<td>3,956</td>
<td>3,849</td>
</tr>
<tr>
<td>Fire</td>
<td>24,751</td>
<td>28,306</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>56</td>
<td>50</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34,976</strong></td>
<td><strong>37,527</strong></td>
</tr>
</tbody>
</table>

Workers compensation claims

The number of workers compensation claims showed an increase of 14% on the previous year compared with a decrease of 4% for all government agencies.

The area of claims showing a notable increase is for psychological stress. These claims have a much higher average cost than other types causing the total cost of claims to rise sharply by 37%.

### Number of claims

<table>
<thead>
<tr>
<th></th>
<th>2003–04</th>
<th>2004–05</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEC</td>
<td>201</td>
<td>229</td>
</tr>
<tr>
<td>All govt agencies</td>
<td>17,303</td>
<td>16,563</td>
</tr>
</tbody>
</table>

Source: Treasury Managed Fund (TMF) Report for quarter ending 30 June 2005. Figures provided are reassessed and amended by TMF as necessary.

Motor vehicle

The number of motor vehicle claims for DEC fell 22% on the previous year compared to a 3% increase for all government agencies. This results from the on-going improvements in fleet management that DEC has achieved. The average cost of claims is consistent with those of other agencies.

### Number of claims

<table>
<thead>
<tr>
<th></th>
<th>2003–04</th>
<th>2004–05</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEC</td>
<td>321</td>
<td>251</td>
</tr>
<tr>
<td>All govt agencies</td>
<td>5,584</td>
<td>5,750</td>
</tr>
</tbody>
</table>

Source: Treasury Managed Fund (TMF) Report for quarter ending 30 June 2005. Figures provided are reassessed and amended by TMF as necessary.

Savings and work priorities

Throughout the year DEC continued to deliver core services while making adjustments to our functions and structures to savings. We have prioritised our work and implemented a targeted voluntary redundancy program.

We worked with unions and staff to put systems in place to help us manage immediate workload issues. Executive members were responsible for ensuring that where staff were asked to take on the work of a departing staff member, there was a corresponding reduction in other parts of their existing work program. As well as taking the opportunity to discuss these issues in work group meetings and directly with their supervisors, all staff were invited to provide written feedback on managing workloads to their executive directors.

The Corporate Plan, released in September 2004, set out our strategic and specific priorities for 2004–06 and established our environment and conservation agenda for the next two years. This plan and the ensuing divisional and section plans have helped prioritise our work with reduced staffing levels.

At all stages, the health and wellbeing of our people is paramount and we are committed to managing the overall workload across DEC.