Objective:

To enable sustainable development and the improvement of business and industry's environmental performance

Conservation and Environmental Services

Through this output the department makes a major contribution to the government's Toward Q2 green target: Protect 50 per cent more land for nature conservation and public recreation. It does this through two sub-outputs: Queensland Parks and Wildlife Service, and Environmental Services.

Queensland Parks and Wildlife Service

The Queensland Parks and Wildlife Service (QPWS) conserves and manages terrestrial and marine protected areas. Its core business is the conservation of diverse land and sea scapes across the state, and ensuring the management of parks and forests to provide for equitable access to safe and sustainable recreational opportunities.

The off-estate focus is on providing information and educating people on their interaction with protected native wildlife.

In the reporting period, QPWS set aside more area for parks and recreation, added tourist walks, and added infrastructure that enables the community to continue to enjoy Queensland's protected area estate in a sustainable way. QPWS also carried out its ongoing and significant pest and fire management program, and continued to build its community education program.

Increasing protected areas

The total area of Queensland's national parks was 7 959 279 hectares at the end of June 2009. The table below shows the increase in area over the past four years.

National parks total area (hectares)	
At 01/07/2005	6 699 342
At 01/07/2006	7 356 554
At 01/07/2007	7 469 946
At 01/07/2008	7 530 914
At 01/07/2009	**7 959 279***

* This number includes all types of national park—recovery, scientific, and Cape York Peninsula Aboriginal Land.

Since June 2000, the number of rangers employed by the department has increased from 504 to 793 full-time equivalent rangers (permanent, temporary and casual employees) at 30 June 2009.

Precious areas like national parks and other protected areas provide wildlife habitats and contribute to conservation outcomes for flora and fauna by helping to maintain biodiversity and build resilience in natural systems. They also provide outdoor recreation opportunities.

Fire and pest management

A $10 million investment in high-quality programs to control fire, weeds and animal pests on QPWS managed lands was completed by the end of June 2009.

QPWS will continue its management program in the 2009–10 financial year to protect biodiversity in Queensland's protected areas. Approximately $4.5 million will be invested to manage pests, of which $1.5 million will be spent on 76 strategically targeted projects, and $5.5 million will be invested on fire management activities. QPWS will also undertake a review of its fire management program.

Wildlife management

Queensland's native wildlife is protected by legislation to ensure its survival and to protect biodiversity. This includes all native birds, reptiles, mammals and amphibians; a limited range of invertebrates, freshwater fish and the grey nurse shark; and indigenous plants.

Wildlife management for some species requires a balance between human safety and conservation needs and QPWS uses licensing and compliance activities to achieve this.

In the reporting period, QPWS implemented recommendations of the 2008 review of the crocodile management program and trained more than 70 staff in revised procedures to ensure the critical goal of public safety and the long-term conservation of crocodiles in Queensland is achieved.

Asset management

By the end of June 2009, QPWS had invested $7.2 million over the year on infrastructure maintenance on its estate and $17.5 million to upgrade facilities such as roads, fire trails, fencing, walking tracks and camp grounds.

This ensured QPWS can effectively protect and manage the estate and that park visitor facilities were clean, safe and met visitor needs.

More Great Walks

Work on the next round of Queensland's Great Walks has involved creating spectacular new tracks through Cooloola, the Whitsunday Islands, the Conondale Range in the Sunshine Coast hinterland, and Carnarvon National Park.

Carnarvon Great Walk was completed in the reporting period. The remaining new walks are due for completion by June 2010. This work builds on the highly successful Great Walks of Queensland program which was first announced in 2001.

Tenure resolutions

The first two national parks to be managed jointly with traditional owners were gazetted in July and August 2008. Lama Lama National Park CYPAL (Cape York Peninsula Aboriginal Land) and KULLA National Park CYPAL will protect nearly 200 000 hectares of highly significant tropical rainforests, woodlands and wetlands on Aboriginal freehold land.

Negotiations are well advanced for at least seven other dealings on Cape York Peninsula and preliminary research for the remainder has begun.

Environmental Services

Incident response

The department has responsibility to support, mainly through advice, the frontline emergency response agencies that protect the environment. Its incident response unit deals with after-hours notifications, responds to major incidents, develops operational procedures and provides internal training programs. It manages DERM's response requirements, largely in an advisory capacity, for chemical, biological, radiological and nuclear incidents.

Response to the *Pacific Adventurer* oil spill was a priority for the unit during the reporting period. Other major incidents during this time included chemical leaks from shipping containers, a large vegetable oil spill, and chemical spills from road and rail transport.

Next financial year the unit will continue to deliver internal training programs to strengthen response capacity, undertake incident responses as they occur, and work collaboratively with government, business, and industry and community groups to improve industry environmental performance.

Clean air for Gladstone

The government established the Clean and Healthy Air for Gladstone Project in response to community concerns about the potential adverse effects of industrial emissions on air quality and community health. The project is one of the most wide-ranging scientific investigations of its kind to be conducted in a Queensland city, and DERM is leading it in collaboration with Queensland Health.

The project commenced in 2007–08 and is expected to conclude in 2009–10. It includes a comprehensive assessment of ambient air quality and air emissions in the region, an assessment of the health risks, and an investigation into people's health and conditions that may be aggravated by air pollution.

The network of air quality monitoring sites in the Gladstone region has been expanded to include six fixed monitoring stations and a mobile monitoring unit. This state-of-the-art monitoring network is currently measuring more than 100 different pollutants, and providing comprehensive information on the region's ambient air quality.

Results of air quality monitoring, where continuous monitoring methods are available, are reported daily through the DERM website. Results for parameters that require laboratory analysis are published in DERM's monthly air quality bulletins.

The next stage of the project is to analyse the monitoring results and provide an assessment of human health risks from any measured air pollutants.

Townsville dust monitoring

The department responded to community concerns about Townsville's air quality by implementing a dust monitoring program, the first element of which was completed at the end of June 2009. The concerns were that emissions from materials handling within the Port of Townsville were causing elevated levels of heavy metals.

In the reporting period, four new air monitoring sites at Yarrawonga, North Ward, Ross Creek and South Townsville were added to the city's air monitoring network, which has been operating for some years. All new monitoring stations have been collecting data on the levels of dust in the air, and samples have also been analysed for metals such as lead, copper, zinc, nickel, arsenic and cadmium.

Comparison of the interim results to December 2008 against national and international standards indicates that metal concentrations are below recommended levels. All data will be referred to Queensland Health for advice on potential human health risks.

A comprehensive report on all data gathered over a full year of sampling is expected to be released before the end of 2009. Progress of the monitoring program is also available on the DERM website in the monthly air quality bulletins.

A selection of key monitoring sites near the Port will continue to operate in 2009–10.

Cultural heritage maintenance audits

For the first time, DERM has completed a comprehensive audit of places on the state's Cultural Heritage Register to determine the condition of Queensland's built heritage.

More than 1400 of the 1599 places on the register have been audited.

The audit program was important for ensuring that Queensland's cultural heritage is preserved for all Queenslanders to enjoy both now and into the future.

Recycling in public places

DERM is a champion of the Public Place Recycling project, partnering with 19 organisations to implement permanent recycling facilities in key public areas such as shopping centres and sporting stadiums.

The department has also played a key role in establishing temporary recycling facilities at more than 40 major events in the past year, including Brisbane's Riverfestival and New Year's Eve fireworks.

Five local councils have now adopted these facilities for local events. A further 11 systems are expected to be implemented across Queensland in 2009–10 in shopping centres and other public places.

Focusing on compliance

DERM develops an annual compliance plan for compliance issues that pose the greatest risk to the natural environment. The aim of the plan is to minimise the risk and drive performance beyond compliance. Major achievements from the 2008–09 Annual Compliance Plan at the end of June include:

- 1702 compliance inspections were carried out—42 per cent more than the target of 1200 inspections
- the three-year Industrial Estate Inspection Program was completed. The government now has a clear picture of the cumulative environmental risk presented by industrial estates to aid industrial land-use planning and environmental regulation of industry well into the future.

A key project in the 2009–10 Annual Compliance Plan is to improve water and waste-water management on mine sites and heavy industrial sites throughout the state, especially in north-west Queensland where high rainfall in the wet season makes this a significant issue.

Wetlands clean up after oil spill

Following the *Pacific Adventurer* oil spill off Moreton Island on 11 March 2009, 234 DERM staff from across the state assisted with the clean-up and wildlife care and rehabilitation.

The oil spill occurred during a cyclone, with associated strong seas and large waves that washed a significant quantity of oil over Moreton Island beaches and into two ecologically sensitive and culturally important freshwater wetlands.

DERM staff put in more than 14 600 person hours (or almost nine person years of work effort) for the initial clean-up, which was completed within the reporting period; but recovery activities will continue for some time yet.

History has shown that cleaning oil from sensitive ecosystems can often lead to more degradation than the oil spill. To prevent this, DERM science staff assessed the extent of oil encroachment into the wetlands, took regular water quality samples, determined the bathymetry of the wetland, and identified some of the area's fauna and flora.

Staff also worked with the Indigenous owners to determine whether oil had encroached into important archaeological sites. Fortunately this did not occur, although it was noted that the wetlands were of tremendous cultural value.

The information and data were used for an oil management plan, implemented by Quandamookan trainee rangers under the guidance of DERM staff. The plan was updated as additional information was collected.

Incredibly hard work by the trainee rangers and others removed the bulk of the oil from the wetland. All oil could not be removed without compromising wetland processes so some was left to degrade naturally and to bio-remediate.

Already, plant material has started to regenerate and it is clear that these two important wetlands will have their previous functions restored.

A significant outcome has been achieved in trying circumstances through the cumulative effort of different departments and people with a variety of interests and skills. Trainee rangers have developed new skills and knowledge and contributed to the restoration of important cultural sites.

An independent evaluation of the effectiveness of the oil spill response has been completed. The consultant praised the high level of care applied to the control and disposal of oily waste, and described the decontamination and strict quarantine as 'world's best practice' for waste management.