6 ADMINISTRATIVE ARRANGEMENTS

6.1 Human resource management

6.1.1 Supervising Scientist

The Supervising Scientist is a statutory position established under the *Environment Protection (Alligator Rivers Region) Act 1978*. Section 8 of the Act requires that the Supervising Scientist be engaged under the *Public Service Act 1999*.

Dr Arthur Johnston PSM, who had held the position of Supervising Scientist since June 1999, retired in October 2005. Mr Alan Hughes was appointed to succeed Dr Johnston in December 2005. Mr Hughes had been Acting Supervising Scientist since Dr Johnston's retirement.

6.1.2 Structure

The Supervising Scientist Division consists of two branches, the Office of the Supervising Scientist and the Environmental Research Institute of the Supervising Scientist.

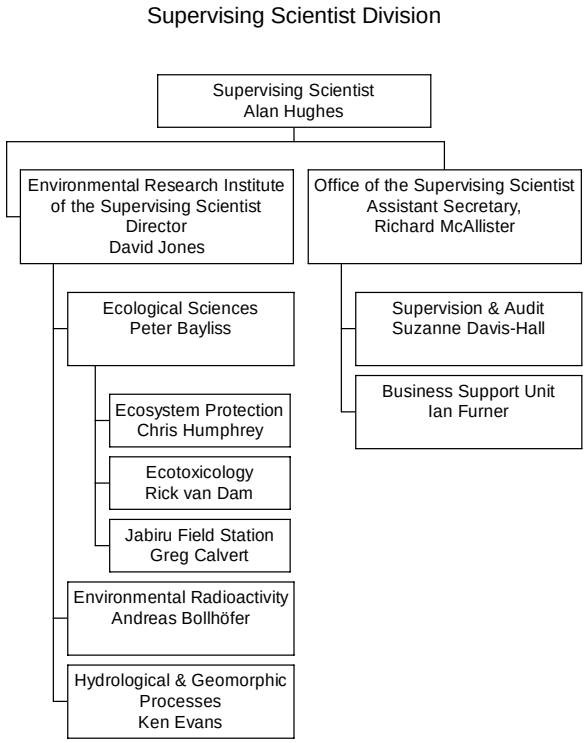

Figure 6.1 Organisational structure of the Supervising Scientist Division (as at 30 June 2006)

The Office of the Supervising Scientist (***oss***) is responsible for supervision, audit, policy, information management and corporate support activities. ***oss*** is headed by Mr Richard McAllister who was appointed in April 2006, replacing Mr Alan Hughes who was appointed to the position of Supervising Scientist in December 2005.

The Environmental Research Institute of the Supervising Scientist (***eriss***) is headed by Dr David Jones and undertakes scientific research activities.

Staffing numbers as at 30 June 2005 and 30 June 2006 are given in Table 6.1.

TABLE 6.1 STAFFING NUMBERS AND LOCATIONS (AT 30 JUNE 2006)

	2004–2005	2005–2006
Darwin	38	43.5
Jabiru	6	7
Total	44	50.5

6.1.3 Investor in People

The Investor in People (IiP) process has continued to encourage a culture of continuous improvement. Reviews of strategic business planning, business processes, staff structures and responsibilities have been undertaken within the Supervising Scientist Division over the past year.

Staff have been encouraged and supported by management in the development of skills through training, attendance at conferences and internal opportunities to act in higher level positions. Through the Performance Development Scheme, staff have identified training requirements to assist them in delivering outcomes in their workplans. SSD staff participation in DEH Internal Seminar Series and other seminars hosted by DEH Canberra has been increased through the installation of video conferencing equipment in the DEH Canberra Bunker Theatre. Other seminars have been hosted locally to provide staff with access to a range of topics relevant to SSD business activities.

Effective communication has also been an integral part of achieving outcomes set by the organisation. SSD continues to produce a fortnightly newsbrief for staff that attracts a wide range of contributors and readership . Management and staff participate in regular structured meetings that ensures information flow within the organisation is maintained. Healthy lifestyle and social activities coordinated by IiP representatives and social club members also enable staff to network in an informal manner.

6.1.4 Occupational Health and Safety

The Supervising Scientist Division continued to maintain a strong commitment to occupational health and safety issues during 2005–06. The Occupational Health and Safety (OH&S) Committee is the primary mechanism in place for the discussion of issues, and for the referral of issues to the Division's senior management team. This staff-based Committee meets

on a monthly basis. This year the committee has contributed to the development of a number of OH&S policies and guidelines on issues, for example travel by vehicle and selection of protective clothing suitable for fieldwork.

During the year, we established a substantial OH&S section on the newly launched SSD Intranet site, with content developed and approved by the committee and linked to the relevant Departmental pages. Other OH&S initiatives during the year included an emergency response checklist to ensure staff answering an emergency phone call from the field gather all the necessary information. Further progress was made on the safety manual update. A review has commenced of the Darwin building emergency evacuation procedures. The safety sections (field, chemical, radiation safety) of the project approval form have been revised and work has started on developing a safety approval process for non-project work with a fieldwork element. Workplace inspections were carried out during the period in accordance with OH&S requirements.

Our ARPANSA licence, which is issued to the Supervising Scientist and allows SSD to hold certain radioactive sources, has now been modified to include non-ionising radiation sources as well. SSD is now also licenced to use optical sources (other than a laser) that produce ultra-violet light, and these sources and general control, safety and management plans are now included (since 2005) in the Radiation Source Control Plan of SSD.

6.2 Finance

The Supervising Scientist Division is part of the Department of the Environment and Heritage and full financial statements for the Department are contained in the Department's Annual Report.

A summary of the costs of the Supervising Scientist's contributions to the Department's outputs are provided in Table 6.2. The table aligns the different PBS Output numbers and titles that applied in 2004–05 and 2005–06 so that a comparison can be made between both financial years.

TABLE 6.2 SUMMARY OF COST OF OUTPUTS

PBS Output	2004–2005	2005–2006
Uranium mining		
1.6 Industry/Human settlements (2004–05) 1.5 Response to the impacts of human settlements (2005–06)	$8 458 000	$9 310 000
Tropical wetlands		
1.7 Inland waters (2004–05) 1.2 Conservation of the land and inland waters (2005–06)	$1 364 000	$466 000
Total	$9 822 000	$9 775 000

6.3 Facilities

6.3.1 Darwin facility

The majority of the Supervising Scientist Division's staff are situated at the Department of the Environment and Heritage's Darwin facility adjacent to Darwin International Airport. This facility consists of office accommodation and laboratories.

The office space is shared with Parks Australia North, which is also part of the Department of the Environment and Heritage.

6.3.2 Jabiru Field Station

A Field Station at Jabiru is maintained to support the activities of the Supervising Scientist Division. The staff consist of the monitoring team that carry out the Supervising Scientist's environmental monitoring programme; an employee who is responsible for delivering the Supervising Scientist's Aboriginal communications programme in Jabiru; an employee who undertakes administrative and financial duties; and the Field Station Manager, who has overall responsibility for managing the Field Station as well as supervisory and inspection responsibilities.

The Field Station sustained some damage as a result of Tropical Cyclone Monica which passed close to Jabiru in the early hours of 25 April 2006.

Staff of the Division, in conjunction with Canberra-based Department of the Environment and Heritage facilities management staff, have started reviewing the Field Station with the aim of optimising asset utilisation and ensuring that a safe and appropriate working environment is provided.

Figure 6.2 Tree damage at Jabiru Field Station caused by Tropical Cyclone Monica

6.3.3 Library

The Supervising Scientist Division's library continues to support the work of the Division, as well as Parks Australia North. The services provided include on-line searches, library inductions and document delivery services. Some 1485 items were added during the year.

6.4 Business planning process

The new annual business planning and reporting process has been fully implemented. This Business Plan outlines key issues that the Supervising Scientist Division will face over the coming year. It outlines the direction SSD intends to take, the activities and programmes to be undertaken and how SSD intends to measure performance. Review of progress against strategic priorities and actions is undertaken on regular basis.

6.5 Interpretation of Ranger Environmental Requirements

Section 19.2 of the Environmental Requirements of the Commonwealth of Australia for the Operation of the Ranger Uranium Mine provides for the publication of explanatory material agreed to by the major stakeholders to assist in the interpretation of provisions of the Environmental Requirements. No explanatory material was published during 2005–06.

6.6 Ministerial Directions

There were no Ministerial Directions issued to the Supervising Scientist under Section 7 of the *Environment Protection (Alligator Rivers Region) Act 1978* during 2005–06.

6.7 Sustainability report

The Supervising Scientist Division first participated in the Department of the Environment and Heritage's Triple Bottom Line (TBL) reporting programme during 2003–04. TBL reporting , now referred to by the Department as the Sustainability Report provides a transparent and accountable reporting system in line with international Global Reporting Initiatives (GRI) on the Department's impact on the community and the environment, including details of performance against social, economic and environmental indicators.

For 2005–06, the Division has set goals to reduce our impact on the environment and to introduce additional monitoring systems to gather information on relevant indicators.

The Department is required to present this information in accordance with Section 516A of the *Environment Protection and Biodiversity Conservation Act 1999* which requires government departments to report on:

- how the Department's activities accord with the principles of ecologically sustainable development (subsection 6a);
- how the Department's outcomes contribute to ecologically sustainable development (subsection 6b);

- the environmental impacts of the Department's operations during the year, and measures taken to minimise the impacts (subsections 6c, d and e).

6.7.1 How the Department applies the principles

The principles of ecologically sustainable development[4] are central to the Department's environment and natural heritage protection activities, all of which aim to conserve biodiversity and ecological integrity, and to maintain the health, diversity and productivity of the environment for the benefit of future generations.

The Department administers the *Environment Protection and Biodiversity Conservation Act 1999* and the *Natural Heritage Trust of Australia Act 1997*, both of which explicitly recognise these principles.

6.7.2 Contribution of outcomes

The Department of the Environment and Heritage is the lead Australian Government agency for developing and implementing national policy, programmes and legislation to protect and conserve the natural environment. One of the key functions of the Department is to promote and support ecologically sustainable development.

The Department's outcomes contribute to ecologically sustainable development as follows:

- Outcome 1: Protecting and conserving the environment helps to maintain the ecological processes on which life depends.
- Outcome 2: Australia's Antarctic interests include a strong focus on protecting the Antarctic environment, as well managing the sustainable use of Antarctic marine resources.

The Division's outputs form part of Outcome 1. The results for the Department of the Environment and Heritage as a whole are published separately. Reports are also available on the Department's web site at www.deh.gov.au/about/publications/tbl/index.html.

6.7.3 Summary of performance 2005–06

SSD's Environmental Management System (EMS)

This section reports on SSD's progress towards an EMS certified to ISO 14001: 2004 (*Environmental management systems – Specification with guidance for use*).

The Division reviewed how scientific research activities can be incorporated into the draft environmental management system, and implemented an action plan to track achievement of the goals set in the 2004–05 Triple Bottom Line report against the Global Reporting Initiatives.

To assist further development of the Environmental Management System, a steering group was established in March 2006. This group includes representatives from Senior

[4] The principles of ecologically sustainable development are set out in sections 3A and (in the case of the precautionary principle) 391 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Management, the Environmental Research Institute of the Supervising Scientist research programme and the Office of the Supervising Scientist Supervision and Audit team. The initial task set for the group was to review our current compliance register to include all legislation, regulations, authorisations and codes of compliance our organisation is required to comply with to cover all of SSD's research activities. This is still under development.

Occupancy

During 2005–06 the Supervising Scientist has continued to conduct business from two premises: DEH Darwin and the Jabiru Field Station. The DEH Darwin facility is shared by both the Supervising Scientist Division and Parks Australia North (Table 6.3).

TABLE 6.3 OCCUPANCY AND AREA OF BUILDING 2005–06

	Darwin	Jabiru	Total
SSD staff	43.50	7	50.50
PAN staff	8.25		8.25
TOTAL staff	51.75	7	58.75
Office area m^2	1050 m^2	1207 m^2	2257 m^2
Laboratory area m^2	2450 m^2	1860 m^2	4310 m^2
TOTAL area	3500 m^2	3067 m^2	6567 m^2

Figures reported for waste, electricity, water usage and greenhouse gas emissions (excluding vehicle usage) cover both Supervising Scientist Division and Parks Australia North operations.

Energy

Electricity

Electricity usage by SSD's Darwin and Jabiru offices and Parks Australia North Darwin office increased by 4% from last year due to increased occupancy, however, the total consumption per person decreased by 6% (Table 6.4).

TABLE 6.4 TOTAL POWER CONSUMPTION 2005–06

Power	2004–05	2005–06
Total kWh	922 879	956 559
Total MJ	3 322 364	3 443 613
Total GJ	3322	3444
MJ per person per annum	59 328	58 865
MJ per m^2 per annum	506	524
CO_2(t)	685	710

Fuel and transport

Fuel usage (transport and other usage) was reduced by 17.7% and distance travelled by vehicles decreased by 30.8% for the same period last year (Table 6.5).

TABLE 6.5 PERFORMANCE – TRANSPORT

Fossil fuel	2004–05	2005–06
Total litres	40 853	33 612
Total distance travelled	280 933	229 622
Average (l) per 100 km	14.5	14.63
Total GJ – petrol	613	417
Total GJ – diesel	885	826
Total CO_2(t) – petrol	45	31
Total CO_2(t) – diesel	62	58

Water

Water usage at the Darwin office increased from 724 kL last year to 1403 kL this year, partly because of an increase in aquaculture work at the Environmental Research Institute of the Supervising Scientist.

Materials – paper

It is the Division's practice, where possible, to purchase 'green' stationery and toiletry products rather than standard products. The Division used 20.2% less paper this year than last year, exceeding the 10% target set in the 2004–05 Triple Bottom Line report (Table 6.6). This was achieved through reusing paper printed on one side, installing duplex trays in printers for double-sided printing, encouraging staff to edit documents on screen, and disseminating information electronically.

There was also a 40.4% reduction in the use of non-recycled paper, and an 8.5% reduction in partly recycled paper.

TABLE 6.6 MATERIALS – PAPER

	Virgin	Partly recycled	Total
Total (reams)	127	336	463
Total (sheets)	63 500	168 000	231 500
Per employee (reams)	2.5	6.7	9.2
Per employee (sheets)	1 257.4	3 326.7	4 584.1
Sheets per day per person	5.5	14.5	20

Waste

To reduce landfill waste, staff sort waste including toner cartridges, glass, paper and plastic products into recycle bins. Organic waste is recycled through the worm farm established to provide live feed for breeding populations of fish (the purple spotted gudgeon) used for research purposes (Figure 6.3).

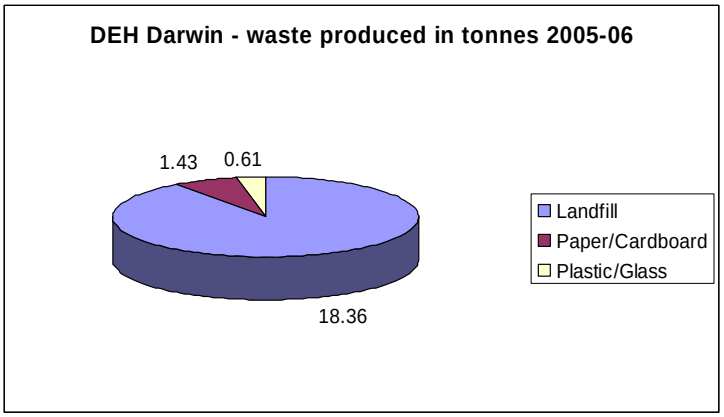

Figure 6.3 Darwin DEH waste produced 2005–06

Greenhouse gas emissions

Greenhouse gas emissions this year are down by almost 380 t (1226 t in 2004–05 compared with 822.67 t in 2005–06). The lower emissions can be attributed to lower fuel usage, reduced distance travelled by vehicles and less waste produced on site (Figure 6.4).

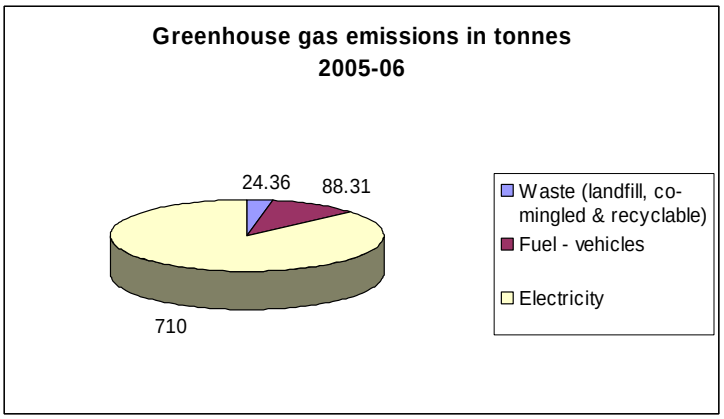

Figure 6.4 Darwin DEH greenhouse emissions 2005–06

6.8 National Centre for Tropical Wetland Research

The National Centre for Tropical Wetland Research (***nctwr***) is a collaborative venture between the Environmental Research Institute of the Supervising Scientist (***eriss***) and three university partners: James Cook University, Charles Darwin University and the University of Western Australia. The activities of the ***nctwr*** are administered through a Board of Management, Advisory Committee and Operational Committee.

Despite two attempts to arrange meetings in 2005–06, the Board of Management was unable to convene. In 2004–05, the Board resolved to initiate a process to establish the future research needs of key stakeholders (ie, government, industry), and that this information be used to identify the necessary research skills and develop a strategic research prospectus for a 'revamped' ***nctwr***. This process was commenced, but has since been subsumed by the larger initiative of the Tropical Rivers and Coastal Knowledge (TRACK) Research Hub, which brings together Australia's leading tropical river and coastal scientists and managers to identify and investigate key social, economic and environmental issues and information gaps that will help ensure the northern rivers and coastal regions are developed in a sustainable manner. The four partner organisations of the ***nctwr*** are involved to varying extents in the TRACK initiative, which has already secured funding under the Commonwealth Environment Research Facilities (CERF) programme and from Land and Water Australia, but is yet to formalise its administrative and operational arrangements. Until this has occurred, further discussion and decisions about the future of the ***nctwr*** have been placed on hold.

For similar reasons as described above, and due to other priorities, the Advisory and Operational Committees also were unable to meet in 2005–06.

The key research activities of the ***nctwr*** during 2005–06 related to the Tropical Rivers Inventory and Assessment Project (TRIAP, managed by ***eriss***), the progress of which is described in Section 3.11 of this Annual Report, and the 'Comprehensive analysis of the freshwater fish faunas and their key management issues across northern Australia' (managed by James Cook University).

6.9 Animal experimentation ethics approvals

eriss seeks the approval of the Charles Darwin University's *Animal Experimentation Ethics Committee* for approval to undertake scientific experiments involving animals.

Table 6.7 provides information on new applications, renewals of approvals and approval expiries for projects during 2005–06.

TABLE 6.7 ANIMAL EXPERIMENTATION ETHICS APPROVALS

Project Title	Ref no	Initial Submission	Approval/Latest Renewal	Expiry
Larval fish toxicity testing at ***eriss***	97016	26 May 1997	13 Mar 2006	13 Mar 2008
Chronic toxicity of uranium to the tropical freshwater fish, *Mogurnda mogurnda* and *Melanotaenia splendida inornata*	A06008	April 2006	24 April 2006	24 April 2008
Monitoring mining impact using the structure of fish communities in shallow billabongs	A00028	25 Sep 2000	4 Feb 2005	4 Feb 2007
Survival of larval fishes in creekside monitoring tests, Magela Creek	A00034	1 Nov 2000	10 Dec 2004	10 Dec 2006
Metal and radionuclide concentrations of fish and mussels associated with the Ranger mine	A02026	31 Oct 2002	28 July 2005	28 July 2007