

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*.

Mr Alan Hughes was appointed to the position in December 2005.

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.

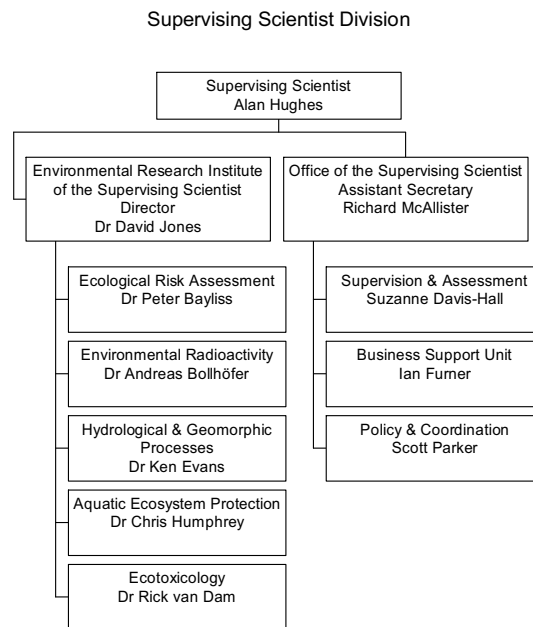


Figure 6.1 Organisational structure of the Supervising Scientist Division (as at 30 June 2007)

The Office of the Supervising Scientist (**oss**) is responsible for supervision, assessment, policy, information management and corporate support activities. Mr Richard McAllister is the **oss** branch head.

The Environmental Research Institute of the Supervising Scientist (**eriss**), managed by Dr David Jones, is responsible for scientific research and monitoring activities.

Staffing numbers as at 30 June 2006 and 30 June 2007 are given in Table 6.1.

TABLE 6.1 STAFFING NUMBERS AND LOCATIONS (AT 30 JUNE 2007)

	2005–2006	2006–2007
Darwin	43.5	43.5
Jabiru	7	8
Total	50.5	51.5

6.1.3 Investors in People

The Investors in People (IiP) process has continued to encourage a culture of continuous improvement. In November 2006 all staff within the Division were invited to participate in a Department-wide staff survey. The outcomes were released in March 2007. The Division ranked first in the Department in a number of areas including ‘satisfaction with current job’. A focus group has been formed to analyse the results of the survey and develop an improvement plan.

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. There has also been a significant investment in leadership training and development with many managers engaged in APSC and DEW leadership events. Through the Performance Development Scheme, staff have identified training requirements to assist them in delivering outcomes in their work plans. SSD staff access to Canberra-based seminars and information sessions has been enhanced through the installation of a second set of video conference equipment in the Darwin office. Locally hosted seminars 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 staff newsletter, *Newsbrief*, that attracts a wide range of contributors and readership. Management and staff participate in regular structured meetings that ensure 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 has continued to maintain a strong commitment to occupational health and safety issues during 2006–07. 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 to discuss incidents, staff training requirements (eg senior first aid) and policy development. This year the committee has finalised a number of OH&S policies and guidelines on issues, for example travel by vehicle and selection of protective clothing suitable for fieldwork.

The safety sections (field, chemical, radiation safety) of the general project approval form have been revised and a safety approval process for non-project work with a fieldwork element has also been developed. 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, now includes non-ionising radiation sources as well. SSD is now also licensed 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 Water Resources and full financial statements for the Department are contained in the Department's Annual Report.

A summary of the actual expenses of the Supervising Scientist against the Department's outputs are provided in Table 6.2.

TABLE 6.2 SUMMARY OF COST OF OUTPUTS		
PBS Output	2005–2006	2006–2007
1.5 Response to the impacts of human settlements		
Sub-output 1.5.3 Supervision of uranium mines	\$9 306 000	\$10 648 000
1.2 Conservation of the land and inland waters		
Sub-output 1.2.5 Tropical wetlands research	\$466 000	\$469 000
Total	\$9 772 000	\$11 117 000

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 Water Resources Darwin facility adjacent to Darwin International Airport. This facility consists of office accommodation and laboratories. During the year there were some minor facility upgrades including the construction of new paths to improve disabled access, conversion of a utility room to a meeting room and redesign of the foyer area to better control access.

The office space, library and amenities are shared with Parks Australia North, which is also part of the Department of the Environment and Water Resources.

6.3.2 Jabiru Field Station

A Field Station at Jabiru is maintained to support the activities of the Supervising Scientist Division. The staff consists 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.

Having repaired the damage caused by Cyclone Monica in April 2006, the Field Station was subject to another extreme weather event in March 2007 with flooding rain causing damage to infrastructure and creekside monitoring equipment.

A programme to refurbish housing owned by the Supervising Scientist has commenced and is expected to run for the next five years.



Figure 6.2 Flood damage to creekside monitoring equipment

6.3.3 Library

The Supervising Scientist Division's library supports the work of Departmental staff based in Darwin and the Jabiru Field Station. Library activities include reference services, reader education, inter-library loans, and collection development. Approximately 800 items were added during the year.

6.4 Business planning process

The Business Plan outlines key issues that SSD 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 2006–07.

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 2006–07.

6.7 Sustainability

In accordance with Section 516A of the *Environment Protection and Biodiversity Conservation Act 1999* the Department is required 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).

Unlike Section 516A reports, sustainability reporting is voluntary.

SSD 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 on the Department’s impact on the community and the environment, including details of performance against social, economic and environmental indicators. Reporting is done in line with the international Global Reporting Initiative sustainability reporting (see www.globalreporting.org) on the Department’s impact on the community and the environment. The Department’s commitment to sustainability reporting is a demonstration of our commitment to continuously improve the sustainability of our operations.

SSD environmental performance improvement goals for 2006–07 included:

- development of a certified Environmental Management System (EMS) to cover all business activities
- continued awareness raising for staff on energy efficiency
- collecting fuel use data from charter small aircraft service providers
- reduction in waste to landfill by 10% through better separation and recycling
- reduce greenhouse emissions by 5% through reduced fuel use, distance travelled and waste to landfill.

6.7.1 How the Department applies the principles

The principles of ecologically sustainable development¹⁰ 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. Examples of how the Department applies the principles of ecologically sustainable development are summarised in the Department of the Environment and Water Resources Annual Report 2006–07. More details on specific programmes are contained in other sections of that Annual Report.

6.7.2 Contribution of outcomes

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 are published separately in the Department of the Environment and Water Resources Annual Report 2006–07. Reports are also available on the Department's web site at www.environment.gov.au/about/publications/tbl/index.html.

6.7.3 Summary of performance 2006–07

Figures reported for 2006–07 include operations for the Supervising Scientist Division and the Policy Services Section, Parks Australia North. It should be noted that the inclusion this year of Parks Australia North operations has impacted on performance figures for fuel and transport, greenhouse gas emissions, waste and paper usage.

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*).

A steering group was established in March 2006 to help develop the Environmental Management System, including representatives from the Division's senior management and from *eriss*, the Supervision and Assessment Unit of *oss*, and Parks Australia North.

During 2006–07, SSD has been reviewing its EMS documentation in line with the latest Departmental Environmental Management System and Darwin International Airport's (DIA)

¹⁰ 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*.

requirements. SSD undertook an internal audit of the DEW Darwin-based premises in accordance with building owner DIA's requirements. DIA conducted an independent energy and water use audit.

Occupancy

During 2006–07, SSD continued to conduct business from two premises: DEW Darwin and the Jabiru Field Station. The DEW Darwin facility is shared by SSD and the Policy Services Section, Parks Australia North. Occupancy of the DEW Darwin building has increased by 13.2% from 2005–06 (Table 6.3).

TABLE 6.3 OCCUPANCY AND AREA OF BUILDING 2006–07*

	Darwin	Jabiru	Total
SSD (Darwin/Jabiru)	45	8	53
PAN Darwin	13.5		13.5
TOTAL	58.5	8	66.5
Office area (m ²)	1050	1207	2257
Laboratory area (m ²)	2450	1860	4310
TOTAL area (m ²)	3500	3067	6567

* Occupancy includes staff members and students

Energy

Electricity

Total power consumption by SSD's Darwin and Jabiru offices and Parks Australia North Darwin office decreased by 2.4% from last year (Table 6.4). Consumption by the Darwin office decreased by 4.2%, although occupancy has increased. Consumption by the Jabiru office increased by 4.4%, however, it should be noted that during that period the backup generator was required less than in previous years and therefore there was an associated drop in fuel usage.

TABLE 6.4 TOTAL POWER CONSUMPTION 2006–07

Power	2005–06	2006–07	% change
Total kWh	956 559	933 528	(2.4)
Total MJ	3 443 613	3 360 701	(2.4)
Total GJ	3 444	3 361	(2.4)
MJ per person per annum	58 865	50 537	(13.8)
MJ per m ² per annum	524	512	(2.3)
CO ₂ (t)	710	693	(2.4)

In 2007, an energy audit on the DEW Darwin building was conducted by DIA to identify areas for improvement in energy efficiency. The final report has not yet been received. The DEW Darwin air-conditioning system operates during business hours only. Other energy saving measures such as turning off computers at night are encouraged.

Fuel and transport

Fuel usage (transport) increased by 11.8% and distance travelled by vehicles increased by 21.9% for the same period last year. There has been a 48% increase in the use of unleaded fuel this year and a 9% reduction in the use of diesel. This year the fleet size has increased from 11 to 13 vehicles. These increases can also be attributed to the inclusion this year of the Policy Services Section, Parks Australia North. (Table 6.5).

TABLE 6.5 PERFORMANCE – TRANSPORT

Fossil fuel	2005–06	2006–07	% change
Total litres	33 612	37 578	11.8
Total distance travelled	229 622	279 806	21.9
Average (l) per 100 km	14.63	13.4	(8)
Total GJ – petrol	417	620	48
Total GJ – diesel	826	751	(9)
Total CO ₂ (t) – petrol	31	45	48
Total CO ₂ (t) – diesel	58	53	(9)

SSD commissions helicopter and light plane services to support some fieldwork activities. A total of 2760 litres of fuel (98 GJ) was used by the service providers (indirectly producing 7 tonnes of CO₂).

Water

Water usage at the DEW Darwin office decreased from 1403 to 920 kilolitres.

Water usage at the Jabiru office was 3130 kilolitres. A large aquaculture area (part of the *eriss* research and monitoring programme) contributes significantly to the Jabiru Field Station water use.

Kakadu Native Plant Supplies – a local indigenous-owned business operating out of the Jabiru Field Station site – also uses a significant amount of water to culture and maintain plant supplies.

Materials – paper

It is the Division's practice, where possible, to purchase 'green' stationery and toiletry products rather than standard products. Paper usage for DEW Darwin and the Jabiru office has increased by 25.8% from last year. This can partly be attributed to the inclusion in the figures of the Policy Services Section, Parks Australia North, this year. Although total paper

usage has increased, it should be noted that building occupancy increased 13.2%, however, the paper usage per person only increased by 2% from last year. More partly recycled paper (37%) was used this year and less virgin paper (28% less).

TABLE 6.6 MATERIALS – PAPER

	Virgin paper		Part-recycled		Total paper		
	05–06	06–07	05–06	06–07	05–06	06–07	% change
Total reams (500 sheets)	127	92	336	532	463	624	25.8
Total reams/employee	2.5	1.4	6.7	8	9.2	9.4	2.1

Waste

Staff sort waste, including toner cartridges, glass, paper and plastic products, into recycle bins to reduce the amount of waste that goes to landfill. Most organic waste is recycled through a worm farm established to provide live feed for breeding populations of fish used for research purposes.

SSD aimed to reduce landfill waste this year by 10%. In the event we achieved a small reduction in waste sent to landfill and an increase in paper products sent for recycling (Figure 6.3). This occurred even with a 13% increase in occupancy in DEW Darwin this year.

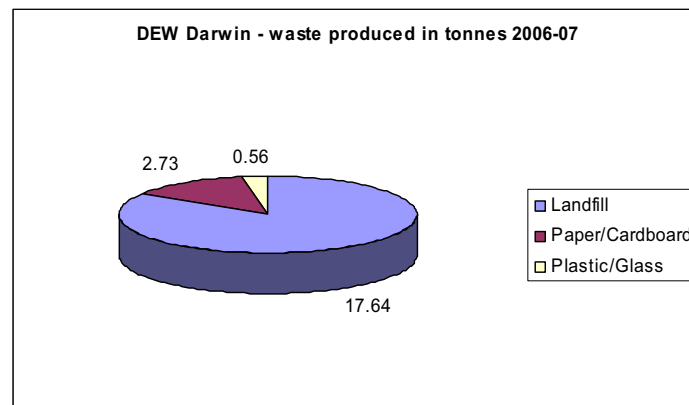


Figure 6.3 Darwin DEW waste produced 2006–07

Greenhouse gas emissions

Last year, SSD made a commitment to reduce greenhouse gas emissions for 2006–07. This year greenhouse gas emissions are down by 3 tonnes. The reduction in emissions was achieved even with the inclusion of additional data from the Policy Services Section, Parks Australia North, and the use of small aircraft by SSD staff (Figure 6.4).

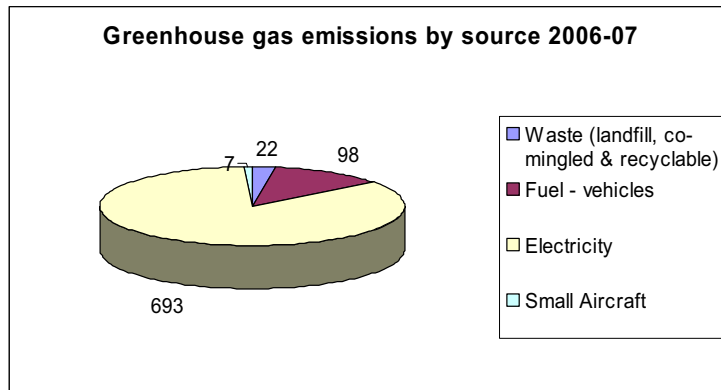


Figure 6.4 Darwin DEW greenhouse emissions 2006–07

6.7.4 Social and community involvement

This year SSD has participated in a number of community events (reported in chapter 5).

SSD has continued to employ local Aboriginal people to assist with research and monitoring activities. Assistance has been sought on projects such as the Ranger Landscape Analogue study, creekside monitoring and aquaculture activities, Jabiru Field Station maintenance, pop-netting, bushtucker and the bioaccumulation project.

SSD also works closely with traditional owners providing support to collaborative research projects. One project involves Kakadu Native Plant Supplies (KNPS), a business operated by local traditional owners. SSD makes available the use of the greenhouse, storage shed and cool room situated at the Jabiru Field Station for the native seed collection and propagation project that KNPS is running.

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.

In the 2005–06 SSD Annual Report, it was reported that further discussion and decisions about the future of the *nctwr* would be postponed until the establishment and working arrangements of the successful Tropical Rivers and Coastal Knowledge (TRaCK) Research Hub (based at Charles Darwin University) had been formalised, and the associated implications for the *nctwr* could be better established. The TRaCK Research Hub involves approximately 70 researchers across 17 collaborating organisations, including the four *nctwr* partners. Although numerous TRaCK planning meetings and workshops were held during 2006–07, the Research Hub was not officially launched until 31 July 2007. Consequently, formal consideration of the implications of the TRaCK Research Hub on the

future of the *nctwr* did not occur during 2006–07. These discussions will be held, and the associated outcomes formalised, during 2007–08.

The key research activities of the *nctwr* during 2006–07 continued to be the Tropical Rivers Inventory and Assessment Project (TRIAP, managed by *eriss*), the progress of which is described in section 3.14 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 Charles Darwin University’s *Animal Experimentation Ethics Committee* for approval to undertake scientific experiments involving animals.

The licence granted by the Northern Territory Government permitting the use of animals for research purposes has been renewed for a further three years.

Table 6.7 provides information on new applications, renewals of approvals and approval expiries for projects during 2006–07.

TABLE 6.7 ANIMAL EXPERIMENTATION ETHICS APPROVALS

Project Title	Ref no	Initial submission	Approval/latest renewal	Expiry
Larval fish toxicity testing at <i>eriss</i>	97016	26 May 1997	13 Mar 2006	13 Mar 2008
Chronic toxicity of uranium to the tropical freshwater fish, <i>Mogurnda mogurnda</i> and <i>Melanotaenia splendida inornata</i>	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	8 Mar 2007	8 Mar 2009
Survival of larval fishes in creekside monitoring tests, Magela Creek	A00034	1 Nov 2000	7 Dec 2006	30 Nov 2008
Metal and radionuclide concentrations of fish and mussels associated with the Ranger mine	A02026	31 Oct 2002	28 July 2005	28 July 2007