

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.

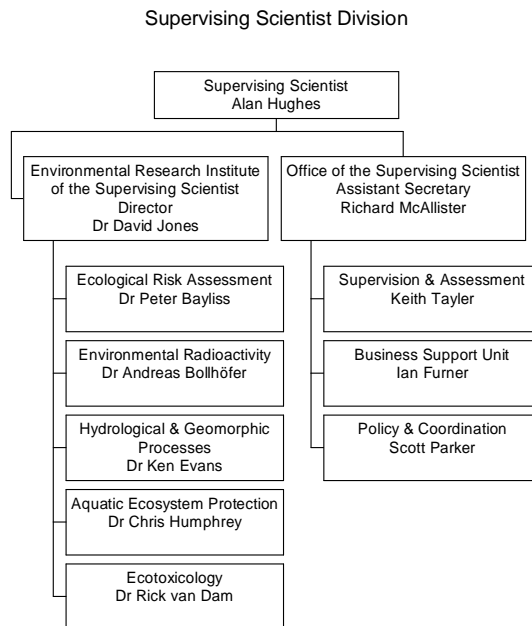


Figure 6.1 Organisational structure of the Supervising Scientist Division (as at 30 June 2008)

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 2007 and 30 June 2008 are given in Table 6.1.

TABLE 6.1 STAFFING NUMBERS ⁽¹⁾ AND LOCATIONS (AT 30 JUNE 2008)

	2006–2007	2007–2008
Darwin	43.5	44
Jabiru	8	6
Total	51.5	50

(1) Full time equivalent

6.1.3 Investors in People

The Investors in People (IiP) process has continued to encourage a culture of continuous improvement. Following a Department wide staff survey conducted in November 2006, the SSD Staff Survey Focus Group established a Divisional Improvement Plan that addressed areas for development. The plan targets specific and relevant training activities and identifies strategies to improve practices within the Division.

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 DEWHA 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, in addition to the SSD Internal Seminar Series, 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 internal 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 2007–08. 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 committee meets on a monthly basis to discuss incidents, staff training requirements and policy development.

In line with changes made to the *Occupational Health and Safety Act, 1991* and the Department's Health and Safety Management Arrangements the Committee established Terms of Reference. This document clearly defines membership, and roles and responsibilities of the committee. During 2007–08 there were substantial changes in membership, with new appointments to the roles of OH&S Chairperson, SSD Senior Management Representative, OH&S Secretariat, and both the Health and Safety Representatives (HSR) and Deputy HSRs for SSD Darwin and Jabiru. The Committee reviewed and updated a number of OH&S policies and guidelines (SSD Road Travel Policy and SSD Footwear Policy) and is currently working on the development of new policies (Medical condition disclosure policy and After hours incident response guidelines) in line with remote fieldwork undertaken by staff.

During 2007–08 SSD conducted an OH&S induction audit to ensure staff training and inductions were up to date and compliant with current guidelines and policy. Since the audit, numerous staff have completed chemical safety and radiation safety inductions, training in defensive driving, 4-wheel driving, small boat handling and other OH&S training activities.

The OH&S induction process has been revised and improvements made to the information provided to staff on commencement, all of which has now been made available on-line via the Department's Intranet. In particular, the Chemical Safety induction has been enhanced with most SSD staff attending a Chemical Safety seminar that provided an overview on the use of Material Safety Data Sheets (MSDS), dealing with chemical spills, handling chemicals and the use of the Chemwatch database. This information has been supported by the development of folders for each program and on-line access to this information via the Intranet.

SSD also participated in a Departmental OH&S audit. A copy of audit report is still to be provided to the OH&S Committee for review and implementation.

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. Changes have been made to the reporting format of these reports to assist with tracking action taken.

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 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 Australian Government Department of the Environment, Water, Heritage and the Arts (DEWHA) 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	2006–2007	2007–2008
Output 1.5 Response to the impacts of human settlements		
Sub-output 1.5.3 Supervision of uranium mines	\$10 648 000	\$10 782 000
Output 1.2 Conservation of the land and inland waters		
Sub-output 1.2.4 Tropical wetlands research	\$469 000	\$410 000
Total	\$11 117 000	\$11 192 000

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, Water, Heritage and the Arts Darwin facility adjacent to the Darwin International Airport. This facility consists of office accommodation and laboratories. During the year there were some minor facility upgrades including improved security to the bike shed, installation of security cameras and conversion of unused space to workstations.

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

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 program, an employee who is responsible for delivering the Supervising Scientist's Aboriginal communications program 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.



Figure 6.2 Building 20 at JFS ready for relocation

Demolition and relocation of four demountable laboratory buildings that were surplus to requirement commenced in May 2008 and is expected to be completed by end August 2008.

6.3.3 Information management

The Supervising Scientist Division's library supports the work of staff based in Darwin and the Jabiru Field Station. Library activities include media monitoring, reference services, reader education, inter-library loans, and collection development. Approximately 420 items were added during the year. Records Management activity this financial year has focused on sentencing and preparing files created prior to 2000 for either destruction or transfer to National Archives of Australia as appropriate under the *Archives Act 1983* and other relevant legislation.

6.4 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 2007–08.

6.5 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 2007–08.

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

Unlike Section 516A reports, sustainability reporting is voluntary.

SSD first participated in the Departmental Triple Bottom Line (TBL) reporting program during 2003–04. TBL reporting (now referred to by the Department as the Sustainability Report) provides a transparent and accountable means of reporting the Department's impact on the community and the environment, and performance against social, economic and environmental indicators.

Sustainability reporting is done in line with the international Global Reporting Initiative framework (see www.globalreporting.org). Sustainability reporting enables SSD to demonstrate our commitment to continuously improve the sustainability of our operations.

SSD environmental performance improvement goals for 2007–08 included:

- continued work on EMS development;
- continued awareness raising for staff on energy and water use efficiency;
- collecting fuel use data from small aircraft charter service providers;
- reduction in waste to landfill by 10% through better separation and recycling;
- reduction in greenhouse emissions by 5% through reduced fuel use, distance travelled and waste to landfill;
- removal of surplus buildings at Jabiru Field Station and development of a rehabilitation plan for the site; and
- improved efficiency in fuel consumption.

6.6.1 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 set out in the Department's 2007–08 Annual Report.

6.6.2 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.

SSD contributes to outputs under Outcome 1. Further details on the Department's contributions to ecologically sustainable development are published separately in the Department's 2007–08 Annual Report. Copies of the Department's Sustainability Reports are available from <www.environment.gov.au/about/publications/tbl/index.html>.

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*.

6.6.3 Summary of performance 2007–08

Figures reported for 2007–08 include operations for the Supervising Scientist Division and the Policy Services Section, Parks Australia North.

SSD's Environmental Management System (EMS)

This section reports on the development of a draft Environmental Management System for the division.

During 2007–08, the draft EMS was subject to two separate reviews. The first review assessed the draft EMS against the Division's environmental reporting requirements, including environmental reporting required under SSD's tenancy agreement with Darwin International Airport. The review also examined the costs and benefits of certifying the EMS to ISO 14001 standard. Implementation of the draft EMS has been deferred until resourcing and other arrangements have been determined in consultation with the Department.

The draft EMS was also reviewed by the Department's New Building and Environmental Performance Team. This review developed a gap analysis identifying actions required to develop the draft EMS to ISO14001 certification standard. SSD has incorporated the gap analysis findings into its EMS development strategy.

Occupancy

During 2007–08, SSD continued to conduct business from two premises: the Darwin office and the Jabiru Field Station. The Darwin office is shared by SSD and the Policy Services Section, Parks Australia North. There was no significant change in occupancy in the Darwin office and the Jabiru Field Station. There has been a significant decrease in the total work area at the Jabiru Field Station (Table 6.3) due to a number of buildings being demolished and removed from the site. The total work area of the Darwin office building has also decreased due to reclassification of various work areas.

TABLE 6.3 OCCUPANCY AND AREA OF BUILDING 2007–08

	Darwin	Jabiru	Total
Occupancy*			
SSD (Darwin/Jabiru)	45.3	7.1	52.4
PAN Darwin	13.8		13.8
TOTAL	59.1	7.1	66.2
Building area			
Office area (m ²)	1146	677	1723
Laboratory area (m ²)	475	672	1147
Other buildings	283	672	955
TOTAL	1904	2021	3825

* Occupancy includes staff members and students

Energy

Electricity

SSD total power consumption decreased by 1.9% from last year (Table 6.4). Consumption at the Darwin office increased by 5%. Consumption by the Jabiru office decreased by 28.5% due to the air-conditioning system being upgraded with a more efficient system. While energy consumption per person reduced slightly, energy consumption on a per m² basis increased significantly due to the large reduction in work areas at the Jabiru Field Station and the Darwin office.

TABLE 6.4 TOTAL POWER CONSUMPTION 2007–08

Power	2006–07	2007–08	% change
Total kWh	933 528	915 584	(1.9)
Total MJ	3 360 701	3 296 101	(1.9)
MJ per person per annum	50 537	49 859	(1.3)
MJ per m ² per annum	512	840	64.1
CO ₂ (t)	693	679	(1.9)

The air-conditioning system in the Darwin office only operates during business hours. Other energy saving measures such as switching off lighting and computers at night are encouraged.

Fuel and transport

Fuel usage (transport) decreased by 29% and distance travelled by vehicles decreased by 20%. There has been a 29% decrease in unleaded fuel consumption and a 28% decrease in diesel consumption. There was no change in the current fleet size of 13 vehicles including vehicles operated by Policy Services Section, Parks Australia North (Table 6.5).

TABLE 6.5 PERFORMANCE – TRANSPORT 2007–08

Fossil fuel	2006–07	2007–08*	% change
Total litres	37 578	26 833	(29)
Total distance travelled	279 806	222 768	(20)
Average (l) per 100 km	13.4	12.0	(10)
Total GJ – petrol	620	440	(29)
Total GJ – diesel	751	539	(28)
Total CO ₂ (t) – petrol	45	32	(29)
Total CO ₂ (t) – diesel	53	38	(28)

* Fuel figures estimated using Australian Greenhouse Office's GreenGuide fuel efficiency rates.

SSD uses helicopter and light aircraft services to support some fieldwork activities. A total of 3148 litres of fuel (108 GJ) was used by the service providers (indirectly producing 7.5 t of CO₂).

Water

Water usage at the Darwin office increased from 920 to 2423 kilolitres as a result of changes in metering arrangements implemented by the building owner, Darwin International Airport.

Water usage at the Jabiru Field Station increased from 3130 to 6044 kilolitres. Some of this increase can be attributed to the large aquaculture facility used for *eriss* research and monitoring activities. However, Kakadu Native Plants, a local indigenous-owned business operating out of the Jabiru site, also uses a significant amount of water for the cultivation and maintenance of plant supplies. Current reticulation and metering arrangements at the Jabiru Field Station do not allow for separate recording of water consumption.

Materials – paper

It is the Division's practice, where possible, to purchase 'green' stationery and toiletry products rather than standard products. Total paper usage for the Darwin office and the Jabiru Field Station has increased by 11% from last year (Table 6.6). Use of partly recycled paper increased 28% and use of virgin paper decreased by 89%. During 2007–08, SSD was recognised for its support of the joint Corporate Express and Greening Australia EXP50R recycled paper campaign.

TABLE 6.6 MATERIALS – PAPER

	Virgin paper		Part-recycled		Total paper		
	06–07	07–08	06–07	07–08	06–07	07–08	% change
Total reams (500 sheets)	92	10	532	681	624	691	11
Total reams/employee	1.4	0.15	8	10.3	9.4	10.45	11

Waste

Staff sort waste, including toner cartridges, batteries, 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.

Recycling of plastic and glass increased by 29% and recycling of paper and cardboard also significantly increased. Total waste going to landfill this year increased by 8%.

Greenhouse gas emissions

Total greenhouse gas emissions for the Darwin office and Jabiru Field Station was 784 t CO₂ which represents a 4% decrease (Figure 6.3).

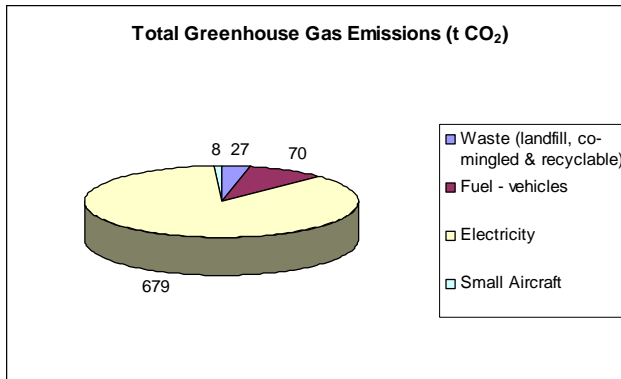


Figure 6.3 Total greenhouse emissions 2007–08

6.6.4 Social and community involvement

This year SSD has participated in a number of community events (see 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 creekside monitoring and aquaculture activities, Jabiru Field Station maintenance, bushtucker and the bioaccumulation project.

SSD also works closely with Traditional Owners providing support to collaborative research projects. For example, SSD allows the greenhouse, storage shed and cool room at the Jabiru Field Station to be used by Kakadu Native Plant Supplies (KNPS), a local business owned and operated by Traditional Owners, for native seed collection and propagation activities.

6.7 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 (the Board), Advisory Committee and Operational Committee.

In the 2006–07 SSD Annual Report, it was stated that further discussions were planned to assess the implications for the *nctwr* in the context of the establishment of the CERF-funded Tropical Rivers and Coastal Knowledge (TRaCK) Research Hub at Charles Darwin University). The TRaCK Research Hub, which involves approximately 70 researchers across 17 collaborating organisations, including the four *nctwr* partners, was officially launched on 31 July 2007. Since TRaCK now largely fulfils the role and function initially envisaged for the *nctwr*, the Board, in late 2007, unanimously agreed that (i) the role of the *nctwr* has been superseded by TRaCK, and, (ii) as a result, there is no significant reason to retain the Centre as an independent venture. Consistent with this, the Centre's partners are currently considering a proposal to terminate the Heads of Agreement and disband the Centre.

The primary research activity of the *nctwr* during 2007–08 continued to be the Tropical Rivers Inventory and Assessment Project (TRIAP, managed by *eriss*), the progress of which

is described in Section 3.12 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). Both projects were completed in 2007–08, meaning there are no longer any active projects being managed under the banner of the *nctwr*.

6.8 Animal experimentation ethics approvals

eriss seeks the approval of Charles Darwin University’s Animal Ethics Committee (AEC) for approval to undertake scientific experiments involving animals.

The project ‘Chronic toxicity of uranium to the tropical freshwater fish, *Mogurnda mogurnda* and *Melanotaenia splendida inornata*’ (A06008) was completed in 2007–08 and a final report was approved by the CDU AEC. This test was incorporated in the renewal application for ‘Larval fish for toxicity tests at *eriss*’ (97016), which was approved for a further two years.

The project ‘Survival of larval fishes in creekside monitoring tests, Magela Creek’ (A00034) will not be renewed as this test will not continue as part of the *eriss* monitoring program. The final report for this project will be submitted to CDU AEC in the coming months.

The number of fish used in toxicity tests at *eriss* was reported to the Northern Territory Government, as part of our licence requirements granted by them permitting the use of animals for research purposes.

Table 6.7 provides information on new applications, renewals of approvals and approval expiries for projects during 2007–08.

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 2008	13 Mar 2010
Chronic toxicity of uranium to the tropical freshwater fish, <i>Mogurnda mogurnda</i> and <i>Melanotaenia splendida inornata</i>	A06008	Apr 2006	Completed	24 Apr 2008
Monitoring mining impact using the structure of fish communities in shallow billabongs	A00028	25 Sep 2000	8 Mar 2009	8 Mar 2011
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	30 Aug 2007	23 Aug 2009