

INTERACT



Social, Environmental and Economic (Seeing) Report 2004-05

Forests NSW is a public trading enterprise within the NSW Department of Primary Industries





The Hon. Ian Macdonald, MLC
Minister for Primary Industries
Minister for Natural Resources

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This is my second 'Seeing' Report as Minister for Primary Industries, and I am pleased that Forests NSW continues to lead the way in government sustainability reporting.

Since last year, the position of Forests NSW as a sustainable forest manager has been further strengthened through efforts in certification standards, enhanced safety systems, and stronger business performance.

The economic, social and environmental results outlined in this report are proof positive that Forests NSW and the Department of Primary Industries are truly world class.

To be truly successful, we must have strong productivity as well as long-term sustainability. The Seeing Report demonstrates how well Forests NSW is performing in these areas - as well as other factors that are relevant to the community. It also helps us pinpoint areas for further improvement.

Achieving certification of forest products is a priority for Forests NSW and the NSW Labor Government. Forests NSW is working towards accreditation under the ISO 14001 Standard and expects to be certified under an internationally approved scheme in 2006.

The foresight of the State Government in establishing the NSW Greenhouse Gas Abatement Scheme has enabled Forests NSW to become the first body in the world authorised to trade carbon credits arising from forests in a registered greenhouse gas abatement scheme.

The ability to trade carbon credits in NSW may contribute to new plantation areas, plantations with longer rotation cycles or plantation development purely for environmental reasons - with income from credits offsetting establishment costs. Either way, it is a boon for the environment, for the industry and for our local communities.

Of course, plantation expansion can never come at the expense of the safety of those in the industry. Significant effort has been put into developing a state-of-the-art safety management system. A host of new materials has been developed and distributed to close to 1,000 employees across the state encouraging them to 'think safe, act safe, stay safe'. This simple concept should be a mantra for all staff going about their day-to-day-activities.

The achievements of last year put Forests NSW in a good position for greater success for the years ahead. I congratulate Forests NSW and the Department of Primary Industries on their efforts and look forward to working with them and our industry partners to deliver greater results to the people of New South Wales.

Ian Macdonald MLC
Minister for Primary Industries



SUSTAINABLE FOREST MANAGEMENT AND OUR REPORTING

The role of Forests NSW is to sustainably manage approximately 2.8 million hectares of native State forests and plantations for the supply of timber, along with a wide range of other social, environmental and economic values. The challenge for Forests NSW is to adequately measure and report our performance in all of these areas.

Forests NSW has been producing a report conveying our sustainability performance for the past eight years. The information presented is intended to communicate how we have performed against a set of values that have been identified as being of particular importance to our staff and other stakeholders. It provides us with the opportunity to evaluate both our progress towards sustainable forest management and our performance as a sustainable business.

Ecologically sustainable forest management (ESFM) is our guiding philosophy. This means more than just delivering social, environmental and economic outcomes. ESFM is about managing forests to maintain ecological processes and biodiversity while optimising the benefits to the community from all uses of the forest - all within the framework of running a profitable business for the people of New South Wales. It's about being forest stewards, managing forests for today and tomorrow.

The efforts of Forests NSW staff should be acknowledged. Sustainability in action requires the dedication and commitment of all of our employees. Change and continual improvement are part of daily duties and without the professionalism and enthusiasm of our staff we would not be so far along the path to sustainability.

State forests provide us with a place to interact with nature and a sustainable resource to nurture so that our community can prosper.

Nurture, interact, prosper - it's what sustainability is all about.

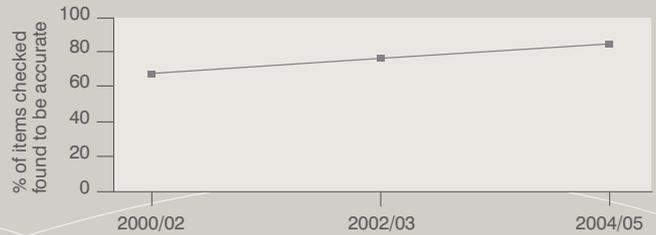
Peter Duncan
Chief Executive Officer

Barry Buffier
Commissioner for Forests

INDEPENDENT ASSESSMENT

Forests NSW has made a commitment to have the Seeing Report verified by an external, independent body every two years to ensure there is confidence in the information provided @. In line with this commitment, this year's report has been verified by URS Australia Pty Ltd using the AA 1000 Assurance Standard. Details of the assurance are provided on pages 22-23.

Verification Results - Accuracy Rate



CHANGES TO OUR REPORTING

This year, for the first time, Forests NSW has produced the Annual Report, Seeing Report and Facts and Figures as an integrated series of documents, linked around the themes of nurture, interact and prosper. All of the reports are available on the report CD, in hard copy or on-line at Forests NSW website @.

Each year, Forests NSW strives to improve the Seeing Report, in terms of the data collected, the way the information is presented and mechanisms for feedback into our management systems.

We report against four cornerstones of our business:

- Social @ - building partnerships and generating economic and social benefits within the community, especially for rural and regional communities; developing and valuing staff (Indicators 1- 10).
- Environmental @ - ecologically sustainable management of native and planted forests to protect and enhance environmental and conservation values and to help meet the demands of future markets for environmental services (Indicators 11-21).
- Economic @ - ensuring an adequate return to the government and community from the marketing of a range of values from native forests and plantations; developing innovative products, services and mechanisms to facilitate investment in new planted forests and the environmental values of forests (Indicators 22-24).
- Sustainability @ - managing State forests for the long-term and retaining opportunities for future generations to meet their needs and expectations, while providing for the present (Indicators 25-31).

Across these areas we report on ten forest values selected on the basis of:

- values recognised in corporate plans;
- input from representative stakeholder groups;
- input from employees;
- reference to internationally recognised methods of measuring progress towards sustainable forest management through triple bottom line accounting; and
- consistency with state (eg State of the Environment), national (eg Regional Forest Agreement) and international (eg Montreal Process) reporting requirements.

Our performance against these forest values is measured using a range of indicators. This year we continue to report on indicators

used in previous reports, plus some additional indicators including the number of NSW greenhouse abatement certificates traded and the certification of Forests NSW estate. The data for the indicators are included in the Appendices (starting on page 24), providing data for the first or 'benchmark' year the indicator was measured and the past two reporting cycles. The complete Seeing Report dataset for all reporting years is available on the report CD or online at Forests NSW webpage @.

Also this year, changes have been made to the forest values and indicators in the economic and sustainability sections of the report. The productivity indicators, which detail performance in terms of management actions taken to ensure the long term supply and regeneration of forests, have been moved to the sustainability section of the report. The economic section continues to report on marketing and sales of our main product - timber - and now also reports on new areas of our business as well as our customers.

Following feedback, we have also developed targets or objectives for each indicator. These help us to better measure our performance and highlight areas where 'follow up' action is necessary.

Information on our governance structure, policy framework, the regulation of forestry activities, codes of practice, full details of Forests NSW reporting framework, indicator definitions and an assessment of how Forests NSW reporting framework compares to the Global Reporting Initiative is available on-line @.

The following symbols are used in the report:

Symbol Interpretation	
	Target achieved
	On track to meeting target
	Target not achieved - action required
	Performance improved since last reporting period
	Performance declined since last reporting period
	No change in performance since last reporting period
@	More information available at www.dpi.nsw.gov.au/forests
@	Social indicator
@	Environmental indicator
@	Economic indicator
@	Sustainability indicator
n/a	Not applicable
n/d	No data available in that year
n/r	Not reported as an indicator in that year

WHO IS FORESTS NSW?

OUR FUNCTIONS

The Forestry Commission of New South Wales is constituted by the *Forestry Act 1916* and the functions undertaken by the Commission are delivered under the trading name Forests NSW.

Forests NSW operates as a public trading enterprise within the NSW Department of Primary Industries (DPI), to manage NSW State forests to provide timber now and into the future.

Forests NSW statement of affairs identifies our management objectives as to:

- sustain our financial performance;
- deliver ecologically sustainable management of natural resources;
- provide accountability to the community; and
- support our people.

THE BUSINESS

The DPI 2005-2008 Corporate Plan sets our overall strategic directions. The vision statement of DPI is 'profitable and sustainable primary industries building vibrant communities'. The DPI Corporate Plan is available at www.dpi.nsw.gov.au

Forests NSW role is centred on our primary objective of ensuring the sustained supply of timber to processing industries as well as our forest stewardship functions, which include the protection of biodiversity in State forests, the achievement of environmental benefits and provision of community amenities. These must be achieved while running a profitable business.

These objectives will be progressed through Forests NSW Corporate Business Strategy for 2005/06 which identifies the key strategic directions for the enterprise in the coming year. These are:

- focus on the core business of sustainable forest management and timber supply through three key businesses, namely planted forest operations, native forest operations, and forest business and support services;
- as a public trading enterprise, financial viability is the first priority for the organisation whilst meeting shareholders' performance targets and customer expectations;

- actively pursue and assess new businesses on their ability to meet profitability objectives and targets and to attract investors and third parties;
- match social and environmental projects to government funding opportunities and transparently identify social and environmental services that are provided for the public good;
- integrate with and capitalise on government policy and directions; and
- maintain focus on safety and implement initiatives to ensure adoption of best practice health and safety standards.

OUR STRUCTURE

Our corporate structure has been developed to deliver on our strategic directions in an efficient and effective way.

Forests NSW operates across NSW with ten main regional centres and a Sydney office at West Pennant Hills. Further details about Forests NSW structure are available in our Annual Report @.



Forests NSW Finances

	2003 \$'000	2004 \$'000	2005 \$'000
Revenue*	219,515	240,634	264,424
Profit			
Trading Profit*	23,959	37,860	36,819
Significant Items and SGARA revaluation**	-11,805	17,392	-29,161
Profit/(Loss) from ordinary activities (before tax)	12,154	55,252	7,658
Distribution to Government			
Distribution payable	4,162	13,096	32,544
Capital expenditure	32,235	36,315	31,531
Forests NSW productivity measures	2003	2004	2005
Employee numbers (30 June)	1,146	1,112	1,039
Timber sales by volume (m ³)	4,133,719	4,489,397	4,338,255
Timber sales per employee (m ³)	3,607	4,037	4,175
Timber sales/employee (\$'000)	102	118	123

* Exclusive of forest revaluation, capital grants and superannuation fund interest and significant items.

** Inclusive of forest revaluations, capital grants and superannuation fund interest.

FORESTS IN OUR REGION, AUSTRALIA AND NEW SOUTH WALES

Australia's forests are an important national asset but their significance extends well beyond our national boundaries. As part of the global forest network, the management of forests in Australia, the products we consume and the perceptions we hold all contribute to the sustainability of forested environments at an international level.

Within the Asia Pacific Region, Australia is a relatively small contributor to both the supply of, and demand for, forest products. Nevertheless, domestic attitudes to forest management have the potential to impact upon the future of forestry in regional communities and the future of regional economies.

Australia is a relatively affluent country and is in a position to afford to maintain and manage extensive areas of native forests

for conservation outcomes. New South Wales has expanded its forest reserves to world class during the last ten years. However, the drive to place native forests in conservation reserves has the potential to impact on the choices available to domestic consumers about the products they buy or the services they seek.

This increases the importance of forest certification programs and raising community awareness about sustainable forest management.

Today in NSW only 9.2% of the forest estate is managed as State forest for multiple uses (allowing for timber harvesting). The remainder is managed as nature conservation reserve (16.6%), leasehold (35.1%) and private property (31.6%), other Crown land (3.9%) or land of unresolved tenure (2.4%). Plantations across all tenures contribute 1.3% of the forest estate (*Australia's Forests at a Glance*, Commonwealth of Australia, 2005). From the small area of forest managed for timber production, including the plantations, NSW is able to supply most of its domestic needs for sawn timber and panel board products. By extensively regulating our own forest industry we are contributing to our own sustainability and acting as good regional citizens.

Further statistics about Australia's forests are available online at www.daff.gov.au

OUR REPORTING BOUNDARIES

Forests are natural ecosystems, they are interconnected and interact with limitless other ecosystems in the world. By managing forests for particular products we alter this interaction and hence the boundaries of our reporting responsibility can also be limitless. Similarly, the way we manage forests, as productive systems, has impacts on the way that forests are managed elsewhere in Australia, the Asia Pacific Region and the world. Global demand for forest products, particularly wood, has social, environmental and economic effects everywhere.

Defining our boundaries of responsibility for reporting purposes is therefore very difficult and it would be virtually impossible to report on all of the possible outcomes associated with the management of State forests in NSW. Therefore, the indicators used in this report are aimed at developing an understanding in terms of our organisation, our decisions, policies and management practices that impact on the forests under our care, the products and services that are directly supplied from State forests, the consequences of these for the industries dependent on them and their importance to other stakeholders.

SOCIAL

Building partnerships and generating economic and social benefits within the community especially for rural and regional communities. Developing and valuing our staff.

Indicator @	Page	Objective or target	Results	Performance*
Forest Value: Community Benefits @				
1. Social responsibility	24	Increase volunteer activities in non-operational business areas	27 volunteer programs with 239 participants	
2. Public participation	24	Increase opportunities for stakeholder participation in planning decisions	1,215 regional community forums attended; 80% of complaints resolved	
3. Recreation and tourism	25	a) Maintain well managed facilities b) Increase opportunities for events and partnerships	246 recreational facilities managed 317 formal events; 22 agreements with groups	
4. Research and education	26	a) Cost-effective research services from DPI and within Forests NSW b) Provide a strategic education program	\$9.1 million on research \$4.5 million on education Over 6,000 participants in education activities	
5. Regional employment	26	Increase opportunities for employment in forest dependent industries	7,823 people employed, over 16,600 jobs generated	
6. Other forest products	27	Access maintained to State forests for apiary, grazing and other products appropriate to forests	Continued provision of products	
Forest Value: Staff @				
7. Quality of management	27	Maintain staff levels for effective and efficient operations	1,039 people directly employed by Forests NSW; \$2.38 million on human resources	
8. Training	28	Forestry operations implemented by appropriately trained and accredited staff	Over \$2.92 million on training Over 2,480 staff and contractors trained	
9. Health and safety	28	Implement the safety management system and achieve lost time incident frequency rate of zero	Lost time incident rate of 14.6	
Forest Value: Cultural Heritage @				
10. Management of cultural heritage	29	a) Identify and protect all significant cultural heritage sites b) Ensure all employees and contractors are trained in cultural heritage awareness	242 new sites of cultural significance protected Over 230 employees and forest workers trained in cultural heritage awareness this year; total employees trained 71%	

* Please refer to symbol interpretation key on page 4.



NEW SAFETY MANAGEMENT SYSTEM DEVELOPED

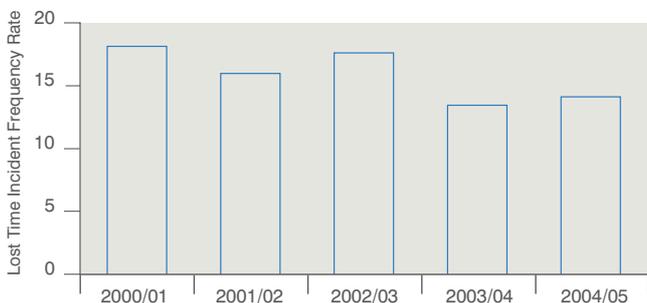
Improving the safety of all those who work in NSW State forests is a top priority for Forests NSW. During the past year, the organisation has rolled out a major revision of its safety management system (SMS) to all employees, with seven new safety and training coordinator positions created to focus on safe work practices. Four coordinators have been appointed and the remainder are being recruited.

'Think Safe, Act Safe, Stay Safe' is the new mantra for our staff, with the message reinforced in a swathe of new safety materials including a safety management system manual known colloquially as the 'Green Book' and a collection of safety standards known as the 'Red Book'.

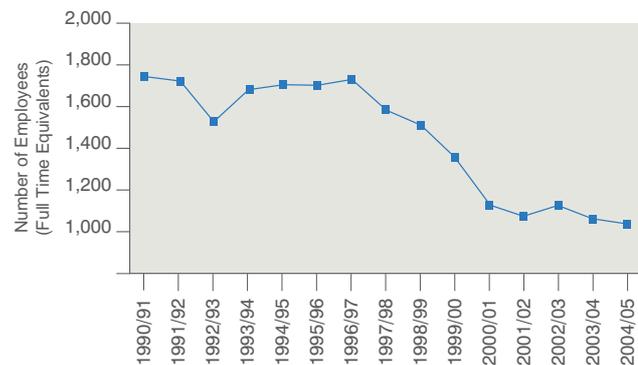
Improved risk assessment methods are a major part of the new system, with assessing risks in the workplace a vital role for all employees. Timber harvesting is inherently a dangerous activity, with forests a hazardous workplace. Our workforce needs to be vigilant and be able to recognise and respond to hazards appropriately.

Individual employees can apply a risk management assessment to each aspect of our business and from this information Forests NSW will be better able to understand activities that are potentially harmful to all employees and develop procedures that can be adopted to remove or minimise the risks. It's all aimed at ensuring a first-class safety performance.

Lost Time Incident Frequency Rate



Forests NSW Employee Numbers*



* Forests NSW has undergone several re-structures over the past 20 years, in line with government policy and directives and productivity improvement requirements. Significant organisational reviews occurred in 1992, 1997 and most recently over the past year.

FORESTS NSW ORGANISATIONAL REVIEW

Utilisation of innovative technology, a reduced forest estate, increased training, up-skilling of staff and a greater focus on streamlined business services have resulted in a steady decline in Forests NSW employee numbers over the past 20 years.

In 2004/05 steps were taken towards a major organisational re-alignment of Forests NSW, in line with our status as a trading enterprise within the newly formed DPI. The creation of DPI and financial targets set by the NSW Government also allowed Forests NSW to explore opportunities for co-location of staff and rationalisation of business services and functions.

As a public trading enterprise, Forests NSW has a responsibility to the government and people of NSW to run a profitable business. The review and rationalisation of our services, coupled with certainty in contractual arrangements, as a result of the completion of Wood Supply Agreements following the Regional Forest Agreements (RFAs), sees Forests NSW in a strong position to continue to operate as an increasingly efficient business with a highly skilled and motivated workforce.

FOREST EDUCATION

Forests NSW has developed and delivered formal education programs about forestry and forest management for more than a decade.

With the support of the National Association of Forest Industries, Forests NSW was host to the 2005 annual national forest educators' conference, which focused on a national approach to forest education. During the conference, forestry educators from all over Australia finalised a plan for the future development of education programs for teachers and students and identified collaborative project opportunities between industry and government.

A formal network of forest education representatives is now working on resource writing projects and a national web portal for schools. The portal will paint the 'big picture' of forests and forestry in Australia and centralise existing state-based information and resources. The network will continue to meet annually.

TALKING WITH OUR STAKEHOLDERS

People who have an interest in what we do; people that are adversely or positively affected by what we do; or people that have an influence on what we do - these people are our stakeholders @.

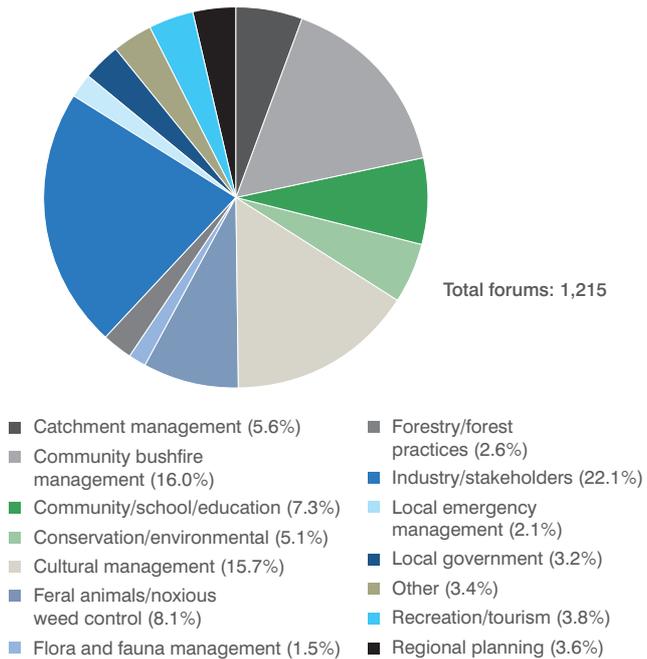
Our many stakeholders value forests in different ways and it is Forests NSW role to balance and integrate these collective ideas into our management.

Maintaining dialogue with stakeholders is crucial to our role in managing forests on behalf on the people of NSW. Some examples of the range of ways Forests NSW has worked with stakeholders over the past year include:

- Feedback and comment via the internet - an on-line forest visitation survey to capture the type of groups and number of people who use State forests.
- Public comment on documents - Ecologically Sustainable Forest Management Plans for forest areas within Forest Agreement Regions were on public display for review and comment.
- Meetings, presentations and representation on committees - the figure (right) shows the range of community forums Forests NSW has participated in over the past year - participation being highest in industry stakeholders, community bushfire management, feral animals and weeds and community, school and education forums.

- A complaints register - maintained in each regional office.
- A hotline - for reporting issues on State forests. Voicemail is available on the free call number Ph: 1800 102 333 while contact with a Forests NSW officer is possible on Ph: (02) 9872 0520 during business hours.
- Forests NSW Information Centre - Forests NSW staff are available to answer enquiries seven days a week on Ph: 1300 655 687 or via email cumberland@sf.nsw.gov.au
- Field trips and professional study tours - Forests make great outdoor classrooms. In 2004/05 Forests NSW hosted three teacher's bus trips, relevant for primary, secondary and tertiary teachers, at a range of State forest locations, providing teachers and educators with a unique experience to learn about many aspects of forestry.

Public Participation



ENVIRONMENTAL

Ecologically sustainable management of native and planted forest to protect and enhance environmental functions and conservation values and expanding the plantation estate to help meet future market needs.

Indicator @	Page	Objective or target	Results	Performance*
Forest Value: Biodiversity @				
11. Extent of forest type		The Forestry Act requires that 3,250,000 ha of State forests is managed	Total forest estate managed approximately 2,792,000 ha	↓
	29	a) Maintain area of native forest for the sustainable supply of timber	2,287,000 ha of native forest estate	↓
	30	b) Manage not less than 600,000 ha of land for afforestation with exotic softwood species	257,000 ha of established plantation 248,000 ha future plantations & protection	↑
12. Native forest structure	30	Ecosystems maintained over a range of successional growth stages and forest management zones	22.7% regrowth, 24.0% mature, 4.1% high conservation value old growth, 3.9% rainforest and 45.3% unassigned	↔
13. Surveyed species	31	Threatened species at risk from forestry operations identified and adaptive management applied	42 targeted fauna species found with 4,638 sightings	↑
Forest Value: Forest Health @				
14. Pests and weeds	31	Manage weeds and animal pests through active coordinated and cooperative programs	\$1.65 million spent on pest animal and weed control	↑
15. Plantation health	31	Monitor and address plantation health issues - 0% of plantation affected by health issues	Less than 3% of hardwood affected and <16% of softwood plantation affected by significant health issues	↔
	32			↓
16. Fire fighting and prevention	32	Managed through integrated and cooperative fire hazard management and wildfire suppression programs	Less than 0.5% of State forests burnt by wildfire 19% of State forests treated by fuel management strategies \$8.2 million spent on fire prevention and control	↑
				↓
				↔
Forest Value: Soil and Water Quality @				
17. Soil and water management		Ecological processes associated with soil and water maintained		↔
	32	a) Assess all areas to be harvested for risks to soil and water quality	100% (92,500 ha) of areas to be harvested assessed for soil erosion hazard	↔
	33	b) Protect water catchment values in socially strategic or environmentally sensitive locations	11.7% of State forests primarily managed to protect water catchments	↑
Forest Value: Compliance @				
18. Regulatory compliance	33	Achieve a 100% compliance rate with zero prosecutions and fines	99.9% compliance rate, 1 fine issued; 1 prosecution	↑
Forest Value: Environmental Services @				
19. Carbon sequestration	34	Maintain a positive contribution to Australia's net emission reduction program for carbon dioxide	4.21 million tonnes of CO ₂ sequestered by plantations	↑
20. Energy consumption	34	a) Reduce greenhouse gas emissions and increase energy sourced from green power	Less than 10,000 tonnes of CO ₂ emitted and 13.3% of electricity sourced from green power	↑
	34	b) Optimising fleet composition to meet business needs in a cost-effective and environmentally responsible manner	Reduced fleet size by 7.8% Reduced fuel consumption by 9.9% Reduced fleet CO ₂ emissions by 9.8%	↑
21. Material consumption and recycling	34	Increase recycling of products consumed, and purchase more products with recycled content	72% of waste recycled or reused; 22% of product purchased with recycled content	↔

* Please refer to symbol interpretation key on page 4.

PLANTATION HEALTH

As a responsible forest manager, it is vital that pests and diseases are monitored and managed effectively to ensure the long term health and viability of our 257,000 hectares of planted forests, and to prevent the spread of pest and disease into other forests.

Forests NSW team of forest health researchers undertake annual assessments to ensure our forests' growth cycle is unaffected by pathogens or pest agents. Using a range of technologies such as remote sensing, helicopter quadrant assessment and on ground surveys, researchers assess areas of hardwood and softwood planted forests to determine the presence of nutrient or biological agents.

This year, the Monterey pine aphid (*Essigella californica*) was detected and has affected up to 15 per cent of the pine plantation estate. A significant pest, the aphid causes discolouration of leaves and loss of needles and can significantly reduce growth rates. The researchers are working closely with operational staff to control this new pest agent. Forests NSW is also providing funds towards a national research program that is being initiated to investigate this potentially serious problem.

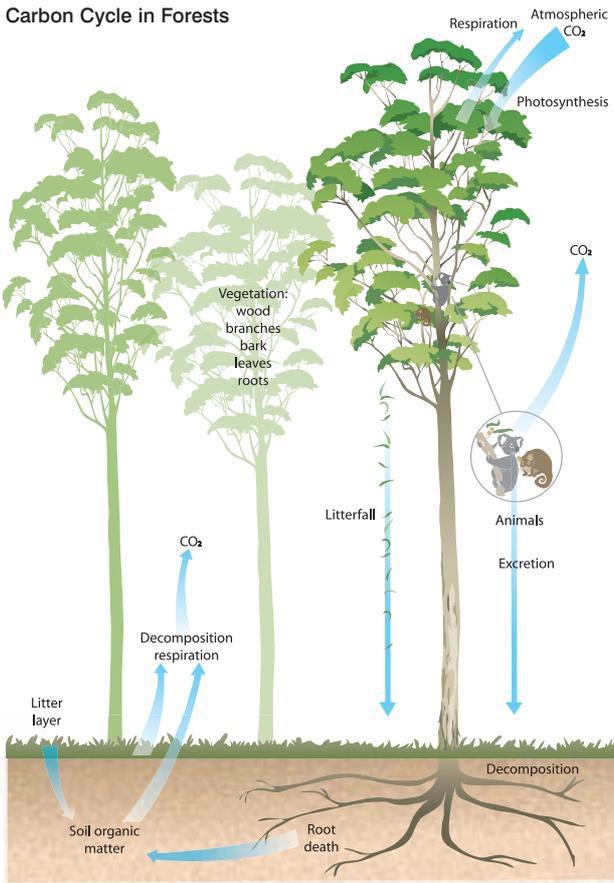
CARBON DIOXIDE AND FORESTS

Forests play an important role in maintaining the functioning of the biosphere. Forests are dynamic and as they grow the gas carbon dioxide (CO₂) is absorbed. Through the process of photosynthesis, trees convert CO₂ to plant matter, such as leaves and wood. At the same time that this occurs, CO₂ is also being released into the atmosphere through respiration from plants, animals and from the decomposition of litter and soil organic matter. Vigorous growing forests absorb more CO₂ through photosynthesis than is released through respiration, so a growing forest is a sink for carbon. As trees mature and eventually die the plant matter decomposes and is returned to the atmosphere.

By managing forests for timber production, some of the carbon stored is released during timber harvesting but much of the carbon remains in storage in timber products such as floorboards or framing. By ensuring adequate regeneration after harvesting, the carbon in these forests effectively remains in equilibrium; the CO₂ absorbed by growing trees balances the amount removed through harvesting.

The expansion of our plantation estate, which takes place largely on land previously managed for agriculture, is also creating a long-term change in land use and a new store of carbon; we are not just maintaining equilibrium we are taking extra carbon out of the atmosphere, thereby providing a positive contribution to the environment. This extra carbon can be used to create certificates under the NSW Greenhouse Gas Abatement Scheme (NGACS). Further detail of this scheme is provided in the economic section of this report @.

Carbon Cycle in Forests





BIODIVERSITY: ECOLOGICAL EFFORT AND RESULTS

Over the past 15 years, Forests NSW has trained staff and recruited experts to progress accurate and efficient surveys for, and management of, biodiversity. Survey and implementation of prescriptions are required before harvesting can commence, in accordance with our Threatened Species Licence which is enforced by the Department of Environment and Conservation. To comply with best practice, Forests NSW also initiates monitoring and research to improve our capabilities.

In the past year, we have carried out more than 1,900 wildlife surveys in State forests to comply with regulations, plus others undertaken in the course of research, monitoring, paid work for clients and for public interest. Threatened species such as the glossy-black cockatoo, sphagnum frog, Dorrigo daisy bush, and yellow-bellied glider are recorded and increase our understanding of habitat preferences. Some formerly hard-to-locate species, like the stuttering frog, are now found more readily with better habitat knowledge.

REGULATORY COMPLIANCE - CONTINUAL IMPROVEMENT

Forests NSW management of forest plants, animals, soil and water is regulated by both government legislation and internal codes of practice.

During 2004/05, 3,701 compliance checks were made by Forests NSW staff under our four tier audit system.

Forests NSW Compliance

	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Potential compliance checks covered by check sheets*	204,636	117,699	120,338	133,156	110,122	124,108
Non-compliance incidents recorded by Forests NSW supervision*	2,039	1,538	2,242	1,810	1,668	1,615
Fines issued to Forests NSW by regulators	3	5	3	1	1	1

* Relate to tier 1 audits only.

Of 124,108 potential compliance areas identified and assessed under tier one audits (in which Forests NSW harvesting supervisors assess the performance of harvesting contractors), 1,615 breaches were identified - almost half related to soil and water quality issues with relatively minor impacts. This was a compliance rate of over 99%.

Forestry operations are also audited by external regulators, resulting in one prosecution and fine in 2004/05 by the NSW Department of Environment and Conservation for pollution of waters after the collapse of a forest road during heavy rain.

A range of actions have been taken to reduce the risk of such an event occurring again, including:

- drafting of regional road and fire trail management plans incorporating measures for assessing environmental risk and prioritising road works;
- development of a road works system manual by staff engineers to ensure road planning and construction is undertaken by appropriately skilled staff;
- initiation of 'roading schools' to give guidance to employees on good engineering principles, instruction in safe, stable design and construction, surveying and road maintenance.

Forests NSW will strive to improve performance relating to the management of our road network. With some 54,000km of roads and an annual expenditure of \$21 million on building and maintaining roads and bridges, this is a challenging task.

ECONOMIC

Ensuring an adequate return from the marketing of wood products from the State's native forest and plantations while also developing innovative commercial products and services to facilitate private investment in new planted forests.

Indicator @	Page		Objective or target	Results	Performance*
Forest Value: Marketing and Sales @					
22. Volume of timber harvested	35	  	Meet market demands for wood products	2.85 million m ³ of logs and 1.64 million tonnes of pulpwood and other products harvested	
23. Product mix of timber harvested	35 36	  	Increase the % of wood harvested going to high value products	Increase in hardwood timber going to high value products	
24. NSW Greenhouse Gas Abatement Certificates	36	 	Trade all certificates that are created	84.8% of certificates created were traded; 100% committed	NEW

* Please refer to symbol interpretation key on page 4.

INCREASING PROFITABILITY

In 2004/05, Forests NSW embarked on a program to develop new revenue streams and achieve sustainable operating and capital expenditure savings through changing management and organisational structures. The program was initiated to meet new government targets of increased and sustained dividends.

Improvements to systems and purchasing arrangements have been implemented to improve efficiencies in administration, with a range of additional opportunities identified for performance improvements including:

- increased revenues from new forest products;
- revision of pricing and charges for some services;
- reduction of some activities;
- voluntary staff reductions;
- realignment of operational business locations;
- reductions to the organisation's asset base through disposal of non-strategic assets and co-location to fewer operational sites; and
- re-investment of asset sale proceeds into technology and equipment to revitalise and further enhance the profitability of the organisation.

SOUTH COAST TIMBER INDUSTRY REFORM

In June 2005, Alan Taylor & Co Pty Ltd, part of the Boral Timber Division, acquired the timber allocation and the sawmills formerly operated by Davis & Herbert Pty. Ltd, previously Forests NSW largest customer on the south coast.

The wood supply agreement for this region was not affected by the change of ownership and includes over 37,700m³ high quality large sawlogs, 4,000m³ high quality small sawlogs and 30,000m³ of salvage logs. Previous harvesting and haulage contractors for Davis & Herbert are being employed by Boral and in addition, Forests NSW has temporarily transferred three log merchandising crews from the Tumbarumba area to supply timber to the Boral mills. It is anticipated that these changes will provide long term security for the industry in this part of the state.



Forests NSW Major Customers

Product	Customer
Plywood	Norply, Big River Timbers, Ausply, Carter Holt Harvey
Major softwood sawmillers	Highland Pine Products, Weyerhaeuser, Hyne & Son, Carter Holt Harvey, D & R Henderson, Integrated Forest Products, Auswest, Penrose Pine, Mesray, Colenden, Willmott Forest Products, Summers
MDF and particleboard	Carter Holt Harvey, Monsbent
Softwood preservation	Willmott Timbers, Penrose Pine, Blayney Treated Pine, Pacpine
Pulp and paper	Norske Skog, Visy, South East Fibre Exports
Major hardwood sawmillers	Boral, Koppers, Notaras & Sons, Australian Solar Timbers, Ford Timbers, Neville Smith Timber, Blue Ridge Hardwood, Gunnedah Timbers, Gulpa Sawmills
Investors	Rothschild, ST Microelectronics, TEPCO
Utilities and Infrastructure	Optus, Vodafone, Telstra, Crown Castle, Country Energy

PRODUCT SUPPLY

During the past financial year, the harvest and sale of softwood and hardwood products were strong but slowed towards the end of the year due to decreased activity in the housing market (see table page 17). Future variations in the markets for our products will continue to be a risk for the organisation and our customers. To help adapt to this, the existing timber allocation system, through the structure of supply contracts, has been reviewed to enable better response to these fluctuations. Strategies developed and put in place will enable customers to install additional processing capability to service the changes in the market when they arise.

This late down turn in sales is also reflected in our trading profit for the year which shows a decrease compared to the 2003/04 performance.

PRODUCT DIVERSITY

The sustainability of any business is improved by the development of new business products and services related to its primary role as product diversification spreads the risk related to any single market place or product. For Forests NSW, opportunities exist in private forestry and plantation management services, carbon sinks and carbon trading, salinity mitigation, eco-tourism, land repair and mine site rehabilitation @.

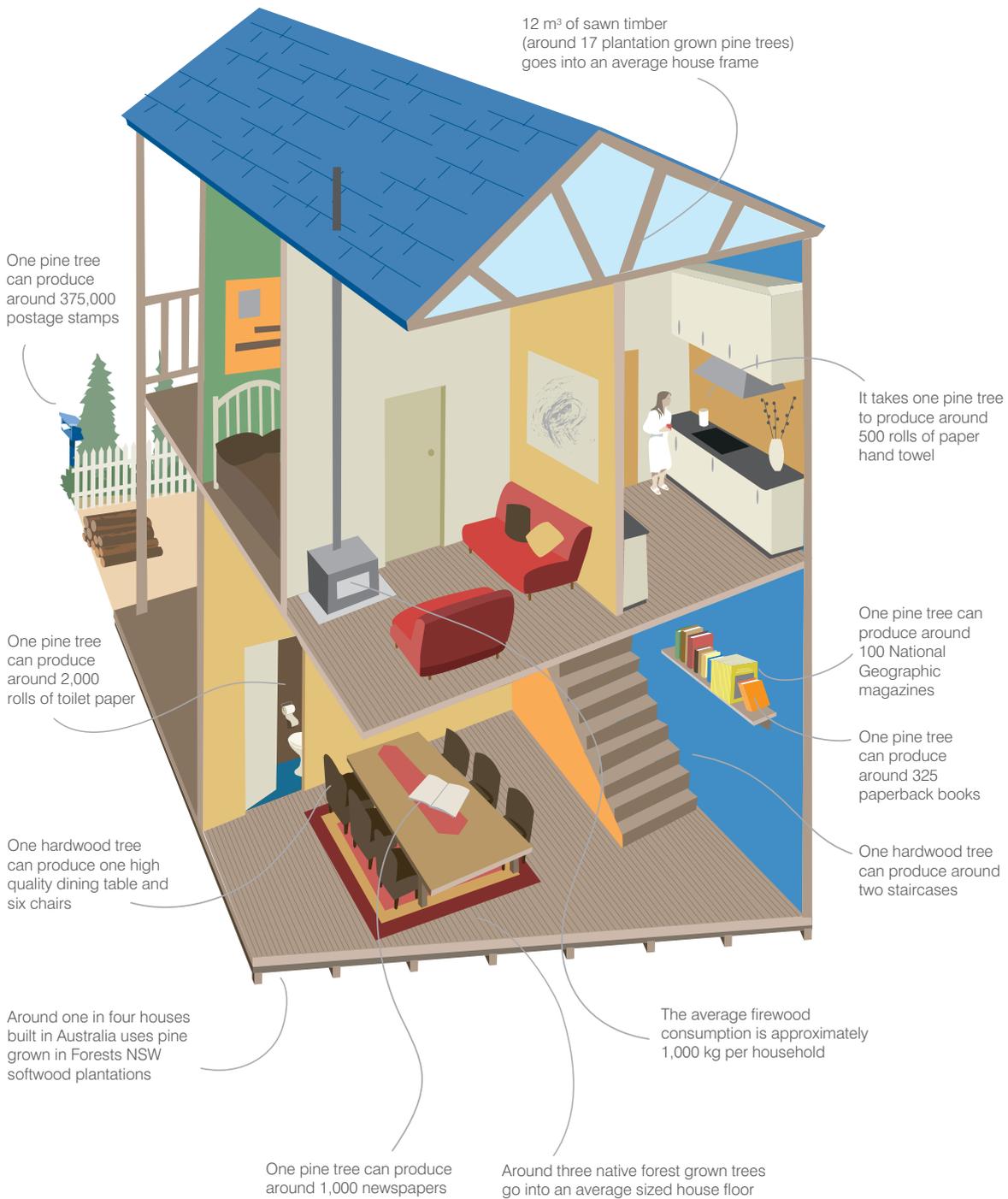
In early 2005, Forests NSW became the first body in the world to trade carbon credits arising from forests in a greenhouse gas abatement scheme. As an accredited abatement certificate provider under the NSW Greenhouse Gas Abatement Scheme, Forests NSW registered 166,005 certificates - each equivalent to one tonne of carbon dioxide. The certificates represented the carbon sequestered during 2004 from 10,000 hectares of planted hardwood forests.

This new form of currency allows Forests NSW to realise additional financial and environmental value from State forests. The success of the NSW scheme confirms there is a market for tradeable carbon certificates and provides incentives for companies to invest in new plantations.

The environmental benefits of soil protection, reduction in salinity and enhancement of biodiversity, coupled with the social and economic benefits of a viable future for the NSW timber industry, make plantations and carbon trading an important part of our sustainable future.

Forests NSW has also become involved in the development of investment products such as managed investment schemes and the establishment of plantations for third party investors. These products utilise investment funds provided by private investors to develop new plantations using Forests NSW expertise. It's hoped involvement in these schemes and third party plantations will increase as a new and increased source of revenue from our plantation management services.

What's in a House?

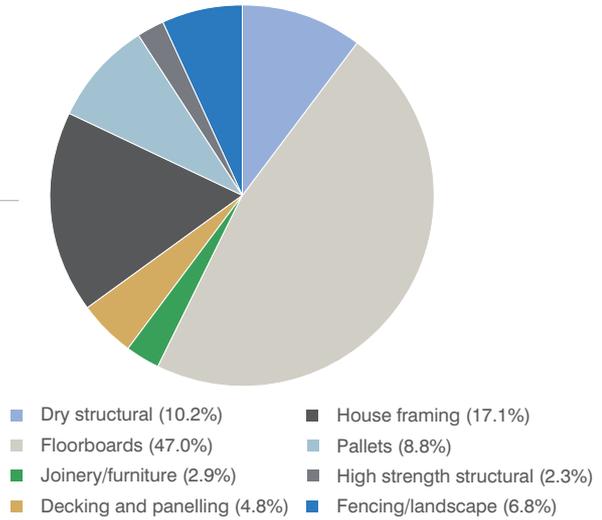




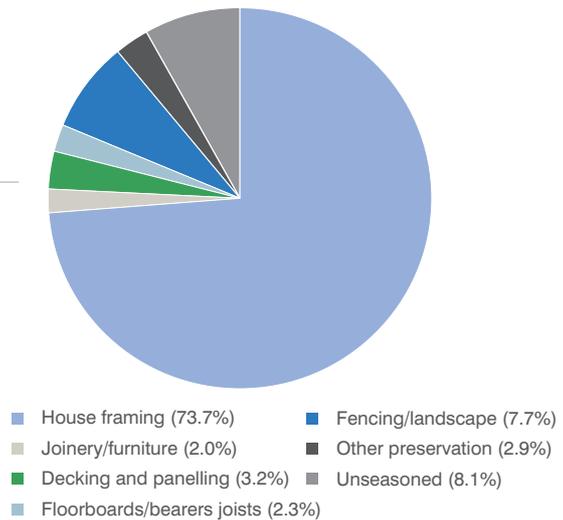
Volume of Timber Harvested

Product	2002/03	2003/04	2004/05
Sawlogs and veneer logs (m ³)	2,538,276	2,840,856	2,724,932
Poles, piles and girders (m ³)	25,572	31,397	31,882
Round timber (m ³)	47,293	45,595	89,098
Other products (t)	147,785	40,309	102,443
Pulpwood (t)	1,521,549	1,571,549	1,542,325

Sawlog Product Mix from Hardwood Forests (Native and Plantation)



Sawlog Product Mix from Softwood Plantations



SUSTAINABILITY

Managing State forests for the long-term and retaining opportunities for future generations to meet their needs and expectations, while providing for the present.

Indicator @	Page	Objective or target	Results	Performance*
Forest Value: Productivity @				
25. Forest management	36	a) Net area of forest land available for timber production maintained b) Large areas of significant value are conserved for those values c) Ecological functions are maintained during harvesting	1,442,000 ha available for timber production 571,000 ha in State forest reserves 779,000 ha of other forest managed for ecological functions	↓ ↓ ↑
26. Plantation establishment and survival	37	a) Plantations established to maintain the timber supply strategy b) New plantations are effectively established	6,764 ha of softwood plantation and 1,164 ha of new hardwood plantation established 93% of softwood plantation and 100% of hardwood plantation successfully established	↔ ↑
27. Mean annual growth in plantations	37	Plantation growth rates are at acceptable levels to achieve future productivity	Mean annual increment for softwood plantations of 16.5m ³ /ha/yr and 13.6m ³ /ha/yr for hardwood plantations	↓ NEW
28. Native forest regeneration	38	100% of surveyed harvested area effectively regenerated	349 surveys and 83% of surveyed harvested area regenerated	↑
Forest Value: Maintainability @				
29. Sustainable yield	38	Harvesting of wood products from forests is within allowable levels	Actual annual yield of high quality sawlogs as % of allowable volume: - 81% from native hardwood forests - 88% from cypress - 92% from all softwood plantations	↑
30. Forest certification		EMS is accredited under ISO 14001 by June 2006. All State forests are certified by Dec 2006	Forests NSW yet to undergo certification	NEW
31. Trading profit	38	Increasing management efficiency is achieved as profit per employee increases	\$35,000 profit per employee generated	↑

* Please refer to symbol interpretation key on page 4.

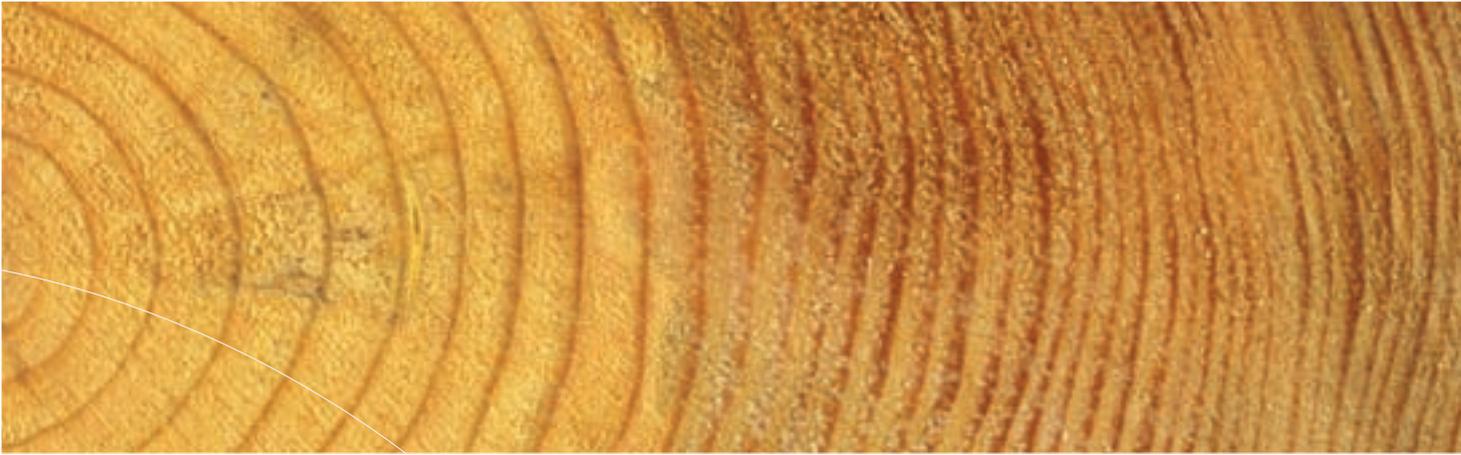
FOREST SUSTAINABILITY

Many people are uncomfortable with the idea that native forests that are managed for commercial objectives can also be managed sustainably. A common misconception is that the drive for profit will ultimately result in over-use. This would be an un-wise management objective for a business that aims for the long term. In fact, for a business to be sustainable it must find a balance between achieving sound financial performance and implementing wise environmental and socio-economic strategies.

As a public trading enterprise, Forests NSW must balance its objectives of commercial performance with a responsibility to

ensure that environmental, social and economic values of forests are also maintained. The challenge in meeting this responsibility arises as different stakeholders seek to achieve their own, evolving objectives for access, use or protection of forest resources.

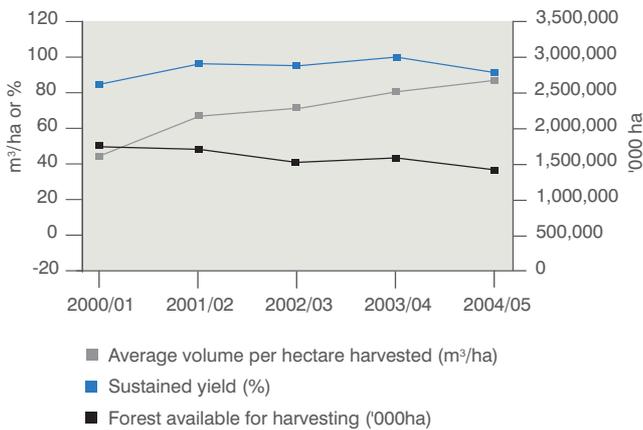
The adaptability of Forests NSW to respond to the changing expectations and needs of the community is an essential element not only of our ability to be sustainable as an organisation, but also to ensure the wise management of State forests into the future.



Forests NSW - A Sustainable Future



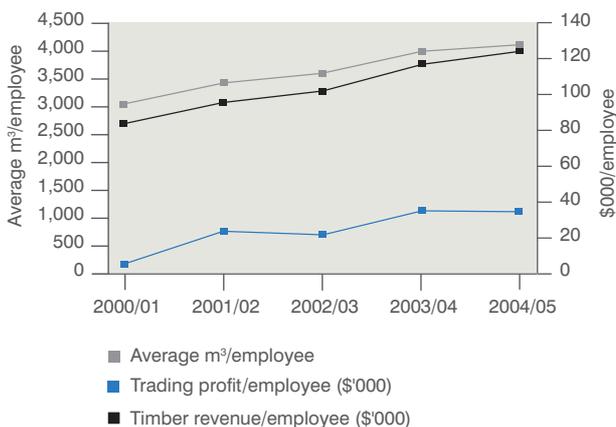
Forest Sustainability*



* The average volume harvested per hectare is strongly influenced by harvesting of the plantation estate. Similarly the decline in the area available for harvesting is reducing as a result of land tenure changes and prescriptions associated with timber harvesting operations in the native forest estate. Detail of volumes harvested are reported under Indicator 22. Changes in the forest estate are reported under Indicator 25.

Sustained yield in RFA Regions may vary by 25% in any one year and by 5% over a 5-year period.

Productivity Measures*



* Information about changes in the number of Forest NSW employees is provided in Indicator 7.

BRIGALOW DECISION

Following the completion of Regional Forest Agreements between the Commonwealth and NSW Government for the coastal areas of NSW (North East, Eden and Southern NSW), the NSW Government announced its decisions on the Regional Assessments of the Brigalow Belt South and Nandewar Bio-regions in May 2005. The decision stemmed from five years of analysis and extensive stakeholder and community consultation, with the outcomes coming into effect in 2005/06.

The announcement will see 264,000 hectares of forest available within the bio-regions for timber harvesting, with up to 57,000m³ of cypress pine per year to be available to the cypress industry. The package is underwritten by 20 year wood supply agreements.

A central element of the government's decision on these areas is the creation of 348,000 hectares of Community Conservation Areas (CCA) - a new tenure of public land that will achieve both permanent conservation outcomes and provide certainty to the various industries operating in the region. Management of the new CCA will also link directly to management of the existing reserve system through the creation of three new community-based advisory committees.

The decision includes the allocation of \$80 million over the next five years on job creation, timber industry and conservation management. The decision provides a detailed plan for the continued development of an ecologically sustainable, value-added and viable timber industry.



FOREST FOR TIMBER PRODUCTION

During the western regional assessment for the Brigalow Belt Bio-region, progress was made in the re-classification of the estate into our forest management zoning system. As a consequence of this, some changes to the area of forest available for timber production are reported this year. Most notably the area of forest available for harvesting has decreased to just 52% of the estate, while the total area excluded from harvesting has increased to 48% (see table below).

Further refinements to this classification will be made as the details of the outcomes of the decision for Brigalow Belt Bio-region progress during the coming year.

ESFM, EMS AND CERTIFICATION

Forests NSW is committed to the principles of Ecologically Sustainable Forest Management (ESFM). Regional ESFM plans are the blueprints for achieving the principles of ESFM. Each plan sets out the broad strategies, performance indicators and measurable outcomes for forest management in a region for a five year period. The plans include strategies in key areas such as Aboriginal and non-Aboriginal cultural heritage, forest health and sustainable timber supply. Community input into five regional

native forest strategic plans was facilitated through public display of the plans in March 2005.

A key tool for Forests NSW in achieving Ecologically Sustainable Forest Management (ESFM) is the Environmental Management System (EMS). This system, based on ISO 14001:2004, is being developed for our Native and Planted Forests Operations. The EMS will assist Forests NSW in identifying and managing significant environmental impacts that may occur as a result of its activities. It establishes a framework for long term decision making that is transparent, documented and fully accountable. The original timetable for achieving EMS certification has been extended and we will be seeking certification in early 2006.

An effective EMS also provides a strong foundation to then seek forest certification under internationally recognised standards. Forest certification is a standard for forest management practises and there is increasing demand from customers for this certification. Achieving forest certification means that forests products can be labelled as sourced from a sustainably-managed forest.

Forests NSW is committed to working towards a recognised international forest certification scheme, and following the EMS certification in early 2006, we will commence the process for achieving forest certification.

Forest Management*

	1999/00	2003/04	2004/05
a) Forest available for timber production (ha)	1,965,720	1,608,505	1,442,120
b) Forest in State forest reserves (ha)** (not available for timber production)	555,000	602,101	571,427
c) Forest in protection zones for ecological functions (ha)*** (not available for timber production)	552,600	610,107	778,573

* Refer to Indicator 25 (page 36) for more details.

** Indicates forest in dedicated (FMZ 1) and informal (FMZ 2 and 3A) reserves.

*** Includes forest not available for harvesting in forest with special prescriptions (FMZ 3B), general management native forest (FMZ 4), hardwood planted forest (FMZ 5), softwood planted forest (FMZ 6), and non forestry use (FMZ 7).

INDEPENDENT ASSURANCE STATEMENT

To the Executive Management and Stakeholders of Forests NSW:

Forests NSW commissioned URS Australia Pty Ltd (URS) to provide independent assurance of the content of this Social, Environmental and Economic 'Seeing' Report' 2004/2005 (the 'report'), the eighth such report by the organisation. The report presents Forests NSW sustainability performance over the period 1st July 2004 to 30th June 2005. Forests NSW was responsible for the preparation of the report and this statement represents the auditor's independent opinion. URS' responsibility in performing our assurance activities is to the management of Forests NSW alone and in accordance with the terms of reference agreed with them. Any reliance any third-party may place on the report is entirely at their own risk.

Assurance Objectives

The objective of the assurance process is to provide stakeholders of Forests NSW with an independent opinion on the materiality, completeness and accuracy of the information presented in the report, and whether Forests NSW has responded to stakeholder concerns and adequately communicated those responses within the report. This is confirmed through an audit of the claims made, underlying systems, processes and competencies that support the report, as well as the embeddedness of policies and strategies relating to sustainability. Other associated objectives include:

- increasing awareness within the organisation of third-party assurance of externally reported information; and
- ensuring continuous improvement in data management systems and associated reporting processes.

Assurance Process

Our approach to assurance provision is aligned to the AA1000 Assurance Standard, and is broadly consistent with the requirements of the International Standard for Assurance Engagements 3000 and the Interim Australia/New Zealand General Guidelines on the Verification, Validation and Assurance of Environmental and Sustainability Reports. The assurance engagement was undertaken in September 2005. The process involved:

- Interviewing management and internal stakeholders to ascertain their views on, and responses to, the material sustainability issues faced by Forests NSW, and the communication of these issues. A total of six interviews were conducted, including an interview with the CEO;
- Interviewing a wide selection of external stakeholders selected by the auditor to ascertain their views on the material sustainability issues faced by Forests NSW, and their opinion on the communication of these issues by Forests NSW. A total of seven interviews were conducted;
- A review of Forests NSW key sustainability strategies, policies, objectives, management systems (including the SEEDs data management system), measurement and reporting procedures, background documentation and data collection and reporting procedures;
- A review of the report for any significant anomalies, particularly in relation to significant claims as well as trends in data;

- An overview of the embeddedness of Forests NSW's key economic, environmental and social policies;
- A series of interviews with key personnel responsible for collating and writing various parts of the report in order to substantiate the veracity of selected claims;
- A visit to the South Coast (Batemans Bay) regional office of Forests NSW, as part of a structured program to capture regional sites in assurance engagements;
- The examination of the aggregation and/or derivation of, and underlying evidence for, 40 selected data points, data spreadsheets and statements made in the report. The audited items were broadly selected to not only satisfy the principles of materiality, completeness and responsiveness, but were also based on our findings from the previous (or 2002/03) assurance process and represented supporting evidence for conclusions reached; and
- A review of selected external media sources relating to Forests NSW sustainability performance, so as to further substantiate reported claims and, more importantly, to ensure that no significant omissions were made in the report.

The assurance process was carried out under URS' quality control procedures.

Assurance Limitations

Our scope of work did not involve verification of financial data, other than that relating to environmental, social or broader economic performance. Our observation of stakeholder engagement activities by Forests NSW involved interviews with internal and external stakeholders as well as reviewing stakeholder engagement processes and outcomes. Due to the 2003/04 report of Forests NSW not being independently verified this statement is limited to the 2004/05 data alone.

Our Independence

URS was not responsible for preparation of any part of this report. URS has not undertaken any commissions for Forests NSW in the reporting period concerning reporting or data collection. Our team's independence was ensured by selecting an assurance team that had no other involvement with Forests NSW during the reporting period that could impair the team's independence or objectivity.

Our Capacity

Our audit team comprised of individuals with expertise in the forestry sector and in environmental and social performance measurement. Collectively, our audit team working with Forests NSW has over twelve years of combined environmental and sustainability report verification and assurance experience having independently verified over forty reports. Team members also have specialist audit qualifications, particularly in environmental management. The team is also a global leader in the use of the AA1000 Assurance Standard in assurance provision.

Our Opinion

Based on the scope of the assurance process, the following represents URS' opinion:

- The findings of the assurance engagement provide confidence in the reporting processes established. The level of data accuracy was found to be high, but some additional improvements to data management, including the reduction of manual aggregation and transcription processes are recommended to reduce potential for minor anomalies. Data trails selected were easily identifiable and traceable, and the personnel responsible were able to reliably demonstrate the origin(s) and interpretation of data.
- The statements made in the report appropriately reflect social, environmental and economic performance achieved during the period.
- All suggested changes were satisfactorily addressed by Forests NSW prior to finalising the report.

Overall, the auditor is satisfied that the report is an appropriate representation of Forests NSW social, environmental and economic performance during the reporting period. We also note that the level of accuracy in reported information has significantly improved since the first review in 2000/01.

Conclusions and Recommendations

- **Materiality:** Issues material to stakeholders have been considered and communicated within the report. Materiality was determined by assessing compliance performance, issues material to stakeholders, policy-related performance and peer-based norms. Accordingly, material environmental, social and broader economic aspects of Forests NSW sustainability performance are also appropriately addressed. Internal corporate governance policies have recently been reviewed/developed, which once implemented, would provide a more robust basis for human capital management.
- **Completeness:** The report was found to be complete in addressing key environmental, social and economic performance as well as all operations of Forests NSW. The report does not strictly adhere to the Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines 2002, only using it as a guide. For purposes of comparability, it is recommended that provision of a GRI index is a good model for future reports. Completeness was also tested using peer-based norms, and ensuring that no operations of the company were omitted.
- **Responsiveness:** URS tested the responsiveness of the organisation through a review of the management systems, documents and policies prepared by the organisation relating to the way in which it intends to respond to stakeholder concerns and interests; by assessing the resources allocated to implement the aforementioned policies and commitments; by assessing the timeliness and accessibility of reported information; and by undertaking a review of key policies, targets and indicators and the extent to which these are implemented by Forests NSW. Stakeholder engagement is at several levels within the organisation, for a variety of issues. The assurance process involved engagement with internal and external stakeholders to test the responsiveness principle, the results of which are discussed below.

External Stakeholder Opinion

As part of the assurance process a range of external stakeholders were contacted for their views about the report and Forests NSW sustainability performance. A number of sustainability opportunities were recommended for action, along with risks for attention. All stakeholders commend Forests NSW intention and commitment to achieving sustainability goals. Most stakeholders rate Forests NSW sustainability performance between average and good; with one exception who rates their performance as poor.

Most stakeholders consider Forests NSW as one of the leaders in sustainability reporting; and all stakeholders highly value the independent verification process. These stakeholders also rate the completeness of the report, and information adequacy provided by the report as between average and good. In general they also either agree or have a neutral opinion that the report is unbiased, accurate and transparent.

The useful improvements or changes recommended for future reports include: disclosure of mixed government objectives given to Forests NSW; provision of more easily digestible data and/or data source on sustainability performance; and use of more sensitive indicators to assess impacts on flora, fauna and water cycle.

The Way Forward

Forests NSW is committed towards sustainability reporting thus ensuring that its performance in environmental, social and economic terms is transparently communicated. The organisation, over the recent past, has undergone extensive re-structure, and has acquired increased responsibilities for financial returns. Yet, its commitment to engage with its stakeholders and be transparent in its outlook is commendable. The reporting database, SEEDS is beginning to work effectively, and the more streamlined report is a delight to read according to its audience. URS has provided additional suggestions for reporting improvement in some areas. URS recommends independent verification of the report on an annual basis instead of biennially, not only to progress reporting to best practice, but also to ensure that data from each year is independently verified. URS also recommends a review of the appropriateness of indicators used, with consideration to the Global Reporting Initiative. These have been outlined in a more detailed report presented to Forests NSW management.

On behalf of the audit team
5th October 2005
Melbourne, Australia



Terence Jeyaretnam
Principal, URS

APPENDICES

Strategic Area: **Social**
Indicator Name: **Social Responsibility**

Forest Value: **Community Benefits**
Indicator Number: **1**

INDICATOR 1 - SOCIAL RESPONSIBILITY			
Corporate sponsorships, donations and waived fees	2000/01	2003/04	2004/05
Number	>50	774	424
Amount (\$)	\$97,924	\$198,832	\$174,053
Volunteering programs			
Number of programs	n/r	13	27
Number of participants	n/r	185	239

Strategic Area: **Social**
Indicator Name: **Public Participation**

Forest Value: **Community Benefits**
Indicator Number: **2**

INDICATOR 2 - PUBLIC PARTICIPATION			
Community forum categories	1997/98	2003/04	2004/05
Catchment management	47	52	68
Community bushfire management	14	196	195
Community/school/education	29	91	89
Conservation/environmental	46	40	62
Cultural management	n/d	102	191
Feral animals/noxious weed control	79	88	98
Flora and fauna management	17	32	18
Forestry/forest practices	40	30	31
Industry/stakeholders	213	214	268
Local emergency management	63	25	25
Local government	44	40	39
Other	116	14	41
Recreation/tourism	252	45	46
Regional planning/RFA	67	49	44
Total	1,027	1,018	1,215

Government assessments with respect to the future management of all public forests have resulted in a continual level of participation in community forums and stakeholder consultations over the past 8 years.



Strategic Area: **Social**
Indicator Name: **Recreation and Tourism**

Forest Value: **Community Benefits**
Indicator Number: **3A**

INDICATOR 3A - RECREATION AND TOURISM

a) Recreational facilities provided	1997/98	2003/04	2004/05
Beaches	no data	25	25
Roadside rest areas/picnic areas	160	53	50
Forest drives (marked)	30	16	16
Forest walks (marked)	90	47	42
Forest walks (un-marked)	n/d	n/d	1
Lookouts	84	24	17
Camping areas	308	86	79
Camps/huts /cottages	17	17	16
Mountainbike tracks (km)	n/d	n/d	105
Total facilities	691	277	246

The total number of recreation facilities managed has declined as increasing areas of State forest have been transferred to national parks and reserves. Forests NSW is managing the remaining areas in a more strategic manner, aiming to provide fewer, high quality sites.

Strategic Area: **Social**
Indicator Name: **Recreation and Tourism**

Forest Value: **Community Benefits**
Indicator Number: **3B**

INDICATOR 3B - RECREATION AND TOURISM

b) Permits for organised recreation activities	1997/98	2003/04	2004/05
Eco tourism/4x4 tours	54	25	33
Horse, trail and endurance rides	32	30	31
Car rallies /go carts	38	24	30
Motor bike rallies	6	9	13
Mountain bike rallies	30	14	31
Orienteering/mountain runs/triathlon	37	24	21
Bushwalking	23	6	16
Bowhunting/archery	60	0	2
Other	22	76	62
Education/outdoor education schools	27	32	33
Training/exercises	152	35	45
Total activities	481	275	317
Area zoned primarily for recreation (ha)	n/d	2,017	3,147
Expenditure on recreation (\$'000)	n/r	\$2,121	\$1,918
Recreation agreements	n/r	n/r	22

The number of permits issued for recreation and tourism events and tours has fluctuated in the recent past, with a significant drop before changes to public liability legislation. Numbers are now increasing as both event organisers and Forests NSW implement strategies to provide for appropriate, safe and fun activities.

APPENDICES

Strategic Area: **Social**
Indicator Name: **Research and Education**

Forest Value: **Community Benefits**
Indicator Number: **4A**

INDICATOR 4A - EXPENDITURE ON RESEARCH AND EDUCATION		
Year	Research (\$M)	Education(\$M)
1998/99	\$7.2	n/d
2003/04	\$9.0	\$4.9
2004/05	\$9.1	\$4.5

Forests NSW expenditure on education and research has shown an increasing trend over the past seven years. As a result of the creation of DPI and the subsequent organisational review a significant component of our research programs will operate as part of the DPI Science and Research Division. This is likely to alter our budget for expenditure on research initiatives in the future.

Strategic Area: **Social**
Indicator Name: **Research and Education**

Forest Value: **Community Benefits**
Indicator Number: **4B**

INDICATOR 4B - NUMBER OF PEOPLE PARTICIPATING IN PROGRAMS AT CUMBERLAND STATE FOREST		
Activity	2000/01	2004/05
School – lower primary	993	474
School – upper primary	2,059	4,672
School – secondary	906	423
School holiday activities	1,112	770
Information services –by phone	2,730	12,740
Information services –by email	1,823	3,500

Our education program has seen an increased focus on upper primary groups, however variations occur in line with changes in school syllabuses.

Strategic Area: **Social**
Indicator Name: **Regional Employment**

Forest Value: **Community Benefits**
Indicator Number: **5**

INDICATOR 5 - REGIONAL EMPLOYMENT			
Forest sector	Number of full time equivalents		
	1997/98	2003/04***	2004/05
Harvesting / Haulage	1,132	1,135	1,083
Primary processing*	4,328	5,183	5,234
Apiary	302	193	305
Grazing	165	279	767
Eco-tourism	88	43	91
Other**	136	405	343
Total	6,150	7,238	7,823

A drop in the number of people in the harvesting and haulage sectors may be attributed to the introduction of mechanised harvesting in some areas.

A one-in-seven year prolific flowering event of many eucalypt species, particularly spotted gums, which may have been triggered by the drought, saw apiary sites in State forest in particular demand this year.

The extended drought across NSW continues to see levels of employment in grazing and apiary industries grow as more operators access forest areas for scarce resources.

* Processing undertaken at a site where the input is raw material supplied by Forests NSW.

** Includes plantation establishment contractors, gravel extraction and other forest product removal.

*** Includes 2002/03 data for South East Region.



Strategic Area: **Social**
Indicator Name: **Other Forest Products**

Forest Value: **Community Benefits**
Indicator Number: **6**

INDICATOR 6 - OTHER FOREST PRODUCTS

Forest product	1997/98	2003/04	2004/05
Grazing (ha)	768,946	680,467	607,218
Apiculture (sites)	3,843	3,416	3,421
Leaf/oil (kg)	8,013	1,891	0
Seed (kg)	969	530	301
Bark (tonnes)	1,109	4	0
Firewood (tonnes)	75,615	74,393	85,607
Broombush (tonnes)	1,977	5,134	1,909
Charcoal (tonnes)	119	2,173	1,939
Craft timber (m ³)	33	21	10
Misc native plants pieces (no.)	1,219	84,087	103,352
Burls (tonnes)	44	6	315
Wood blocks (no.)	0	4,226	0
Film/documentary (permits)	3	3	7
Communication sites (permits)	126	104	145
Other structures (permits)	227	296	195
Powerlines/cables/pipelines (km)	2,886	838	678
Gravel/sand/rock (tonnes)	69,495	145,883	128,072
Research (permits)	215	67	71
Nursery seedlings to public (no.)#	1,148,000	1,047,000	885,000
Maps sold to public (no.)	5,491	2,254	19,599*
Total value (\$'000)	n/r	\$7,071	\$6,745

The importance of State forests for a diversity of products continues to grow, although variations are evident for each product type. A decline in retail nursery sales has occurred in response to drought conditions and water restrictions in some areas.

Does not include plantation stock sold to private plantation owners.

* This included maps sold to distributors that were not collected in the previous years.

Strategic Area: **Social**

Forest Value: **Staff**

Indicator Name: **Quality of Management**

Indicator Number: **7**

INDICATOR 7 - QUALITY OF MANAGEMENT

Year	Men	Women	REERM*	Persons with disability	Aboriginal and Torres Strait Islanders	Total staff**	Expenditure on HR mgmt (\$M)
1999/00	965	253	45	74	26	1,218	n/r
2003/04	873	214	48	64	24	1,087	\$2.45
2004/05	846	193	80	71	23	1,039	\$2.38

* REERM is an acronym for Racial, Ethnic and Ethno/Religious Minority Groups.

** Excludes casual staff.

*** HR is an acronym for human resources.

APPENDICES

Strategic Area: **Social**
Indicator Name: **Training**

Forest Value: **Staff**
Indicator Number: **8**

INDICATOR 8 - TRAINING*		
Course	2003/04	2004/05
Computer skills	26	232
Cultural heritage	100	239
Environmental	35	47
Fire	100	382
Flora and fauna identification and management	22	3
Forest harvest operator	110	205
Forest management, inventory and silviculture	42	25
HR management	77	45
Induction	127	34
Legal and administration	5	20
Maps reading and airphoto interpretation	9	45
OH&S - including chainsaw, 4WD training and first aid	891	997
Pest and weed control	11	6
Product Identification and assessment	47	19
Roading and road survey	2	20
Soil and water	87	161
Total	1,691	2,481
Expenditure on training (\$M)	\$2.90	\$2.92

Investing in the skills and capabilities of our workforce ensures efficient, effective and safe operations. Notable increases are evident in training in occupational health and safety, fire fighting and cultural heritage awareness.

* Number of employees and contractors trained.

Strategic Area: **Social**
Indicator Name: **Health and Safety**

Forest Value: **Staff**
Indicator Number: **9**

INDICATOR 9 - HEALTH AND SAFETY			
OH&S issue	2000/01	2003/04	2004/05
Number of safety meetings held	76	83	74
Number of lost time incidents (LTIs)	42	31	30
Days lost due to LTI's	1,203	217	234
LTI frequency rate	18.6	13.9	14.6
Provision of health or fitness services	n/r	187	174
Provision of specialised equipment or clothing	n/r	352	377
Risk assessments	n/r	293	431
Training*	n/r	107	342
Voluntary audits	n/r	146	183

Improved risk assessments are an objective of the new SMS, refer to the Social section of this report for further details of this initiative.

* This is a subset of Occupational Health and Safety (OH&S) training reported under Indicator 8.



Strategic Area: **Social**
Indicator Name: **Management of Cultural Heritage**

Forest Value: **Cultural Heritage**
Indicator Number: **10A**

INDICATOR 10A - MANAGEMENT OF CULTURAL HERITAGE

a) Protection of cultural heritage sites	1998/99	2003/04	2004/05
Total Aboriginal sites found	174	213	242
Total heritage sites (post settlement)	n/r	862	689
Number of cultural heritage surveys	n/r	308	300
Area managed for cultural heritage (ha)	n/r	14,070	11,584
Agreements for co-management of land (no.)	n/r	4	5
Agreements for co-management of land (ha)	n/r	53,987	54,187
Partnerships	n/r	14	10

The reduction in the area managed for cultural heritage primarily due to the reclassification of forests in the western part of the state during the Western Regional Assessment.

Strategic Area: **Social**
Indicator Name: **Management of Cultural Heritage**

Forest Value: **Cultural Heritage**
Indicator Number: **10B**

INDICATOR 10B - MANAGEMENT OF CULTURAL HERITAGE

b) Training in cultural heritage awareness	1998/99	2003/04	2004/05
Training in cultural heritage awareness (no. of people)	n/r	100	239

Strategic Area: **Environment**
Indicator Name: **Extent of Forest Type**

Forest Value: **Biodiversity**
Indicator Number: **11A**

INDICATOR 11A - EXTENT OF NATIVE FOREST TYPE

Percent of native forest type	1997/98	2003/04	2004/05
Alpine ash forest	n/d	1%	1%
Blackbutt forest	6%	5%	5%
Blue gum forest	8%	5%	5%
Messmate forest	11%	10%	10%
Mixed coastal eucalypt	8%	8%	8%
Non eucalypt forest	2%	1%	1%
Non forest	n/d	13%	10%
Other inland eucalypt types	2%	13%	16%
Rainforest	4%	4%	4%
River red gum forest	3%	5%	5%
Snow gum woodland	1%	1%	1%
Spotted gum forest	7%	8%	8%
Stringybark forest	13%	10%	10%
Un-classified	34%	3%	5%
White cypress pine forest	1%	12%	11%
Total	100%	100%	100%

While some significant decisions were made by the government regarding changes to the public forest estate during the year these will not come into effect until the 2005/06 financial year. As such only relatively minor changes to the estate occurred this year.

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Strategic Area: **Environment**
Indicator Name: **Extent of Forest Type**

Forest Value: **Biodiversity**
Indicator Number: **11B**

INDICATOR I1B - EXTENT OF PLANTED FOREST TYPE*			
Plantation type	1999/00	2003/04	2004/05
Softwood (<i>Pinus spp</i>)	57%	42%	41%
Hardwood (<i>Eucalyptus spp</i>)	14%	9%	10%
Total planted area	71%	51%	51%
Retained vegetation and infrastructure	21%	43%	43%
Land for future planting	8%	5%	5%
Other exclusions	n/r	1%	1%
Total planted forest estate	100%	100%	100%

* This figure includes State forest, joint venture and annuities. Areas for hardwood plantation include pre-1994 plantations that may or may not be accredited are also included.

Strategic Area: **Environment**
Indicator Name: **Native Forest Structure**

Forest Value: **Biodiversity**
Indicator Number: **12**

INDICATOR I2 - NATIVE FOREST STRUCTURE								Percent of Total Native Forest		
Forest Management Zoning (FMZ) Type 2004/05								1997/98	2003/04	2004/05
Structure class	Dedicated reserve (FMZ 1)	Informal reserve special management (FMZ 2)	Informal reserve harvest exclusion (FMZ 3A)	Special prescription (FMZ 3B)	General management (FMZ 4)	Non forestry use (FMZ 7)	Further assessment (FMZ 8)			
HCV Old Growth	0.8%	36.7%	58.4%	0.3%	3.3%	0.1%	0.5%	n/d	4.1%	4.1%
Rainforest	3.0%	34.9%	37.2%	0.6%	19.3%	0.1%	4.9%	n/d	3.9%	3.9%
Mature	1.5%	9.8%	13.7%	2.2%	63.8%	0.2%	8.8%	28.0%	23.9%	24.0%
Regrowth	0.8%	5.9%	5.9%	2.9%	76.8%	0.2%	7.4%	16.0%	22.7%	22.7%
Not assigned	0.9%	7.5%	12.1%	3.5%	70.7%	0.8%	4.4%	56.0%	45.4%	45.3%
Percent of total native forest	1.1%	9.9%	14.0%	2.8%	65.7%	0.5%	6.0%	100.0%	100.0%	100.0%



Strategic Area: **Environment**
Indicator Name: **Sightings of Surveyed Species**

Forest Value: **Biodiversity**
Indicator Number: **13**

INDICATOR 13 - SIGHTINGS OF SURVEYED SPECIES*

Species sightings	1997/98	2003/04	2004/05
Arboreal mammals	268	803	789
Ground mammals	195	89	94
Frogs	204	661	1,668
Bats	93	292	101
Raptors	86	197	169
Non raptor birds	110	904	1,815
Reptiles	n/r	10	2
Total	956	2,956	4,638
Number of fauna surveys	n/r	1,489	1,971
Sightings per survey	n/r	2.0	2.4
Expenditure on surveys (\$'000)	n/r	\$1,540	\$1,603

Mid North Coast Region reports that increases in sightings of stuttering frogs have resulted following the introduction of new survey techniques. Better tadpole identification methods have improved ecologists' abilities identify future populations of this species.

* Surveys for threatened flora are also undertaken before harvesting occurs however, these are not reported here.

Strategic Area: **Environment**
Indicator Name: **Pests and Weeds**

Forest Value: **Forest Health**
Indicator Number: **14**

INDICATOR 14 - EXPENDITURE ON PEST ANIMALS AND WEED CONTROL

Year	1997/98	2003/04	2004/05
Weeds	\$1,325,000	\$1,235,017	\$962,744
Pest animals	\$328,000	\$694,238	\$687,788
Total	\$1,653,000	\$1,929,255	\$1,650,532

Forests NSW Southern Region is participating in an innovative control program using llamas to protect lambing ewes. In conjunction with Tumbarumba Shire, local land holders, the Rural Lands Protection Board and Department of Environment and Conservation, the llamas will be part of an integrated program which will continue to use the already successful fox and dog baiting programs.

Strategic Area: **Environment**
Indicator Name: **Plantation Health**

Forest Value: **Forest Health**
Indicator Number: **15A**

INDICATOR 15A - HARDWOOD PLANTATION AFFECTED BY HEALTH ISSUES*

Agent	1998/99	2003/04	2004/05
Herbivorous and sap-sucking insects	23.80%	2.50%	2.00%
Stem borers (insects)	7.50%	0.14%	0.25%
Soil pathogens (fungi)	1.00%	0.00%	0.00%
Frost damage	n/r	0.00%	0.00%
Leaf and shoot fungi	n/r	0.50%	0.50%

* Based on 26,000 ha of the planted hardwood forest estate, post 1994.

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Strategic Area: **Environment**
Indicator Name: **Plantation Health**

Forest Value: **Forest Health**
Indicator Number: **15B**

INDICATOR 15B - SOFTWOOD PLANTATION AFFECTED BY HEALTH ISSUES*			
Agent	1998/99	2003/04	2004/05
<i>Dothistroma</i> (needle blight)	1%	0.50%	0.25%
<i>Sphaeropsis</i> (fungus)	3%	0.01%	0.01%
Boron deficiency	4%	0.01%	<0.01%
Sirex (insect)	0%	0.01%	<0.01%
Possum damage	0%	0.10%	0.50%
<i>Essigella</i> (aphid)	n/r	n/r	15%

This year a significant discovery occurred in the softwood plantation. The Monterey pine aphid (*Essigella californica*) has affected up to 15% of the plantation estate causing discolouration of the leaves and loss of needles. The researchers from our forest health group are working closely with the Regions to control this new pest.

* Based on 205,000 ha (the planted area of the softwood plantation estate).

Strategic Area: **Environment**
Indicator Name: **Fire Fighting and Prevention**

Forest Value: **Forest Health**
Indicator Number: **16**

INDICATOR 16 - FIRE FIGHTING AND PREVENTION			
Wildfire	1999/00	2003/04	2004/05
Total State forest estate burnt (%)	0.04%	1.50%	0.3%
Expenditure (\$M)	n/r	\$3.3	\$1.4
Fuel management			
Hazard reduction (ha)*	n/r	75,540	35,921
Grazing (ha)	n/r	680,467	497,378**
Expenditure (\$M)	n/r	\$7.6	\$6.8

A cool, wet summer, coupled with extensive effort in fuel management during 03/04 saw a very low incidence of wildfire over the 04/05 fire season. However the varying conditions across the state have reduced opportunities for hazard reduction burning in the lead up to the 05/06 season. Following from the hottest and second driest autumn on record and predicted below average rainfall over winter the Bureau of Meteorology has predicted a potentially serious fire season. Significant effort and resources have been invested in bringing employee training and preparedness up-to-date and various detection, management and reporting tools are being upgraded in readiness.

* Includes pre and post harvest burning.

** This area refers to an estimate of actual area grazed; previous years report on the total area leased for grazing.

Strategic Area: **Environment**

Forest Value: **Soil and Water Quality**

Indicator Name: **Soil and Water Management**

Indicator Number: **17A**

INDICATOR 17A - SOIL AND WATER MANAGEMENT			
	1999/00	2003/04	2004/05
Area assessed for soil and water (ha)	n/r	117,903	92,510
Number of soil and water surveys	n/r	372	316
Expenditure on harvesting supervision and environmental compliance (\$'000)	n/r	\$6,041	\$6,157
Area of forest harvested			
Area of native forest harvested	56,900	45,746	42,923
Area of softwood plantation harvested	14,000	12,783	11,820
Area of hardwood plantation harvested	2,000	0	0
Total area harvested	72,900	58,529	54,743
Percent of forest estate harvested	2%	2%	2%
Soil and water non-compliance incidents self reported	1,255	823	724
Fines received in relation to soil and water	3	0	1



Strategic Area: Environment Forest Value: Soil and Water Quality Indicator Name: Soil and Water Management Indicator Number: 17B

INDICATOR 17B - SOIL AND WATER MANAGEMENT

Land primarily assigned for catchment protection*	1999/00	2003/04	2004/05
Fully protected land (ha)**	290,700	233,672	231,334
Partly protected land (ha)***	30,200	81,171	95,162
Total	320,900	314,843	326,496
Percent of total area	10.5%	11.2%	11.7%

* Excludes substantial tracts of land otherwise zoned primarily for natural and cultural protection which also provide a catchment protective function.

** Includes Wetlands, Filter strips reserved from harvesting and areas with extreme risk of erosion or water pollution hazard.

*** Includes Forest Management Zone "Catchment" and filter strips protected in areas where modified harvesting methods are permitted.

Strategic Area: Environment
Indicator Name: Regulatory Compliance

Forest Value: Compliance
Indicator Number: 18

INDICATOR 18 - REGULATORY COMPLIANCE

Number of compliance check sheets conducted	1999/00	2003/04	2004/05
- 1st tier supervision checks	5,428	2921	3292
- 2nd tier supervision checks	420	383	391
- 3rd tier supervision checks		4	14
- 4th tier supervision checks		2	4
Total	5,848	3,310	3,701
<i>Potential compliance checks covered by check sheets</i>	204,636	110,122	124,108
Number of non-compliance incidents (NCI) recorded by Forests NSW supervision for corrective action			
- NCI's related to soil erosion & water quality	1,255	823	724
- NCI's related to flora and fauna	469	444	394
- NCI's related to fish habitat & passage	1	6	0
- other NCI issues (e.g. safety)	314	395	497
Total	2,039	1,668	1,615
<i>Compliance rate (%)</i>	99.99	99.98	99.99
Number of fines issued to Forests NSW by regulators			
- Fines to DEC (NPWS)	0	0	0
- Fines to DEC (EPA)	3	1	1
- Fines DPI Fisheries	0	0	0
Total	3	0	1
Number of prosecutions recorded against Forests NSW			
- Prosecutions by DEC (NPWS)	1	0	0
- Prosecutions by DEC (EPA)	0	0	1
- Prosecutions by DPI Fisheries	0	0	0
Total	1	0	1

The estimate of the average number of items checked per Harvest Inspection Report check sheet has been revised on the basis of information entered into the Harvest Tracking System. Data for previous years have been amended and will be reported accordingly.

Refer to the report on regulatory compliance in the Environmental section of this report for further details about this incident.

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Strategic Area: **Environment** Forest Value: **Environmental Services** Indicator Name: **Carbon Sequestration** Indicator Number: **19**

INDICATOR 19 - CARBON SEQUESTRATION			
Planted forest type	2002/03	2003/04	2004/05
Softwood (t)	3,654,974	3,647,013	3,638,173
Hardwood (t)	585,331	553,639	574,802

Assumptions:

CO₂ sequestered (tonnes CO₂e) = Net Plantation Area x MTBI x CP x CCF where:

MTBI = SBI + CBI + RBI where:

SBI (Stem Biomass Increment) = TSVI x BD where:

TSVI (Total Stem Volume Increment) - softwood = 16m³/ha/year and hardwood = 15m³/ha/yr

BD (Basic Density) - softwood = 0.42 t/m³ and hardwood = 0.55t/m³

CBI (Canopy Biomass Increment) = SBI x .1765

RBI (Root Biomass Increment) = (SBI + CBI) x .2

CP (Carbon Proportion) = 0.5

CCDF (Carbon to Carbon dioxide factor) = 3.667

Net Plantation Area = Net Stocked Area in State forests and joint venture plantations (refer Indicator 27)

Strategic Area: **Environment** Forest Value: **Environmental Services** Indicator Name: **Energy Consumption** Indicator Number: **20A**

INDICATOR 20A - ENERGY CONSUMPTION			
Year	Total Energy (GJ)	CO₂ Emissions (tonnes)	Green Energy Purchased (% of total energy)
1998/99	111,893	10,419	7.6%
2003/04	111,392	10,060	12.0%
2004/05	99,988	9,035	13.3%

Strategic Area: **Environment** Forest Value: **Environmental Services** Indicator Name: **Energy Consumption** Indicator Number: **20B**

INDICATOR 20B - FLEET				
Fleet	Fuel Type	2000/01	2003/04	2004/05
Light vehicles	Diesel	573	503	453
	Petrol	239	136	124
	LPG	n/a	1	1
	Hybrid		1	1
Total		812	640	579
Trucks and light plant	Diesel	139	184	208
	Petrol	11	15	4
	LPG	n/a	4	4
Total		150	203	216
Heavy plant	Diesel	86	85	62
	Petrol	0	1	0
Total		86	86	62

Strategic Area: **Environment** Forest Value: **Environmental Services** Indicator Name: **Material Consumption and Recycling** Indicator Number: **21**

INDICATOR 21 - MATERIAL CONSUMPTION AND RECYCLING			
	2002/03	2003/04	2004/05
Percent of waste recycled or re-used	53%	72%	72%
percent of product with recycled content	20%	20%	22%



Strategic Area: Economic

Forest Value: Marketing and Sales

Indicator Name: Volume of Timber Harvested

Indicator Number: 22

INDICATOR 22 - VOLUME OF TIMBER HARVESTED			
Product	1999/00	2003/04	2004/05
Sawlogs and veneer logs (m³)			
Native forest hardwood sawlogs	786,774	707,403	638,855
Hardwood plantation sawlogs	55,466	80,478	73,933
Cypress pine sawlogs	101,881	101,300	93,876
Plantation softwood sawlogs	1,648,790	1,859,732	1,828,938
Plantation softwood veneer logs	70,919	78,499	76,807
Native forest hardwood veneer logs	10,600	7,962	9,462
Hardwood plantation veneer logs	2,819	5,482	3,061
Total sawlogs and veneer logs	2,677,249	2,840,856	2,724,932
Poles, piles and girders (m³)			
Native forest hardwood	28,432	23,268	23,246
Plantation hardwood	5,479	8,129	8,636
Total poles, piles and girders	33,911	31,397	31,882
Round timber (m³)			
Preservation plantation softwood	56,422	45,595	34,895
Other native forest hardwood	11,169	0	0
Total round timber	67,591	45,595	34,895
Pulpwood (tonnes)			
Native forest hardwood pulpwood	503,546	491,292	467,810
Plantation hardwood pulpwood	82,660	35,040	32,057
Plantation softwood pulpwood	636,058	1,045,217	1,042,458
Total pulpwood	1,222,264	1,571,549	1,542,325
Other (tonnes)			
Other forest products (t)	7,575	40,309	54,203
Total other	7,575	40,309	54,203

Strategic Area: Economic

Forest Value: Marketing and Sales

Indicator Name: Product Mix of Timber Harvested

Indicator Number: 23

INDICATOR 23A - SAWLOG PRODUCT MIX FROM HARDWOOD FORESTS (NATIVE AND PLANTATION)			
Product	1995/6	2003/04	2004/05
Dry structural	21%	10.9%	10.2%
Floorboards	22%	42.5%	47.0%
Joinery/furniture	1%	2.7%	2.9%
Decking & panelling	4%	4.9%	4.8%
House framing	30%	21.8%	17.1%
Pallets	12%	8.3%	8.8%
High strength structural	2%	2.4%	2.3%
Fencing/landscape	8%	6.6%	6.8%

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Strategic Area: **Economic** Forest Value: **Marketing and Sales** Indicator Name: **Product Mix of Timber Harvested** Indicator Number: **23**

INDICATOR 23B - SAWLOG PRODUCT MIX FROM SOFTWOOD PLANTATIONS			
Product	1995/6	2003/04	2004/05
House framing	71%	72.6%	73.7%
Joinery/furniture	2%	2.0%	2.0%
Decking/panelling	1%	3.1%	3.2%
Floorboards/bearers/joists	3%	2.6%	2.3%
Fencing/landscape	7%	7.9%	7.7%
Other preservation	1%	3.2%	2.9%
Unseasoned	14%	8.6%	8.1%

Strategic Area: **Economic** Forest Value: **Marketing and Sales** Indicator Name: **NSW Greenhouse Gas Abatement Certificates** Indicator Number: **24**

INDICATOR 24 - NSW GREENHOUSE GAS ABATEMENT CERTIFICATES*	
	2004/05
Number of certificates created	166,005
Number of certificates traded	140,705

* This indicator does not relate to indicator reporting net atmospheric carbon sequestration in planted forests. These are related to only a portion of Article 3.3 consistent plantation.

Strategic Area: **Sustainability** Forest Value: **Productivity** Indicator Name: **Forest Management** Indicator Number: **25**

INDICATOR 25 - FOREST MANAGEMENT						
Area of forest within each Forest Management Zone (FMZ)	Land not available for harvesting (ha)			Land available for harvesting (ha)		
	1999/00	2003/04	2004/05	1999/00	2003/04	2004/05
Dedicated reserve (FMZ 1)	33,500	26,334	25,094	0	0	0
Informal reserve – special management (FMZ 2)	322,500	256,602	227,086	0	0	0
Informal reserve – harvest exclusion (FMZ 3A)	199,000	319,165	319,247	0	0	0
Special prescription (FMZ 3B)	54,500	61,081	29,460	13,500	36,285	34,950
General management native forest (FMZ 4)	387,500	323,583	519,196	1,368,000	1,164,474	983,066
Hardwood planted forest estate* (FMZ 5)	0	48,002	48,018	46,000	51,751	54,888
Softwood planted forest estate* (FMZ 6)	102,600	165,893	170,800	201,720	230,004	231,735
Non forestry use (FMZ 7)	8,000	7,162	11,099	0	0	0
Land for further assessment (FMZ 8)	0	0	0	326,500	126,145	137,480
Total forest estate	1,107,600	1,207,822	1,350,000	1,965,720	1,608,660	1,442,120

The reduction in the area available for harvesting and in areas managed through special prescription is primarily as a result of the reclassification of forests in the western part of the state during the Western Regional Assessment.

* Includes State forest (including pre 1994 plantations), joint venture and annuities.



Strategic Area: Sustainability
Indicator Name: Plantation Establishment and Survival

Forest Value: Productivity
Indicator Number: 26

INDICATOR 26 - PLANTATION ESTABLISHMENT AND SURVIVAL						
Year	Area planted (ha)			Cost (\$'000) of establishment	Percent with successful stocking after 1 year	
	Softwood plantation	Hardwood plantation	Total		Softwood plantation	Hardwood plantation
1995	4,732	941	5,673	n/r	n/r	n/r
2003	6,506	1,529	8,035	\$8,246	80%	78%
2004	6,764	1,164	7,928	\$8,246	93%	100%

The establishment of hardwood plantation has slowed over the past few years in response to changes in market conditions for plantation investment by third party investors.

Third party investor plantings such as TEPCO are included.

Strategic Area: Sustainability
Indicator Name: Mean Annual Growth in Plantations

Forest Value: Productivity
Indicator Number: 27

INDICATOR 27 - MEAN ANNUAL GROWTH IN PLANTATIONS			
Softwood plantation	2000/01	2003/04	2004/05
Annual increment* (m ³)	3,465,000	3,501,309	3,568,612
Net stocked area** (ha)	205,007	209,659	209,151
Mean annual increment*** (m ³ /ha/yr)	16.9	16.7	16.48
Hardwood plantation#	2000/01	2003/04	2004/05
Annual increment* (m ³)	n/d	n/d	365,035
Net stocked area** (ha)	n/d	n/d	26,915
Mean annual increment*** (m ³ /ha/yr)	n/d	n/d	13.6

The mean annual increment for softwood plantations was reviewed during the year and calculations were undertaken to provide an estimate for hardwood plantations for the first time. These will be refined further in the future as improved resource information becomes available.

* Annual increment is the change in volume of the planted estate.

** Net stocked area is the area of the estate where trees are planted (i.e. does not include roads, environmental exclusion areas, area awaiting regeneration etc) as at the end of the financial year.

*** Mean annual increment (MAI) is an indication of the productive potential of an average hectare within the estate. The silvicultural and harvesting regimes adopted can influence this figure considerably, so calculating MAI over a 15 year timeframe gives a more balanced figure.

Relates to post 1994 hardwood plantations only.

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Strategic Area: **Sustainability**
Indicator Name: **Native Forest Regeneration**

Forest Value: **Productivity**
Indicator Number: **28**

INDICATOR 28 - NATIVE FOREST REGENERATION			
Regeneration surveys	1997/98	2003/04	2004/05
No. of regeneration surveys undertaken	n/d	96	349
Area surveyed (ha)*	n/d	4,406	4,670
Percent with effective regeneration	n/d	86%	83%
Expenditure on silviculture and inventory (\$000)	n/r	\$3,893	\$3,718

The introduction of a new inventory policy, reported as under development last year, has resulted in further improvements in the number of regeneration surveys in native forests.

* Does not report regeneration "cypress release" surveys undertaken in cypress forests prior to harvesting.

Strategic Area: **Sustainability**
Indicator Name: **Sustainable Yield**

Forest Value: **Maintainability**
Indicator Number: **29**

INDICATOR 29 - REMOVAL OF MAJOR PRODUCTS COMPARED TO ALLOWABLE VOLUME			
Forest type	1999/00	2003/04	2004/05
Total native hardwood forest products	95%	97%	81%
Total native cypress forest products	97%	92%	88%
Total softwood planted forest products	95%	101%	92%
Total pulpwood	102%	101%	89%
Native hardwood forest pulpwood	100%	97%	94%

The harvesting of major products remained well within allowable limits due to the slow down in the housing market.

Strategic Area: **Sustainability**
Indicator Name: **Trading Profit**

Forest Value: **Maintainability**
Indicator Number: **31**

INDICATOR 31 - TRADING PROFIT			
	1999/00	2003/04	2004/05
Value (\$'000)*	29,541	37,860	36,819
\$'000 per employee	24.3	34.8	35.4

* Exclusive of forest revaluation, capital grants, superannuation fund interest and abnormals.

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(excluding cover, pages 2, 3, 13 and 19 images)

The report represents a combined effort of Forests NSW corporate and operational branches in terms of data provision and content. Thanks to all employees who contributed to this report and those who gave constructive feedback on this and previous Seeing Reports @.

FEEDBACK

We hope you found the Seeing Report valuable, informative and easy to read. We would like you to let us know what you think of it.

A feedback form for your opinions and comments is available on our website at www.dpi.nsw.gov.au/forests or you can just send us a letter or email with suggestions.

Thank you.

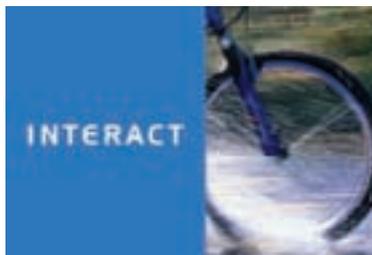
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Facts and Figures 2004-05



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Forests NSW is a public trading enterprise within the NSW Department of Primary Industries