

Forests NSW Seeing Report Supplement
2008-09

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Introduction

This document provides background and contextual information relating to Social, Environmental, Economic and Sustainability indicators contained within the Forests NSW Annual Report 2008-09.

1. Forests NSW Reporting Context

Forests NSW has a range of voluntary and statutory reporting commitments at the state, national and international levels.

The organisation has been producing public reports on environmental and social values since 1997-98. The Forests NSW sustainability report was entitled Seeing Report between 2001 and 2008. The title reflected our commitment to Social, Environmental and Economic reporting (Seeing). In 2009 the sustainability report was produced as an integral part of the Forests NSW annual report. Our history of reporting social, environmental and economic indicators is part of our commitment to communicate with the community, staff and other stakeholders and to monitor our performance in managing public forests for a range of values identified as being of particular importance to Forests NSW and our customers and stakeholders.

Forests NSW has a commitment to produce a corporate annual sustainability report on our Ecologically Sustainable Forest Management (ESFM), as part of our obligations under the NSW Forest Agreements from 1999.

Sustainability Reporting

Seeing reporting

Over the past twelve years Forests NSW has developed its reporting framework along the lines of sustainability reporting. The report addresses three key areas of sustainability - social, environmental and economic.

- Social – building partnerships and generating economic and social benefits within the community, especially for rural and regional communities; developing and valuing our staff.
- 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.
- Economic – ensuring an adequate return to the Government and public of NSW from the marketing of a range of values from the State's native forests and plantations; developing innovative products, services and mechanisms to facilitate investment in new planted forests and environmental values of forests.
- 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.

Within each performance area a number of forest values have been identified as fundamental to the sustainability of the organisation and the forests we manage. Each forest value is described using a number of specific indicators.

While each performance area, forest value and indicator is presented separately, the framework recognises that each indicator may relate to one or more performance area.

To demonstrate our performance symbols are used in the Performance tables at the beginning of each section to reflect progress towards meeting the stated objectives.

Forests NSW Annual Report 2008-09 has been assessed against the [Global Reporting Initiative Guidelines](#) (GRI 3) and determined to adhere to GRI Guidelines Application Level B. To view how our reporting relates to GRI 3 and view explanations on why a small number of indicators have not been reported see section 6 page 34.

Other Reports

In addition to research that Forests NSW directly carries out, Forests NSW also has a Memorandum of Understanding in place with NSW PDI through which Forests NSW supports research into key areas. You can find out more about these and other research projects in the [Science & Research & Forests NSW Research & Development Annual Report 2008-09](#).

Forests NSW continues to produce our Facts and Figures booklet.

In part 2 of the Forests NSW Annual Report details of Forests NSW financial and corporate performance as required under the *Public Finance and Audit Act 1983* and the *Annual Reports (Statutory Bodies) Act 1984* are recorded.

Forests NSW reports its performance on implementing both Regional Forest Agreements and NSW Forest Agreements by contributing to a range of state level reports:

- Regional Forest Agreement annual reports;
- Forest Agreement annual reports;
- Forest Agreement Criteria and Indicator reports;
- I FOA (Integrated Forestry Operation Approvals) reports;
- New South Wales State of the Environment report;

These reports are publicly available at the websites of the [NSW Department of Environment and Climate Change](#).

At a national level, Forests NSW contributes to the State of the Forests Report and internationally to the Montreal Process. These reports are downloadable from [Australian Government Department of Agriculture, Fisheries and Forestry](#) website.

Data Management

Forests NSW developed a social, environmental and economic data storage (SEEDS) system during the 2001-02 reporting period. The system was developed to streamline and integrate the collection and collation of data required for Forests NSW reporting requirements, as outlined above. The system has enhanced data consistency, accuracy in data collation and provides regions with data entry facilities and improved access to all levels of the data.

2. Forest Values and Indicators

SOCIAL

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

Forest Value – Community benefits

State forests are managed by Forests NSW on behalf of the people of NSW. Regional communities are particular beneficiaries of forestry, mainly through employment and income generation through timber processing and value-adding. Providing secure access for all forest users to pursue and enjoy a range of activities - small business, recreation and education activities - is important to Forests NSW. Managing such a large and geographically widespread resource provides many opportunities to form constructive community partnerships and to build our stakeholder relationships.

Indicator 1: Social responsibility

One way Forests NSW tries to improve its performance as a good corporate citizen is through facilitating Volunteer Programs. Forests NSW acknowledges the contribution of community volunteers who donate their time and efforts to assist Forests NSW in undertaking various activities.

This indicator includes the number and value of sponsorships, donations and waived fees provided to communities, schools, local councils, local Aboriginal Land Councils and other groups. We also include the number of volunteer programs undertaken and recognise the role of both community and staff volunteers in making these successful ventures.

Indicator 2: Public participation

Different communities have different values and expectations about forest management. Community engagement is necessary to better understand the range of local and general attitudes in relation forest management. Forests NSW is committed to involving the public in management decisions about State forests and the landscapes in which they occur. Our employees often organise and/or attend meetings and community forums related to land and forest management issues. The number of meeting and forums demonstrates our commitment to listening to and involving the public and contributing to the decision making process.

Forests NSW has developed a Stakeholder Identification Procedure which provides the 8 regions with a systematic method for assessing which stakeholder need to be contacted. This procedure provides the basis for identifying stakeholder groups recorded in Regional External Communication Plans.

Indicator 3: Recreation and tourism

Forests NSW recreation and tourism policy and strategy entitled *Living, working, playing...forests 2005-2009* sets the direction for access to forests and facilities for a wide range of activities for community benefit. Almost all State forests are available to the public year-round for a range of recreational activities. State forests have an extensive road network, maintained primarily for harvesting operations and fire management. However, this road network means that State forests are also accessible for a range of recreational pursuits. Many activities, such as mountain bike riding, horse riding, camping and four-wheel driving can be undertaken in State forests free of charge and often with greater flexibility than on other public lands. Organised groups can use State forests under a permit system that allows for public notification and orderly management of events, forest access and safety.

Monitoring the number and type of recreational facilities and the area of forest zoned primarily for recreation indicates our performance in meeting these needs. The management of recreational facilities is also a useful indicator of our commitment to managing forests for these values. This information is also available from the Forests NSW pages of the NSW DPI website, where the location of recreational facilities can be found. This new function provides improved information to those wishing to use State forests for recreational purposes.

Indicator 4: Research and education

Many management decisions are influenced by the findings of Forests NSW program of research and development. In conjunction with our contribution to education on forest management, Forests NSW takes part in many collaborative research programs with universities and cooperative research centres within Australia and around the

world. Monitoring our expenditure on research and education helps track our commitment to, and improve the scientific basis for, forest management and public awareness as well as understanding of forest ecosystems and sustainable management.

Forests NSW research goals currently focus on maintaining and expanding the State's planted forests and marketing the environmental benefits to be derived through the strategic location of planted forests in the landscape and the relationship between forests and climate change. Research emphasis has included investigation of the issues that impact on the establishment, management and quality of products from sustainable planted forests in lower rainfall areas as well as the traditional higher rainfall zones. Significant work has been directed at establishing the benefits of planted forests for such purposes as carbon sinks, identifying effective mine-site rehabilitation techniques, biodiversity enhancement and the development of sustainable land use practices for salinity-prone areas.

The Cumberland Forest Centre at West Pennant Hills in Sydney continues to be the focal point of our education program providing hands on experience for a range of school and community groups in and around Sydney and information for the general public about NSW public forestry.

Indicator 5: Regional employment

Forest management activities are an important source of employment in regional communities in NSW. It is useful to measure employment in forest related industries to monitor the social and economic benefits it brings to these communities and, more broadly, the NSW economy.

In this indicator direct employment refers to employment in traditional forest industries (eg forestry and logging and wood and paper products), forest management in government and industry, and other forest contact industries (eg eco-tourism and beekeeping). Indirect employment related to employment that is generated within a community as a result of direct forest employment (i.e. the multiplier effect from direct forest employment such as employment in service-based industries including shops, schools and hospitals)" (Montreal Process Implementation Group for Australia, November 2001). The multiplier used to calculate this is for every job generated in forest based industries in NSW, another 1.88 indirect jobs are generated at the State level.

Definitions, assumptions and examples

- Harvesting/Haulage - includes harvesting and haulage (timber transportation) contractors
- Primary processing - includes processing undertaken at a site where the input is raw material supplied by Forests NSW.
- Apiary - includes employment related bee-keeping sites leased in State forest.
- Grazing - includes that portion of grazing related industry accessing State forest, relates to leases and permits over State forest.
- Eco-tourism - includes employment related to eco-tourism ventures accessing State forest.
- Other - includes plantation establishment contractors, gravel extraction, forest product removal (leaves, seeds, and plants), commercial fire wood collectors and other timber harvesting such as sleepers, fencing and landscape materials.

In addition to employment figures based on our own data and estimates, we have published the forest dependant job within NSW based on information published by the Australian Bureau of Statistics derived from the 2006 Census.

Indicator 6: Other forest products

Forests provide many products and services other than timber that is processed in sawmills. Monitoring the supply and sale of specific products from forests helps us understand the extent to which forests remain an important multiple-use resource, supplying products sought by the community. Products may be for personal use or as part of a commercial enterprise. Forests NSW records many of these other products through the Permits and License System.

Definitions, assumptions and examples

- Grazing - hectares which have been leased for grazing of sheep and cattle
- Leaf/oil - harvested for products such as tea tree oil
- Seed - for nurseries, and revegetation programs
- Bark - for nurseries and landscaping (typically from pine plantation residues)
- Firewood - collected by individuals and commercial firewood collectors
- Broombush – *Melaleuca uncinata* used for the construction of fences
- Charcoal - for a wide range of uses including in nurseries for orchid production
- Craft timber - small quantities of specialist and unique timber products for furniture and craft
- Miscellaneous native plants pieces - small quantities of live plants such as ferns, for domestic use
- Burls - abnormal outgrowth from trunk highly prized by wood turners for it's decorative woodgrain

- Wood blocks - for wood turning and craft
- Film/documentary - feature films, advertisements and documentaries requiring a natural setting;
- Communication sites - transmission towers for mobile phone reception;
- Other structures - such as dams, water towers etc
- Power lines/cables/pipelines - linear features such as power lines, cables, water and gas pipelines that require access through State forest
- Gravel/sand/rock - provided through Forests NSW quarries
- Research - permits issued to research organisations or individuals by Forests NSW for programs undertaken in State forest
- Nursery seedlings to public - seedlings grown and sold through Forests NSW amenities nurseries. This does not include seedlings grown for Forests NSW plantations
- Advanced plants sold to the public - Plants, other than seedlings sold through Forests NSW amenities nurseries.
- Maps sold to the public - These include maps sold via the website
<http://www.mapshop.net.au/msnindex.html>

Forest Value – Staff

Forests NSW has identified key result areas in the Corporate Business Strategy 2009-10. The strategy identified a number of strategic directions relating to staff. The primary focus is safety. In addition Forests NSW commit to the training and development of its people.

Indicator 7: Quality of management

Forests NSW aims to provide a safe, productive and progressive work environment in each workplace where staff are located. The number of staff directly employed by Forests NSW is used as an indicator of the size of the task of human resources management and our ability to recruit and retain employees. This in turn is a reflection of the quality of management and the way in which working for Forests NSW is valued by its staff.

Indicator 8: Management and training

Employee skill and competency development is an investment in people and essential to the continued success of Forests NSW and the career growth of employees. The quality of personnel management is reflected in opportunities provided to employees for development and training. Indicators include expenditure on human resource management and training opportunities provided for staff.

Definitions, assumptions and examples

- Authorised Officer training – Under the *Forestry Act 1916*
- Communication & facilitation – Basic communication, conflict resolution, effective meetings, written communication
- Computer Skills - Arcview, computer based training, Forests NSW systems training
- Cultural heritage - Working within Cultural Heritage Requirements
- Environmental - Working within environmental constraints
- Fire - Aerial observer, basic fire fighter, crew leader, incendiary machine operator, rural prescribed burning, tanker operator, tower operator, incident management training
- Flora and fauna identification and management - Certificate of wildlife identification, certificate of wildlife survey techniques, wildlife management
- Operator training - Forest harvest operator, plantation establishment operator, chainsaw operator, plant operator
- Forest management, inventory and silviculture - Advanced diploma of forestry management, bachelor of applied science, inventory training, permanent growth plot measurement; silviculture training
- Human resource management - Continuous improvement, people skills for supervisors, staff selection
- Induction - Workplace induction
- Management & leadership – Supervisor development, managing staff performance, management development, time management
- Map reading and aerial photo interpretation - Aerial photograph interpretation, map reading;
- OHS training - including chemical use, traffic control and firstaid, aircraft awareness (safety), back care and manual handling, brushcutting, chainsaw (basic, intermediate and advanced), designated safety officer training, first aid, four wheel drive, OHS committee training, OHS & recovery supervisor training, workplace trainer and assessor

- OHS legislation and awareness – Harassment/Bullying, OHS legislation and safety management systems awareness, safety warden
- Pest and Weed Control - Feral Animal Management
- Product identification and assessment - Sawlog measurement & defect assessment
- Rooding and road survey - Road survey
- Soil and water - Forest soil and water course
- Workshops

Indicator 9: Health and safety

The Forests NSW Safety Strategy – ‘First Priority’ 2008-11 is available from our website and documents our mission, values and objectives. Progress on these objectives have been reported against in the Annual Report for 2008-09

Forests NSW aims to achieve a safety and rehabilitation record which is the best in the Australasian forestry industry. Continuous improvement will be measured through a reduction of the accident frequency rate, the lost time severity rate and days lost due to workplace accidents.

Forest Value – Cultural Heritage

Cultural heritage encompasses the qualities and attributes of places that have aesthetic, historic, spiritual, scientific or social value for past, present or future generations. These values may be seen in a place’s physical features, but importantly can also be intangible qualities such as people’s association with or feelings for a place.

Forests NSW is committed to continuing to improve our understanding, appreciation, management and conservation of Aboriginal and non-Aboriginal cultural heritage values in our forests. In particular, Aboriginal cultural places retain special values recognised by Forests NSW. These places may hold additional significance that is defined by the Aboriginal communities themselves.

Indicator 10: Management of cultural heritage

The number of cultural heritage surveys undertaken on State forests and the area managed for cultural heritage are indicators of the level to which Forests NSW incorporates considerations of cultural heritage values into landscape management. The number of corporative arrangements with Aboriginal groups is a further indicator of Forests NSW recognition of cultural heritage values. To ensure the management and protection of cultural heritage Forests NSW employees and external contractors employed in forestry operations are trained in cultural heritage awareness. Non aboriginal heritage sites are also recorded and protected on State forests.

Definitions, assumptions and examples

- Sites recorded in the Aboriginal Heritage Information Management System and Section 170 Register (under the *NSW Heritage Act 1977*) include:
 - Natural features - water-holes, rock shelters, mountain tops
 - Sites of historic importance - contact sites, massacre sites, mission sites, walk-off sites, etc
 - Art and ceremonial sites - rock engravings, art, bora rings, stone arrangements, ceremonial sites, etc
 - Sites associated with tools, artifacts and hunting - quarries, stone artifact scatters, scarred trees, grinding grooves, fish traps, etc
 - Sites associated with traditional Aboriginal life - camp sites, middens, burial grounds, etc
- Number of cultural heritage surveys - surveys undertaken prior to timber harvesting to ensure cultural heritage sites are found and protected
- Area managed for cultural heritage - Forest Management Zone with a Special Value 'Indigenous', land subject to custodianship or land with recognised native title
- Agreements for Co-management of Land - agreement made between Forests NSW and Local Aboriginal Land Councils and community groups to undertake co-management practices that provide mutual benefits

Cultural heritage training

Forests NSW Aboriginal staff have actively developed an innovative cultural heritage awareness program designed to give their fellow co-workers an insight into Aboriginal culture dealing with both contemporary and traditional issues that effect Aboriginal people. This indicator measures the number of Forests NSW staff and contracted forest workers trained annually on the program.

ENVIRONMENT

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

Forest Value – Biodiversity

A key objective of ecologically sustainable forest management is to maintain and/or enhance natural levels of biodiversity. The forests of NSW have high biodiversity that must be managed in a way that is mindful of the variety of forest ecosystems and the different ways that these respond to different management practices.

Forests NSW is committed to the management and conservation of the biodiversity in the forests we manage. This commitment includes:

- Maintaining the extent and range of forest types, their distribution and abundance.
- Maintaining a range of all forest structural classes across the landscape including the protection of high conservation value old growth forests, rainforest and rare ecosystems.
- Maintaining the diversity of flora and fauna in forests, with particular attention to threatened species and their habitats.
- Undertaking relevant management practices based on sound research and scientific understanding of ecological characteristics of forest types.
- Undertaking research and monitoring programs to improve understanding of species and ecosystems, ecological processes and ecosystem functions and develop tools for assessment and management.

Many areas of State forest have been recognised as having particular importance for the maintenance of biodiversity values. These areas are protected and managed for these values, which often results in special zoning (Forest Management Zones) and management prescriptions being applied during harvesting or the areas being excluded from harvesting altogether.

Forests NSW has in place an environmental policy through which it is recognised that planted and native forests represent a wide range of values and uses to the people of New South Wales. Our goal is to conserve and protect forest values ranging from biodiversity, ecosystem functions, forest productivity and the ability of forests to provide environmental services such as by acting as carbon sinks, as well as for the many recreational and cultural values they provide.

Indicator 11: Extent of forest type

To properly manage State forests, we need to know and understand the types of forest ecosystems, their management history and resultant structure of the forests, as well as other environmental factors. Forests NSW employs a range of specialist staff with expertise and training in silviculture (the science of forestry), ecology, botany, hydrology, soil science, geography, conservation and fire management. This knowledge allows us to determine the appropriate management practices that should be applied in different parts of the forest estate. Employees also undertake training in certain areas to ensure their knowledge remains up to date and their skills adequate for forests we manage. To find out more about Forests in Australia visit www.australianforests.org.au

Native forest

The native forest estate managed by Forests NSW comprises over 200 recognised forest ecosystem types, which are organised into broad forest types listed below. Each type has a unique combination of flora, fauna and other characteristics. Monitoring changes in the area and nature of these forests over time helps us make decisions about resource utilisation, silviculture, conservation and other issues relating to forest management.

Definitions, assumptions and examples

Broad native forest type	Description
Alpine ash forest	Highland/Tableland Forest types including alpine ash, mountain gum and manna gum
Blackbutt forest	Forest that is dominated by blackbutt with sub-dominant species such as spotted gum, Bloodwood, angophora species, sydney blue gum, bangalay, scribbly gum and sydney peppermint
Blue gum forest	Typically moist forest dominated by sydney blue gum and may include bangalay, flooded gum, tallowwood, brush box, dunn's white gum and turpentine
Messmate forest	Forest dominated by messmate or brown barrel often with peppermints and stringybarks as sub-dominant species
Mixed coastal eucalypt forest	A broad forest classification including the grey gum - grey ironbark league, grey box, ironbark and forest red gum
Other inland eucalypt forest types	A very broad forest classification including yellow box, white box, black box, bimble box, west ern box, various Ironbark species and black cypress pine
Rainforest	All rain forest types including dry and depauperate rainforest, subtropical rainforest, cool temperate rainforest and warm temperate rainforest
River red gum forest	Forest types dominated by river red gum
Snow gum woodland	Forest types dominated by snow gum and may include black sallee candlebark, mountain gum and manna gum as sub-dominant species
Spotted gum forest	Forest dominated by spotted gum often with blackbutt, grey box, bangalay, ironbark, grey gum, sydney blue gum, yellow stringybark or white stringybark
Stringybark forest	Forest dominated by stringybark species (yellow, white, red, blue-leaved, needlebark, silvertop) and may also include silvertop ash, scribbly gum, brittle gum and some box species
White cypress pine forest	Forest dominated by white cypress pine which may also include ironbark, bloodwood, redgum and box forests
Non-eucalypt forest	Includes forests dominated by species such as wattle, swamp oak, river oak, paperbark, mangroves, bull oak and swamp mahogany
Non forest	Areas of cleared land, heath community, broom, mallee, saltbush, swamps, other water bodies, natural grassland, rock, sand, herb or shrub dominated communities
Un-classified	Areas for which the forest type has not been classified and assigned to one of the broad forest types listed above

Planted forest

The area and percentage of plantation managed by Forests NSW is an indicator of our commitment to meet both domestic and international markets in wood supply as well as in energy, carbon sequestration and third party investment.

The size of the plantation estate managed by Forests NSW continues to increase. There has been continuing public and private investment in the establishment of new forests for timber as well as other environmental services such as carbon sinks and combating salinity. Significant progress has also been made in gaining commitments to establish plantations in partnership with private investors.

Definitions, assumptions and examples

- Hardwood plantation - planted forests of native hardwood species such as blackbutt (*Eucalyptus pilularis*), flooded gum (*Eucalyptus grandis*) and Spotted gum (*Corymbia maculata*)

- Softwood plantation - planted forests of (typically) exotic softwood species such as radiata pine (*Pinus radiata*) and southern pine but may also include native softwoods such as hoop pine (*Araucaria cunninghamii*) and bunya pine (*Araucaria bidwillii*)
- Retained vegetation and infrastructure - the area of the planted forest estate that has not been planted and which may include native forest types, water sources etc
- Land for future planting - land that has been recently harvested or recently purchased but which has not yet been planted
- Other exclusions - roads, infrastructure etc

Indicator 12: Native forest structure

Forest structure refers to the physical features of a forest which reflect the natural environment and management history of the forest. Largely determined by forest type, age and past disturbance such as timber harvesting and fire, forest structure is an important consideration when planning future management, including harvesting, of forests. The structure of the forest is reflected in the proportion of trees of different age and size over given area.

For comparative analysis and management purposes, three forest structure classes are referred to in eucalyptus forests: regrowth forest, mature forest and high conservation value old growth. The proportion of older trees increases progressively through these categories.

Rainforest is also included because it has high conservation value and may have a proportion of the canopy dominated by eucalyptus species.

Areas identified as high conservation value old growth forest are not available for harvesting or silvicultural improvement. Areas identified as regrowth or mature forest may have specific silvicultural practices applied to enhance their productive capacity. A stable forest landscape requires a balanced range of forest structures in all forest types.

An objective of our forest management is to preserve habitat that is critical for the survival of native species in our forests, particularly for threatened species. Protection and enhancement of critical fauna habitat requires management for a range of forest types and structure classes across the native forest estate. To protect critical habitat, Forests NSW must ensure that the appropriate mix of forest types and structure classes is maintained across the landscape.

Definitions, assumptions and examples

- High conservation value old growth - Eucalyptus forest that, through the Regional Forest Agreement process, has been mapped and agreed as Old Growth (which is forest dominated by trees that are over-mature or senescent (aging) and which are of a forest ecosystem type that is of special conservation importance
- Rainforest - a type of tropical forest that is dominated by closely spaced trees forming an unbroken canopy
- Mature - Eucalyptus forest that is dominated by trees that are healthy, vigorous, mature trees;
- Regrowth - Eucalyptus forest that is dominated by trees that are young, vigorous and still growing;
- Un-assigned - forest for which structure cannot be determined because they are not Eucalyptus dominated forest ecosystems or for which structural assessment has not been undertaken.

Source: 1 - National Forest Inventory www.brs.gov.au/nfi

Indicator 13: Flora and fauna

During the planning phase of forestry operations flora and fauna surveys are undertaken to determine the presence of native species or their preferred habitat.

Forests NSW routinely compiles a list of sightings and recordings of targeted species of fauna and flora on State forest as part of pre-harvest planning or pre-hazard reduction burning. Special wildlife surveys are also carried out for research purposes. Sightings, past or new, trigger species-specific protocols as prescribed in the IFOA that are adopted in harvesting plans.

Forests NSW also undertakes a range of projects and programs to improve our understanding of how flora and fauna respond to management.

Targeted fauna species

Target species	Latin Name	NSW Threatened Species Act
Arboreal mammals		
Brush-tailed phascogale	<i>Phascogale tapoatafa</i>	Vulnerable
Eastern pygmy-possum	<i>Cercartetus nanus</i>	Vulnerable
Greater glider	<i>Petauroides volans</i>	Endangered population
Koala	<i>Phascolarctos cinereus</i>	Vulnerable
Squirrel glider	<i>Petaurus norfolcensis</i>	Vulnerable
Yellow-bellied glider	<i>Petaurus australis</i>	Vulnerable
Ground mammals		
Black stripped wallaby	<i>Macropus dorsalis</i>	Endangered
Broad-toothed rat	<i>Mastacomys fuscus</i>	Vulnerable
Brush-tailed rock-wallaby	<i>Petrogale penicillata</i>	Endangered
Hastings river mouse	<i>Pseudomys oralis</i>	Endangered
Long-footed potoroo	<i>Potorous longipes</i>	Endangered
Long-nosed potoroo	<i>Potorous tridactylus</i>	Vulnerable
Parma wallaby	<i>Macropus parma</i>	Vulnerable
Red-legged pademelon	<i>Thylogale stigmatica</i>	Vulnerable
Rufous bettong	<i>Aepyprymnus rufescens</i>	Vulnerable
Smoky mouse	<i>Pseudomys fumeus</i>	Endangered
Southern brown bandicoot	<i>Isodon obesulus obesulus</i>	Endangered
Spotted-tailed quoll	<i>Dasyurus maculatus</i>	Vulnerable
White-footed dunnart	<i>Sminthopsis leucopus</i>	Vulnerable
Western pygmy-possum	<i>Cercartetus concinnus</i>	Endangered
Frogs		
Peppered frog	<i>Litoria piperata</i>	Vulnerable
Glandular frog	<i>Litoria subglandulosa</i>	Vulnerable
Southern corroboree frog	<i>Pseudophryne corroboree</i>	Endangered
Northern corroboree frog	<i>Pseudophryne pengilleyi</i>	Vulnerable
Davies' tree frog	<i>Litoria daviesae</i>	Vulnerable
Giant barred frog	<i>Mixophyes iteratus</i>	Endangered
Giant burrowing frog	<i>Heleioporus australiacus</i>	Vulnerable
Glandular frog	<i>Litoria subglandulosa</i>	Vulnerable
Green and golden bell frog	<i>Litoria aurea</i>	Endangered
Green-thighed frog	<i>Litoria brevipalmata</i>	Vulnerable
Littlejohn's tree frog	<i>Litoria littlejohni</i>	Vulnerable
Pouched frog	<i>Assa darlingtoni</i>	Vulnerable
Red-crowned toadlet	<i>Pseudophryne australis</i>	Vulnerable
Sphagnum frog	<i>Philoria sphagnicolus</i>	Vulnerable
Stuttering frog	<i>Mixophyes balbus</i>	Endangered
Mountain frog	<i>Philoria kundagungan</i>	Endangered
Loveridge's frog	<i>Philoria loveridgei</i>	Endangered
Yellow-spotted tree frog	<i>Litoria castanea</i>	critically endangered
Fleay's frog	<i>Mixophyes fleayi</i>	Endangered

bats		
Beccari's freetail-bat	<i>Mormopterus beccarii</i>	Vulnerable
Common bent-winged bat	<i>Miniopterus schreibersii</i>	Not listed
Eastern bent-wing bat	<i>Miniopterus schreibersii oceanensis</i>	Vulnerable
Eastern cave bat	<i>Vespadelus troungtoni</i>	Vulnerable
Eastern false pipistrelle	<i>Falsistrellus tasmaniensis</i>	Vulnerable
Eastern long-eared bat	<i>Nyctophilus bifax</i>	Vulnerable
Eastern freetail bat	<i>Mormopterus norfolkensis</i>	Vulnerable
Eastern mastiff bat	<i>Chalinolobus dwyeri</i>	Vulnerable
Golden-tipped bat	<i>Kerivoula papuensis</i>	Vulnerable
Greater broad-nosed bat	<i>Scoteanax rueppellii</i>	Vulnerable
Greater long-eared bat	<i>Nyctophilus timoriensis</i>	Vulnerable
Grey-headed flying fox	<i>Pteropus poliocephalus</i>	Vulnerable
Hairy-nosed freetail bat	<i>Mormopterus " sp 6"</i>	Endangered
Hoary wattled bat	<i>Chalinolobus nigrogriseus</i>	Vulnerable
Inland forest bat	<i>Vespadelus baverstocki</i>	Vulnerable
Large-eared pied bat	<i>Chalinolobus dwyeri</i>	Vulnerable
Large-footed myotis	<i>Myotis adversus</i>	Vulnerable
Little pied bat	<i>Chalinolobus picatus</i>	Vulnerable
Little bent-winged bat	<i>Miniopterus australis</i>	Vulnerable
Yellow-bellied sheath-tail bat	<i>Saccolaimus flaviventris</i>	Vulnerable
Raptors		
Barking owl	<i>Ninox connivens</i>	Vulnerable
Masked owl	<i>Tyto novaehollandiae</i>	Vulnerable
Powerful owl	<i>Ninox strenua</i>	Vulnerable
Red goshawk	<i>Erythrotriorchis radiatus</i>	Endangered
Sooty owl	<i>Tyto tenebricosa</i>	Vulnerable
Square-tailed kite	<i>Lophoictinia isura</i>	Vulnerable
Non raptor birds		
Albert's lyrebird	<i>Menura alberti</i>	Vulnerable
Black-chinned honeyeater	<i>Melithreptus gularis</i>	Vulnerable
Black-necked stork	<i>Ephippiorhynchus asiaticus</i>	Endangered
Black-breasted button-quail	<i>Turnix melanogaster</i>	critically endangered
Black-throated finch	<i>Poephila cincta</i>	Endangered
Brown treecreeper (eastern subsp.)	<i>Climacteris picumnus victoriae</i>	Vulnerable
Bush-stone curlew	<i>Burhinus grallarius</i>	Endangered
Diamond firetail	<i>Stagonopleura guttata</i>	Vulnerable
Cotton pygmy-goose	<i>Nettapus coromandelianus</i>	Endangered
Double-eyed fig-parrot	<i>Cyclopsitta diophthalma coxeni</i>	Endangered
Eastern bristlebird	<i>Dasyornis brachypterus</i>	Endangered
Eastern quoll	<i>Dasyurus viverrinus</i>	Endangered
Gang-gang cockatoo	<i>Callocephalon fimbriatum</i>	Vulnerable
Glossy black-cockatoo	<i>Calyptorhynchus lathami</i>	Vulnerable
Grey-crowned babbler (eastern subsp.)	<i>Pomatostomus temporalis temporalis</i>	Vulnerable
Hooded robin	<i>Melanodryas cucullata</i>	Vulnerable
Major mitchell's cockatoo	<i>Cacatua leadbeateri</i>	Vulnerable
Marbled frogmouth	<i>Podargus ocellatus</i>	Vulnerable
Olive whistler	<i>Pachycephala olivacea</i>	Vulnerable
Pink robin	<i>Petroica rodinogaster</i>	Vulnerable

Purple-crowned lorikeet	<i>Glossopsitta porphyrocephala</i>	Vulnerable
Red-tailed black-cockatoo	<i>Calyptorhynchus banksii</i>	Vulnerable
Regent honeyeater	<i>Xanthomyza phrygia</i>	Endangered
Regent parrot (eastern subsp.)	<i>Polytelis anthopeplus monarchoides</i>	Endangered
Rufous scrub-bird	<i>Atrichornis rufescens</i>	Vulnerable
Scarlet-chested parrot	<i>Neophema splendida</i>	Vulnerable
Speckled warbler	<i>Pyrrholaemus saggitatus</i>	Vulnerable
Spotted-tailed quoll	<i>Dasyurus maculatus</i>	Vulnerable
Superb parrot	<i>Polytelis swainsonii</i>	Vulnerable
Swift parrot	<i>Lathamus discolor</i>	Endangered
Turquoise parrot	<i>Neophema pulchella</i>	Vulnerable
White-eared monarch	<i>Monarcha leucotis</i>	Vulnerable
Wompoo fruit dove	<i>Ptilinopus magnificus</i>	Vulnerable
Reptiles		
Broad-headed snake	<i>Hoplocephalus bungaroides</i>	Endangered
Heath monitor	<i>Varanus rosenbergi</i>	Vulnerable
Pale-headed snake	<i>Hoplocephalus bitorquatus</i>	Vulnerable
Rosenberg's goanna	<i>Varanus rosenbergi</i>	Vulnerable
Stephens' banded snake	<i>Hoplocephalus stephensii</i>	Vulnerable

Definitions, assumptions and examples

- Arboreal mammals - Mammals that dwell in trees, such as koalas, gliders, possums;
- Ground mammals - Mammals that dwell on or in the ground such as potoroos, rats, wallabies, bandicoots, wombats and quolls;
- Amphibians - frogs and toadlets;
- bats - bats and flying foxes;
- Raptors - Birds of prey such as owls, hawks, kites and eagles;
- Non raptor birds - Such as robins, whistlers, parrots, doves, cockatoos;
- Reptiles - Lizards and snakes.

Flora species

Details of targeted flora species along with all licence conditions are found in the [IFOA Threatened Species Licences](#), which are available at www.environment.nsw.gov.au.

Forest Value - Forest Health

A healthy and vital forest promotes biodiversity and productivity and also provides a greater range of possible community uses, products and benefits. Controlling populations and the effects of pest animals and weeds, conserving site fertility, reducing the impact of damaging insect and fungal pests and managing fire risks and bushfires are critical components of our forest management practices.

The conservation of biodiversity and opportunities for social and economic development are enhanced by healthy and stable forest ecosystems, across all tenures. Forests NSW has produced Ecologically Sustainable Forest Management Plans (ESFM) plans for all Regions. ESFM plans address such essential areas as: fire management, insect and disease management, forest regeneration, feral and introduced predator control, weeds management and forest research projects.

The NSW DPI Forest Health Management Program has corporate knowledge of the potential damage agents, pests and diseases, of forests. Techniques to detect and accurately measure the extent of disease using remote sensing such as multi-spectral imagery are finding increased application.

Fire is an important component of healthy forests and many Australian forest ecosystems depend on fire for regeneration and renewal. However the frequency of large and intensive fires must be managed and controlled. Bushfire risk and bushfire suppression management plans have been developed in conjunction with local communities and agencies, and hazard reduction and fire suppression programs have been implemented to protect forests, plantations and the nearby community from the effects of severe wildfire.

Indicator 14: Pests and weeds

Tracking expenditure on programs to control pest animals and weeds is an indicator of the effort made to maintain the health and vitality of forest ecosystems. Information about the extent of control efforts is also presented, particularly where significant outbreaks have occurred or have been controlled. Forests NSW is working closely with other land managers and local landholders to develop effective joint management strategies for the control of wild dogs and foxes.

Definitions, assumptions and examples

- Weeds - bathurst burr, blackberry, blue heliotrope, boxthorn, camphor laurel, crofton weed, galvanised burr, giant parramatta grass, golden dodder, gorse, groundsel bush, horehound, lantana, lippia, mother of millions, nodding thistle, pampas grass, patterson's curse, prickly pear, salvinia, scotch broom, serrated tussock, spiny burr grass, St Johns wort, sweet briar, thistle, tiger pear, tree of Heaven, tree pear and willow
- Pests - Possums and wallabies
- Feral Animals - Carp, deer, horses, cattle, goats and rabbits
- Introduced predators - Cats, dogs, foxes and pigs

Indicator 15: Plantation affected by insect and disease

Forests NSW invests significantly in the establishment of new planted forests and replanting of harvested areas. In order to protect these plantations, the DPI Forest Health Survey Unit monitors for the presence of threatening biological agents and critical nutrient deficiencies and undertakes appropriate control or remedial measures.

The indicator for this forest value is the percentage of planted forest affected by selected agents that are severe enough to potentially cause a deleterious affect on plantation health and vitality. Surveys are undertaken over all or part of the plantation estate. For hardwood plantations surveys focus on that portion of the estate that was established after 1994.

This year the species listed has been amended to reflect recent prevalence of diseases and syndrome.

Indicator 16: Fire fighting and fire prevention

Fire can be either beneficial or detrimental to forest ecosystems depending on a variety of factors. Most eucalypt forests are dependent upon fire for regeneration and renewal but some species, such as river red gum (*Eucalyptus camaldulensis*), are fire-intolerant.

Wildfires occur every year in the forests of NSW. They may threaten life, property and/or assets and Forests NSW places a high priority on suppressing wildfires and on preventing wildfires from occurring. Planted forests are particularly vulnerable as softwood plantations and to a lesser extent hardwoods are threatened with destruction by severe or frequent fire events. This can result in significant financial losses for Forests NSW as these plantations represent a significant long term financial investment.

Forests NSW aims to reduce the frequency and size of wildfires by early intervention and by undertaking fuel management activities. Regional Fuel Management Plans are developed in conjunction with other fire-fighting agencies and local councils. Strategies are customised for the forest types being managed and the natural and climatic features of the areas in which they are to be implemented.

A program of hazard reduction burning of targeted areas is undertaken each year to reduce fuel loads and thus the potential impact of wildfires and make fire suppression safer and more effective. Areas of forest identified as 'high-risk' should wildfire occur are intentionally burnt by low intensity fire of a manageable size, under controlled conditions.

Small scale, localised burning is often undertaken after timber harvesting to promote regeneration or during the establishment of planted forests to remove residual groundcover.

Grazing is also effective for managing fuel loads because it reduces the amount of fine fuel in forests without using fire. Grazing is particularly suited to forests with fire-intolerant species such as river red gum (*Eucalyptus camaldulensis*) and cypress pine (*Callitris glaucophylla*). Forests NSW has management plans in place to address specific fire reduction issues relating to these species

Forests NSW accesses a lightning strike detection system and numerous fire towers to detect fire out-breaks. The organisation has also built up an extensive network of road and fire trails to rapidly gain access to fires. Significant training is also undertaken annually to make sure that all employees who are involved in fire suppression and management have the relevant skills to be safe and effective.

Forest Value - Soil and Water

Forests play an essential role in the protection and maintenance of soil and water resources. Conservation of soil and water contributes to the catchment health and biodiversity values of the landscape.

Through our Forest Practices Codes, operational manuals and guidelines, Forests NSW is committed to using world's best practice to ensure that soil and water quality are not adversely impacted by roading and timber harvesting operations. Our forest management also aims to maintain the soils in State forests to support natural forest ecosystems and ecosystem processes.

Effective implementation of soil and water protection is further assisted through the regulatory conditions prescribed in Environment Protection Licences, issued by the Environment Protection Authority (EPA within NSW Department of Environment and Climate Change). The EPA monitors the implementation of licence conditions.

Forests NSW also undertakes a program of water quality sampling and long term monitoring.

Indicator 17: Protection of soil and water

Prior to the establishment of any roads in forests that are scheduled for timber harvesting, a soil survey is undertaken, by an accredited officer, to identify areas that may be susceptible to soil erosion. These surveys represent a systematic assessment for soil erosion hazard and help determine which water pollution prevention measures are put in place before harvesting commences.

The entire Forests NSW estate is managed for catchment protection. However this indicator reports on the area of land that is zoned 'catchment' as the primary special value in our Forest Management Zoning system (ie has a special emphasis for catchment protection). It also includes the current estimate of the extent of stream-side reserves and extreme soil erosion hazard land that is protected within the 'general management' native forest zone and the current estimate of the extent of filter strips in planted forest.

The indicator does not include land that has been primarily zoned for other ecological purposes, but for which catchment protection is also an important objective. Consequently, Informal Reserves that are managed primarily for flora or fauna are not included in this indicator.

Definitions, assumptions and examples

- Land primarily assigned for catchment protection - Excludes substantial tracts of land otherwise zoned primarily for natural and cultural protection which also provide a catchment protective function
- Fully protected land - includes wetlands, filter strips reserved from harvesting and areas with extreme risk of erosion or water pollution hazard
- Partly protected land - Includes Forest Management Zone 3b, special value "Catchment" and filter strips protected in areas where modified harvesting methods are permitted

Forest Value – Compliance

All harvesting operations conducted by Forests NSW are subject to various regulatory regimes. In the native forests of eastern NSW, the regulatory regime is explicitly documented in legislation and detailed in such documents as the Integrated Forest Operations Approvals (IFOA) under the NSW Forest Agreements and the Regional Forest Agreements with the Commonwealth. In other parts of the state harvesting is undertaken in accordance with conditions agreed between Forests NSW and other government agencies.

The plantation areas are covered by a comprehensive Code of Practice under the *Plantations and Reafforestation Act 1999*. This Code specifies the conditions associated with soil and water management to be implemented for all planted forests operations. Although planted forests do not have flora, fauna and cultural heritage issues to the same extent as the native forests, the code addresses management actions in case these where protection of these attributes are required.

During harvest planning and licensed harvesting operations, Forests NSW and external harvesting contractors are required to comply with conditions set out in this Code or under the IFOAs and established best practice standards. To ensure that these requirements are met, Forests NSW supervises, checks and audits the work of contractors and is, in turn, subject to audit and inspection by the independent regulatory agencies.

FNSW also complies with the Environment Protection Licence issued to Forests NSW by DECC. The conditions implemented are consistent with the risk associated with the each operation.

Following the completion of four Forest Agreements in New South Wales, a large proportion of forests managed by Forests NSW are regulated under IFOAs. These IFOAs reflect the policy of the NSW Government to promote an

ecologically sustainable, value added and secure native forest timber industry while establishing clear, consistent and strong environmental protections for areas available for timber harvesting.

Indicator 18: Regulatory compliance

The number of audits undertaken and the number of fines and breaches reported are used to monitor compliance with both Codes of Practice and external licence conditions. Forests NSW undertakes routine monitoring for compliance and orders corrective action by contractors where necessary. These are registered and tracked through the Non-Conformance and Improvement System

The number of compliance check sheets completed by Forests NSW staff is proportional to the number of harvesting operations during the year, and also depends on the type and duration of each harvesting operation as checks are undertaken every two weeks of each operation.

Forest Value – Environmental services

Environmental services is a term given to the benefits generated for society by the existence and dynamic development of natural resources, in this case with a particular focus on forests.

Forests are key ecosystems for the planet's long term sustainability. They produce oxygen and remove CO₂ from the atmosphere. They regulate the surface and underground flow of water. They smooth out peaks and troughs in water availability and provide very effective filtration systems for higher water quality. They support a wide range of native flora and fauna species. And they provide many valuable goods and services, ranging from timber rights through to pleasure knowing that they simply exist.

Regrettably, many of the services or benefits provided by forests either were not recognised or were accorded little value. As a consequence, the true value of these services only became widely known when the services themselves were lost through historical removal of the forest. Examples include soil erosion, loss of nutrients, floods, poor quality water, salinity, flora and fauna extinction, climate change and low resilience to stress in resulting farming systems.

Planted forests have the potential to act as carbon sinks to absorb some of the greenhouse gases that have been building up in the atmosphere, particularly over the last century, as a consequence of land clearing and burning fossil fuels. Timber products also store carbon, which would otherwise be released back into the atmosphere as dead and dying trees decompose.

During 07-08 Australia became a signatory to the Kyoto Protocol. Progress was made toward the implementation of a national Carbon Pollution Reduction Scheme with the publication of a white paper in July 2008. These are important steps towards recognising forests role in climate change mitigation.

Indicator 19: Carbon sequestration

This indicator expresses the total annual carbon sequestration within our existing planted and native forests. The calculations are affected by changes in the net stocked area, assume estate-wide mean annual increments (growth rates) for softwood and hardwood plantations and assume region wide mean annual increments (growth rates), based on native forest valuation data supplied to the NSW Auditor General's Office.

The carbon accounting models used to estimate the total sequestered CO₂ each year over the last few years from the total planted forest estate is a very simplified one. The calculation is based on the net area of plantation (ie after any final harvesting). This method may change again as the models are further refined to include, for example, carbon sequestered in the undergrowth, litter and soil (which have been excluded from this calculation).

A more comprehensive carbon accounting system is used for the subset of the total plantation estate that is consistent with Article 3.3 of the Kyoto Protocol. This refined system underpins the number of certificate creates under the [NSW Greenhouse Gas Abatement Scheme](#).

This is the second year Forests NSW has reported on carbon sequestration in native forests. The assumptions used are the best available to date and may change in subsequent reporting periods. The models used report the amount of carbon stored in forest products, along with emissions associated with harvesting and forest fire emissions.

Definitions, assumptions and examples

The quantum of atmospheric carbon sequestered in Forests NSW plantations is determined using the following formula which has been developed by Forests NSW through work undertaken with the CRC for Greenhouse accounting:

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

CO₂ sequestered (tonnes CO₂ e) = 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 0.1765

RBI (Root Biomass Increment) = (SBI + CBI) x 0.2

CP (Carbon Proportion) = 0.5

CCDF (Carbon to CO₂ factor) = 3.667

The quantum of atmospheric carbon sequestered in Forests NSW native forests is determined using the mean figure derived from using following formula (a) along with the AGO model (b):

Model a

CO₂ sequestered (tonnes CO₂ e) = 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) native forest average = 5m³/ha/yr

BD (Basic Density) = 0.325t/m³ (source AGO 2006)

CBI (Canopy Biomass Increment) = SBI x 0.1765

RBI (Root Biomass Increment) = (SBI + CBI) x 0.2

CP (Carbon Proportion) = 0.5

CCF (Carbon to CO₂ factor) = 3.667

Model b is based on Weighted Average Growth rates in the AGO methodology 2006 (refer table A1) for the estimation of GHG emissions and sinks for the broad forest types within State forest

Indicator 20a: Energy consumption

As an organisation Forests NSW is committed to reducing its contribution to atmospheric carbon during the process of managing and harvesting forests. Forests NSW subscribes to the [NSW Government Energy Management Policy](#) (GEMP) objectives and the [Australian Government Greenhouse Energy program](#) as an integral part of our business.

Indicator 20b: Fleet

FNSW ongoing commitment is to ensure a safe, reliable and practical motor vehicle fleet that further demonstrates the organisations economic and environmental management disciplines. During the year a revised *Light Fleet Selection and Accessorisation Policy* was finalised, which is aimed at optimising FNSW fleet composition such that it meets the business needs of the organisation in a cost-effective and environmentally responsible manner.

The NSW Government's *Cleaner Vehicles Action Plan*, has as one of its key initiatives an improvement in the environmental performance of the NSW Government vehicle fleet. This initiative will encourage the procurement of smaller, cleaner and less polluting vehicles, reduce fuel consumption and greenhouse emissions and save both on vehicle purchase and running costs. FNSW supports these broad energy and environmental principles and will contribute to such outcomes by pursuing sound motor vehicle choices.

This indicator reports the number of fleet in three categories by fuel type:

- Light vehicles owned by Forests NSW (eg sedans, wagons, utes)
- Trucks and light plant owned by Forests NSW (eg trucks, tankers)
- Heavy plant owned by Forests NSW (eg dozers, graders)

Indicator 21a: Material consumption and recycling

Forests NSW participates in the [NSW Waste Strategy 2007](#). This strategy contains targets and proposes priority areas and actions to guide the work of all key groups in NSW in contributing to the minimisation of environmental harm from waste disposal and the conservation and efficient use of our resources.

Further details on policy are contained within the [NSW Government Sustainability Policy](#).

Indicator 21b: Water usage

The State-wide target contained in the [NSW Government Sustainability Policy](#) to reduce total potable water consumption by 15% by 2010-11 (from 2005-06 levels). While 2005-06 water usage figures have not been collated,

Forests NSW is confident that this target will be met, due to significant improvement in water efficiency in the production nursery process, particularly at the Blowering Nursery. In addition Forests NSW has closed a number of facilities over the last number of years, which will lead to further water savings.

Forests NSW water usage has been collected for each of the facilities operated by Forests NSW. While water usage has been taken from billing information, with estimates based on comparable offices made for less than 1% of the total amount recorded.

ECONOMIC

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

Forest Value - Marketing and Sales

The marketing and sale of timber is included as a forest value in recognition of its importance to the organisation and the community. The steps involved in the timber production life cycle are harvest planning, harvesting operations and processing into the end product at the mills, monitoring of regeneration and growth for future harvest.

In NSW, timber is harvested from trees that grow either in native forest areas or in Planted Forests Operations Branch Inventories of how much and what type of trees are in the forest are undertaken and are used to develop 3-year plans of operations for individual compartments that range in size from tens to hundreds of hectares.

Once the timber has been harvested, it is transported to mills for further processing. Most timber goes to sawmills which produce various sawn timber products such as house framing, fencing, floorboards, decking and furniture. Some logs are processed into round timber such as telegraph poles and treated posts or into veneer for plywood. Sawmill residue and pulpwood logs are used for pulp and paper and reconstituted timber products (eg particle board, medium density fibre-board (MDF)).

The Commercial Services Branch of Forests NSW, with support from industry groups, assesses the markets for timber products, timber end-use prices and volume trends over time. This helps the industry understand how the timber market is performing, where there will be short falls in supply to domestic markets and what products and species need to be planted, managed and cut in the future.

Indicator 22: Volume of timber harvested

Change in the volumes of logs and other products harvested reflects both the market fluctuations in the building industry and more importantly demand for different timber products. Trends in timber supply volumes and the mix of harvested products is of interest to many of our key stakeholders and therefore the data is reported here.

Indicator 23: Sawlog product mix of timber harvested

Market demand for sawn timber contributes significantly to the type and volume of timber that is removed from different forest types. As market demand for sawn products changes so does the type, volume and quality of timber removed from forests. Monitoring change in product mix helps us plan our harvesting operations to make sure market demands can be met and reinforces our focus on value-added products.

Indicator 24: Carbon accounting compliant with NSW Greenhouse Gas Reduction Scheme

The *NSW Greenhouse Gas Reduction Scheme* (GGAS) commenced on 1 January 2003. It is one of the first mandatory greenhouse gas emissions trading schemes in the world. GGAS aims to reduce greenhouse gas emissions associated with the production and use of electricity.

Each certificate accredited represents one tonne of CO₂ removed from the atmosphere.

Forests NSW is seeking smooth and equitable transition arrangements for abatement certificate providers operating under the NSW Greenhouse Gas Abatement Scheme. The NSW Greenhouse Gas Abatement Scheme is due to be replaced by the national scheme in 2010.

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

Forest Value - Productivity

One of our main forest management objectives is to ensure our forest practices, including timber harvesting, are undertaken in a manner which provides for a perpetual supply of forest products in line with community expectations and to ensure all disturbed native forests are properly regenerated.

Managing forests is a long-term process. The impact of decisions and actions in our management today may not be readily visible in the forest for many decades. New management practices need to be researched over long time and practices implemented often take many years before they have an effect on forest growth and productivity. Monitoring and maintaining the forest's productive capacity is critical to the continued ability to provide, in perpetuity, the range of products and services demanded by society.

Indicator 25: Forest management

Within the estate managed by Forests NSW, an important sustainability indicator is the proportion of the forest estate that has a special management focus on conservation and how much of the forest has a management focus on timber production, subject to IFOA prescriptions to protect other forest values. The area available for timber production is a major determinant of the sustainable supply of raw timber products to the timber processing industry.

Definitions, assumptions and examples

The forest estate is classified according to management intent. Known as Forest Management Zones (FMZ) each area is managed according to a range of primary values, which also determine whether the forest will be made available for harvesting.

- FMZ 1:** Dedicated Reserve/Special Protection - Management to maximise protection of very high natural and cultural conservation values. Not available for timber harvesting
- FMZ 2:** Informal Reserve (Special Management) - Specific management and protection of natural and cultural conservation values where it is not possible or practical to include them in zone 1. Not available for timber harvesting
- FMZ 3a:** Informal Reserve (Harvest Exclusion) - Management for conservation of identified values and/or ecosystems and their natural processes. Areas where harvesting is excluded but other management and production activities not permitted in zone 1 or 2 may be appropriate (eg grazing or mineral exploration)
- FMZ 3b:** Special Prescription - Management for conservation of identified values and/or ecosystems and their natural processes. The zone is available for timber harvesting but minimised in design and implementation to maintain or enhance the values that the area is zoned to protect
- FMZ 4:** General Management Native Forest - Management of native forests for timber production utilising the full range of silvicultural options as appropriate; and conservation of broad area habitat and environmental values which are not dependent on the structure of the forest. Available for timber harvesting
- FMZ 5:** Hardwood planted forest estate - Management of hardwood plantations to maximise sustainable timber production on a continuing cyclical basis
- FMZ 6:** Softwood planted forest estate - Management of softwood plantations to maximise sustainable timber production on a continuing cyclical basis
- FMZ 7:** Non forestry use - Management of cleared (non-forested) areas, such as those used for special developments such as infrastructure
- FMZ 8:** Land for further assessment - An interim zoning of areas where field investigation is required to determine final Forest Management Zone classification. Field investigation will be undertaken as part of pre-harvest planning. Management will be for protection under the same requirements as zone 3a until field investigation has taken place.

The area included in this indicator will include areas of forest that are managed by Forests NSW but which may not be dedicated State forest. Forest Management Zoning may be determined over areas such as Western Lands Leases

prior to timber harvesting. For more information of see the *Managing Our Forests Sustainably Forest Management zoning in NSW State Forests* publication

Indicator 26: Plantation establishment and survival

This indicator tracks the area of new ("first rotation") plantation and harvested and replanted ("second or third rotation") plantations established during the year. New planted forests are only established on land that was cleared in the past for agricultural purposes that is either purchased by Forests NSW or by contractual arrangements (ie joint ventures or annuities) with private land owners.

The establishment of new planted forest and re-establishment of existing planted forest after final harvesting contributes to the development of a sustainable timber supply in NSW. The final productivity of a newly planted forest depends on achieving vigorous growth in the first few years. Forests NSW monitors the effectiveness of the establishment of newly planted forest by undertaking surveys of seedling survival in the first year after planting. If survival rates are generally low or low in specific locations, the failed areas are replanted. Forests NSW does not clear land for the purpose of establishing plantations.

Survival surveys are undertaken annually (on a calendar year basis) one year after planting.

Indicator 27: Mean annual growth in plantations

High productivity in our planted forests is essential to achieving long term supplementation of timber from native regrowth forests. Monitoring the mean annual volume change in planted forests tells us whether we need to be seeking to improve productivity through additional attention to forest health, maintenance of soil fertility, improvement in genetic stock and/or improvement in silvicultural practices.

Definitions, assumptions and examples

- Annual increment - Annual increment is the change in volume of the planted softwood estate
- Net stocked area - Net stocked area is the area of the estate where trees are planted (ie does not include roads, environmental exclusion areas, area awaiting regeneration etc) as at the end of the financial year
- Mean annual increment - Mean annual increment (MAI) is an indication of the productive potential of an average hectare within the estate. The MAI is derived for a species, for example radiate pine, or for a management area, for example Central region. The silvicultural and harvesting regimes adopted can influence this figure considerably.

Indicator 28: Native forest regeneration

This indicator monitors the maintenance of the productive capacity of our native forests through regeneration. Regeneration of native forests after harvesting is the source of future forests and the key to maintaining future timber supplies as well as other ecological values within forest ecosystems. The nature of Eucalypt and Cypress pine forests allows for the natural regeneration of seedlings following a logging operation. In adverse conditions, restocking is undertaken by Forests NSW to ensure adequate regeneration occurs.

Forest Value - Maintainability

Indicator 29: Sustainable yield

The volume of high quality veneer logs and sawlogs that can be harvested each year is set at a sustainable level to maintain productive forest ecosystems in the long term. For native forests in eastern NSW, this level has been established through the Regional Forest Agreement process and is reflected in timber supply agreements with industry. Elsewhere, the level of production in native forests is based on forest type, yield history and the advice of Forests NSW operational, resources, marketing and research. Harvesting in plantations is measured against commitments to industry.

The harvesting of lower quality logs and other wood products is integrated with the harvesting of high quality logs. In the longer term it is important that the level of actual harvest does not exceed the agreed sustainable level of production.

Indicator 30: Forest Certification

In December 2006 Forests NSW was certified as compliant with the *Australian Forestry Standard* {(AFS) AS 4708: 2007} by NCS International (NCSI), which is accredited by JAS-ANZ to audit against this internationally recognised forest management standard.

The standard is based on criteria for sustainable forest management agreed on by the PEFC Council (*Programme for the Endorsement of Forest Certification schemes*), which is an independent, non-profit, non-governmental organisation, that promotes sustainably managed forests through independent third party certification. PEFC is a global umbrella organisation for the assessment of and mutual recognition of national forest certification schemes, such as the Australian Forestry Standard.

In addition the organisation was certified to the Environmental Management System ISO 14001:2004 earlier in 2006. ISO 14001:2004 meets the criteria and requirements of 1 of the 9 Australian Forestry Standard criteria, however maintaining ISO 14001:2004 is not required to keep AFS certification. Instead ISO 14001:2004 certification has been maintained as a matter of good business practice.

Indicator 31: Trading Profit

The trading profit of the Forests NSW reflects the efficiencies of the organisation in undertaking our primary function of providing a commercial and sustainable supply of timber to NSW. As a trading enterprise, Forests NSW also looks to other markets to ensure the best value is derived from the State forests prime product, timber. During 2008-09, Forests NSW reviewed its accounting policies and the following changes each impacted negatively on the overall trading result. The first three points are explained in note 3 to the 2009 financial statements.

- Interest payments are no longer capitalised - \$10 million impact
- Plantation establishment costs are no longer capitalised - \$13.6 million impact
- Improvements to Shire roads are expensed - \$2 million impact
- Provision for "onerous" (ie loss-making) contracts, brought to account for the first time - \$4 million impact.

Despite incurring a trading loss, Forests NSW generated a net cash surplus of \$7 million for the year, \$5 million of which was used to retire debt.

3. Governance

Forests NSW is the public trading enterprise within the New South Wales Department of Primary Industries (NSW DPI).

The Honorable Ian McDonald MLC is the Minister responsible for the Primary industries portfolio (other portfolios included Energy, Mineral Resources and State Development) and the Department is headed by the Director General, Mr. Richard Sheldrake.

DPI Corporate Planning

The *DPI Corporate Plan* (2008 – 2011) articulates the vision, values and strategic directions. The vision of 'profitable, adaptive and sustainable primary industries building vibrant communities' will be achieved through focusing on the following Key Result Areas:

- Strong economic performance of primary industries
- Appropriate access to and wise management of natural resources
- Safe, healthy and biosecure industries
- A strong voice for primary industries
- Excellence in people, innovation and service delivery.

The structure of NSW DPI

The CEO of Forests NSW, Mr. Nick Roberts sits on the NSW DPI Board of Management along with eight other NSW DPI Directors, each of whom heads a Division within the organisation.

Note that at the time of publication significant changes had occurred in the structure of NSW DPI. These are documented in both the Forests NSW Annual and NSW DPI Annual Reports.

Forests NSW Corporate Business Strategy

To achieve the above DPI vision FNSW has developed a *Corporate Business Strategy (2009-10)* identifying the strategic business directions for the coming years. These are:

1. FOCUS

Our focus is on excellence in profitable and sustainable forest management including:

- Safety
- Profitability and cash flow
- Environmental sustainability
- Customer service and customer satisfaction
- Inventory and resource modelling
- Innovation, technical capability and Operational efficiency
- Risk management and protection of assets

2. ORGANISATIONAL EFFICIENCY

We are committed to making optimal use of our assets through:

- Training and developing our people
- Clearly defined roles and expectations
- Performance management and benchmarking
- Critical review, selection and prioritisation of activities and ventures we undertake
- Tools and systems that deliver results

3. REVENUE GROWTH

We will increase revenue by focusing on:

- Market pricing
- Value recovery and increasing long term value
- New business and product diversity
- Forest management services

4. COST REDUCTION

We will reduce costs through

- Continued re-evaluation of our business and operational practices
- Planning and process improvement
- Benchmarking and adoption of best practice
- Reduction in overheads
- Better procurement

5. SIMPLIFICATION

We will simplify the way we work including:

- Management systems
- Organisational structure and functions
- Sales and pricing
- Regulation and compliance

Forests NSW corporate structure

To deliver on this Forests NSW structure is along six operational lines:

- Planted Forests Operations
- Native Forests Operations
- Financial and Operational Business Services
- Human Resources
- Land Management and Forestry Services
- Commercial Services

Within each branch there are number of units and programs designed to address a particular aspect of Forests NSW business and operational activities. Each branch is lead by a director, who also sits on the Senior Management Team for Forests NSW.

4. Legislative and policy context

Forests NSW and State forests are administered in accordance with the *Forestry Act 1916* and its regulations. Forest NSW develops and implements a range of policies as guided by the objects of this legislation, in accordance with the principles of ecologically sustainable forest management.

Within this policy context Forests NSW determines management of the areas under its control, with innovative approaches to forest management, silviculture, biodiversity conservation and other values. The decision making process is also influenced by a regulatory regime, which provides a number of the parameters to be accommodated in management.

The regulatory regime under which Forests NSW operates is in accordance with a number of Acts and regulations including:

- *Forestry Act 1916,*
- *Environmental Planning and Assessment Act 1979;*
- *National Parks and Wildlife Act 1974;*
- *Protection of the Environment Administration Act 1991;*
- *Protection of the Environment Operations Act 1997;*
- *Fisheries Management Act 1994;*
- *Plantations and Reafforestation Act 1999;*
- *Timber Marketing Act 1977,*
- *Threatened Species Conservation Act 1994;*
- *Native Vegetation Act 2003*
- *National Parks and Forestry Estate Act YEAR?*
- *Brigalow and Nandewar Community Conservation Area Act 2005;*

How these are implemented varies for different regions and forests.

Regional Forest Agreements

For many State forests, particularly on the east coast, assessments were conducted as part of the State-Commonwealth Regional Forest Agreement (RFA) process. RFAs are one of the principle means of implementing the *National Forest Policy Statement* of 1992 under which the Commonwealth and all State and Territory Governments agreed to work towards a shared vision for Australia's forests. NSW RFAs are agreements between the Commonwealth and the NSW Governments on the future use and management of the State's coastal native forests. A RFA is a 20-year agreement with three main objectives:

- to protect environmental values in a world class Comprehensive, Adequate and Representative (CAR) Reserve system of dedicated and informal reserves and areas protected by prescription;
- to encourage development of an internationally competitive timber industry;
- to manage native forests in an ecologically sustainable way.

They are the result of years of scientific study, consultation and negotiation covering a diverse range of interests. RFAs are in place for Eden, North East (Upper North East and Lower North East) and Southern (South Coast and Tumut) NSW. Copies of NSW RFAs can be downloaded from this web page: www.daff.gov.au

The *Forestry and National Parks Estate Act* formalised the identified conservation reserves through the transfer of certain State forest and other Crown land to the national park estate. The Act also provides for the making of NSW Forest Agreements.

A NSW forest agreement is one means by which NSW implements the obligations and undertakings arising from an RFA for a region. A forest agreement contains provisions that promote ecologically sustainable forest management, sustainable timber supply, community consultation on forestry operations and arrangements concerning native title rights and interests or land claims, as well as other provisions the Ministers consider appropriate. Forest agreements establish a co-operative framework at a strategic, rather than operational, level for the management of forested areas across all tenures, including national parks.

Forest agreements were prepared for all regions now covered by an RFA. These agreements were signed by the Ministers administering the *Environmental Planning and Assessment Act 1979*, the *Forestry Act 1916*, the *National Parks and Wildlife Act 1974*, the *Protection of the Environment Administration Act 1991* and the *Fisheries Management Act 1994*.

In May 2005 the NSW Government announced the outcomes from the Western Regional Assessments (WRAs) for the Brigalow and Nandewar Bioregions in May 2005, covering Forests NSWs Western Region. An entirely new land tenure was created as part of this decision, by creating a community conservation area which will provide for conservation outcomes, sustainable timber, minerals and other industries and is underpinned by strong community involvement. The *Brigalow and Nandewar Community Conservation Area Act 2005* provides the legislative basis for this tenure.

Forests NSW plantations are regulated by the *Plantations and Reafforestation Act 1999* and its Regulations (Code of Practice). This Act and Code are administered by the Department of Primary Industries They aim to promote and encourage the establishment of plantations by both the public and private sectors and provide a uniform “one stop shop” regulatory environment for both sectors across the whole of New South Wales. The Act also provides for the development of equitable arrangements for road funding to service the needs of the plantation timber processing industry.

Forests NSW policies and codes of practice

A suite of policies has been implemented to help guide sustainable forest management practices. While not explicit in their stated objectives several policies seek outcomes that contribute to sustainable forest management. These policies are listed in the Forests NSW Statement of Affairs on our web page and copies are available if you contact the FOI Coordinator on telephone (02) 9872 0111 Fax (02) 9873 1048, or email lalw@sf.nsw.gov.au.

These include:

Compensation:

- Compensation for Loss or Damage of Personal Property of Forests NSW Employees and Volunteers

Financial:

- Accounts Payable Policy
- Corporate Credit Cards Policy
- Credit Management Policy
- Procurement of Goods and Services Policy
- Tendering Policy

Fire Management:

- Fire Management Policy

Fleet Management:

- Fleet Insurance Policy and Procedures
- Forests NSW Light Fleet Replacement and Ordering Policy
- Forests NSW Vehicle Use and Care Policy
- Light Fleet Selection and Accessorisation Policy
- ME&FS Equipment Maintenance and Engineering Change Policy
- ME&FS External maintenance Approval Policy
- Motor Vehicle Policy
- Salary Package Motor Vehicle Accessories
- Salary Packaged Vehicle Replacement & Insurance Excess Policy

Forest Management:

- Forest Codes of Practice
- Environmental Policy
- Forest Operator and Contractor Licences
- Forest Roads, Legal Access for Private Use (Right-of-Way or Easement)
- Forest Recreation Policy and Strategy

Information Management:

- Privacy and Personal Information Protection Policy
- Public Access to Planning Information
- Records Management Policy

Occupational Health & Safety:

- Health and Safety Policy
- Safe Driving Policy

Human Resources:

- Drug and Alcohol Policy
- Forests NSW Scholarship Policy
- Forests NSW Study Assistance Policy
- Harassment Policy
- Managing Reasonable Adjustment and Employment for People with a Disability Policy
- Volunteer Policy

Strategic Management:

- Commitment to Ethical Practices
- Equity Policy
- Ethnic Affairs Priority Statement
- Forest Management Zoning in NSW Forests Policy
- Participation in International Project Policy
- Reasonable Adjustment During Pregnancy Policy
- Residual Forest Biomass Policy

Note: Forests NSW Policies are under constant review and may vary as Government policy or circumstances dictate.

Forest NSW has developed a number of *Forest Practice Codes* to identify non site specific terms and conditions for forestry activities that have the potential to impact on environmental values. These include codes for:

- Timber harvesting in Forests NSW plantations;
- Timber harvesting in native forests;
- Plantation establishment and maintenance; and
- Forest roads and fire trails.

5. Major customers and associated products and services

Manufacture area	Main species used	Products/Services
Plywood	Mixed hardwoods	Plywood flooring & stairs, structural bracing, formply (concrete construction), external cladding
Major softwood sawmillers	Radiata pine	Structural softwood timber for dwelling construction and renovation markets, internal joinery (eg windows and architraves) and furniture timbers, landscape timbers, treated softwood poles, treated decking, etc.
MDF and particleboard	Radiata pine	Medium density flooring and particleboard products such as flooring, cabinets, benchtops, furniture components, etc
Softwood preservation	Radiata pine	Treated timber for outdoor applications such as decks, pergolas, landscape timbers, etc.
Pulp and paper	Mixed hardwoods	Newsprint, writing paper, cardboard, personal hygiene paper products, etc
Export woodchip	Mixed hardwoods	Newsprint, writing paper, cardboard, personal hygiene paper products, etc
Major hardwood saw millers	Mixed hardwoods coastal and tablelands (including native cypress pine)	Kiln dried and green structural timber, strip flooring, furniture and joinery timber, bridge and engineering timber products, power poles, plywood products, external cladding decking, etc.
Investors	Radiata pine and plantation hardwoods	Plantation investment, carbon credit
Utilities and infrastructure	n/a	Telecommunications, electricity supplier.

Hardwood/ Softwood	Type	Customer name	State	Capacity
Hardwood	Sawmill/roundwood	A.S. Nicholas & Sons Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	Adams Sawmill Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	Albert Johnson Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Allied Timber Products	NSW	100,000>
Hardwood	Sawmill/roundwood	Aquafern Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	Arbuthnot Sawmill Pty Ltd	Victoria	<19,999
Hardwood	Reconstituted board	Australian Hardboards	Queensland	<19,999
Hardwood	Sawmill/roundwood	Australian Ironwood Antique Timbers Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Auswest Timbers (ACT) Pty Ltd	ACT	20,000-99,999
Hardwood	Sawmill/roundwood	B&S Timbers Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Baradine Sawmilling Company Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood & veneer/plywood	Big River Timbers Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	Bingara Cypress Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Blayney Treated Pine	NSW	<19,999
Hardwood	Sawmill/roundwood	Blue Ridge Hardwoods Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood & veneer/plywood	Bonum Sawmills Pty Ltd	Victoria	<19,999
Hardwood	Sawmill/roundwood	Boral Ltd	NSW	100,000>
Softwood	Sawmill/roundwood	Braidwood Sawmill	NSW	<19,999
Softwood	Veneer/plywood	BRT trading as Ausply Pty ITD	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	C.J. & A Woods Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	C.J. & A Woods Pty Ltd trading as Newville Hardwoods	NSW	<19,999
Softwood	Sawmill/roundwood & reconstituted board	Carter Holt Harvey Ltd	NSW	100,000>
Softwood	Veneer/plywood	Carter Holt Harvey Ltd	Victoria	20,000-99,999
Hardwood	Sawmill/roundwood	Coffs Harbour Hardwoods trading Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Colenden Pty Ltd	NSW	20,000-99,999
Softwood	Sawmill/roundwood	Correctional Services Industries	NSW	<19,999
Softwood	Sawmill/roundwood	D & R Henderson Pty Ltd	Victoria	20,000-99,999
Softwood	Sawmill/roundwood	Dale & Meyers Operations Pty Ltd	Queensland	<19,999
Hardwood	Sawmill/roundwood	Darlington Point Sawmills Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	Davis & Herbert Pty Ltd	NSW	100,000>
Hardwood	Sawmill/roundwood	E & RJ Hay Co Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Fenning Timbers (Aust.) Pty Ltd	NSW	20,000-99,999

Hardwood/ Softwood	Type	Customer name	State	Capacity
Hardwood	Sawmill/roundwood	Ford Timbes Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	Grafton Sawmilling Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Grants Timber Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Gulargambone Cypress Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Gulpa Sawmill Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Gunnedah Timbers Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Gwabegar Sawmill Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Hardwood Resources	NSW	<19,999
Hardwood	Sawmill/roundwood	Hayden Timbers Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Hensons Sawmills Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Highland Pine Products Pty Ltd	NSW	100,000>
Softwood	Sawmill/roundwood	Humula Timbers Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Hurfords Building Supplies Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Hyne & Sons Pty Ltd	NSW	100,000>
Hardwood	Sawmill/roundwood	ITC Timber Pty Ltd	Victoria	<19,999
Hardwood	Sawmill/roundwood	J Notaras & Sons Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Jamieson Bros. Pty Ltd	Victoria	<19,999
Hardwood	Sawmill/roundwood	Kempsey Timbers Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Kilmore (Nymboida) Holdings Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Koppers Wood Products Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	L.M. Hayter & Sons Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Leonard J Williams (Timber) Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Lido Frame Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	M & B Dyer Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Machins Sawmill Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	McVicars Timber Group	NSW	100,000>
Hardwood	Sawmill/roundwood	MecTech Cartage Pty Ltd	Victoria	<19,999
Hardwood	Sawmill/roundwood	Merbein Sawmills Pty Ltd	Victoria	<19,999
Hardwood	Sawmill/roundwood	Midway Pty Ltd	Victoria	<19,999
Hardwood	Sawmill/roundwood	Newell Creek Sawmilling Co. Pty Ltd	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	Niewee Creek Sawmill Pty Ltd	NSW	<19,999
Softwood	Pulp and paper	Norske Skog Paper Mills (Australia) Ltd	NSW	100,000>
Hardwood	Sawmill/roundwood	North Coast Hardwoods Pty Ltd	NSW	<19,999

Hardwood/ Softwood	Type	Customer name	State	Capacity
Hardwood	Sawmill/roundwood	O'Brien Redgum Sawmills Pty Ltd	Victoria	<19,999
Hardwood	Sawmill/roundwood	Outback Timbers Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Pacpine Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Paul Herbert Timber Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Penrose Pine Products Pty Ltd	NSW	20,000-99,999
Softwood	Sawmill/roundwood	Pentarch Forest Products Ltd	NSW	100,000>
Hardwood	Sawmill/roundwood	Peter John Mather	NSW	<19,999
Softwood	Sawmill/roundwood	Queensland Commodity Exports Pty Ltd	Queensland	<19,999
Hardwood	Sawmill/roundwood	R.G. Grant & Co Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	R.A. Sweetman & Son Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Ramiens Timber Co. Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Riamukka Sawmill Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Romney Park Sawmill Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Ryan & McNulty Pty Ltd	Victoria	<19,999
Hardwood	Sawmill/roundwood	S.A. Relf & Son	NSW	20,000-99,999
Hardwood	Sawmill/roundwood	South East Fibre Exports Pty Ltd	NSW	100,000>
Softwood	Sawmill/roundwood	Tarmac Sawmilling Pty Ltd	NSW	20,000-99,999
Softwood	Sawmill/roundwood	Tarn Pty Ltd	NSW	<19,999
Hardwood	Sawmill/roundwood	Tedavis Sawmilling Ltd Pty	NSW	<19,999
Hardwood	Sawmill/roundwood	Thomas Charles Osmond	NSW	<19,999
Hardwood	Sawmill/roundwood	Thomas Patrick O'Connor	NSW	<19,999
Hardwood	Sawmill/roundwood	Thora Sawmilling Pty Ltd	NSW	20,000-99,999
Softwood	Pulp and paper	Visy Industries Pty Ltd	NSW	100,000>
Hardwood	Sawmill/roundwood	W.J. Treseder & Co Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Walkers Sawmill	Victoria	<19,999
Hardwood	Reconstituted board	Weathertex Pty Ltd	NSW	<19,999
Softwood	Sawmill/roundwood	Willmott Forests Pty Ltd	NSW	100,000>
Hardwood	Sawmill/roundwood	Wyong North Sawmill Pty Ltd	NSW	<19,999

This information is provided as a guide only, is based on Forests NSW data and in the case of 'capacity' on corporate knowledge.

6. Analysis of Forests NSW alignment with Global Reporting Initiative indicators

Indicators	Included	Page	Indicator	Comment
1.1 Statement of the organisation's vision and strategy regarding its contribution to sustainable development.	✓	4		
1.2 Two narrative sections on key impacts, risks, opportunities.	✓	3, 116, 11		
2.1 Name of reporting organisation.	✓	1		
2.2 Major products and/or services, including brands if appropriate.	✓	4		
2.3 Operational structure of the organisation.	✓	5		
2.4 Location of organizations headquarters.	✓	inside back cover		
2.5 Countries in which the organisation's operations are located.	✓	4		
2.6 Nature of ownership; legal form.	✓	4		
2.7 Nature of markets served.	✓	19, 38	6	
2.8 Scale of the reporting organisation:				
number of employees;	✓	38	7	
products produced/services offered (quantity or volume);	✓	38, 46, 47	6, 22, 23	
net sales; and	✓	8		
total capitalisation	✓	8		
value added;	✓	27		Value is added to our product by delivering the product at the mill door rather than stumpage sales (selling the trees prior to harvesting)
total assets; and	✓	8		
breakdowns of any or all of the following:				
• sales/revenues by countries/regions that make up 5 percent or more of total revenues;	✓	52 & 93		
• major products and/or identified services;	✓	38, 46, 47	6, 22, 23	
• costs by country/region; and	✓	54, 66, 94		Forests NSW operates within NSW and does not currently report costs for each operation regions.

Indicators	Included	Page	Indicator	Comment
• employees by country/region.	✓	38	7	Forests NSW operates within NSW and does not currently report employee numbers by operation region, although this information is reported in the Forest Agreement Implementation Reports for Forest Agreement area.
2.9 Significant changes in size, structure, ownership, or products/services that have occurred since the previous report.	✓	10 & 11		See Corporate Business Strategy performance.
2.10 Awards received in the reporting period	✓	6		Although no awards were received, the 2007-08 Seeing Report was short listed for a ACCA sustainability reporting award.
3.1 Reporting period (e.g., fiscal/calendar year) for information provided.	✓	8		
3.2 Date of most recent previous report (if any).	✓	6		
3.3 Reporting Cycle	✓	6		
3.4 Contact point for questions regarding the report	✓	2		
3.5 Process for defining report content, including materiality, prioritizing topics and identifying stakeholders	✓	6		
3.6 Boundaries of report (countries/regions, products/services, divisions/facilities/joint ventures/subsidiaries) and any specific limitations on the scope.	✓	4, 6		
3.7 State any specific limitations on the scope or boundary of the	✓	36-49		These are stated in the footnotes of specific indicators.
3.8 Basis for reporting on joint ventures, partially owned subsidiaries, leased facilities, outsourced operations, and other situations that can significantly affect comparability from period to period and/or between reporting organisations.	✓	36-49		Indicators specify the scope of reported data, where this may be ambiguous.
3.9 Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	✓	36-49		Further details on each indicator are provided in the reporting supplement and this document.

Indicators	Included	Page	Indicator	Comment
3.10 Explanation of the nature and effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	✓	7 & 45		
3.11 Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	✓	6		
3.12 Table identifying the location of the Standard Disclosures in the report. Identify the page numbers or web links.	✓	Index		
3.13 Policy and current practice with regard to providing independent assurance for the full report.	✓	6		
4.1 Governance structure of the organisation, including major committees under the board of directors that are responsible for setting strategy and for oversight of the organisation.	✓	5 & 108		
4.2 Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organization's management and the reasons for this arrangement).	✓	4, 5, 108		
4.3 For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	⊖			
4.4 Mechanisms for shareholders and employees to provide recommendations or direction to the board of directors.	✓	108, 109		Non Conformance and Improvement System provides the mechanism for feedback. As a Public Trading Enterprise Forests NSW has obligations to provide response to enquiries from the electorate. The NSW Auditor General undertakes audits of Forests NSW on behalf of Government and Forests NSW is committed to implementing recommendations resulting from Auditor Generals reports.
4.5 Linkage between executive compensation and achievement of the organisation's financial and non-financial goals (e.g., environmental performance, labour practices).	⊖			

Indicators	Included	Page	Indicator	Comment
4.6 Processes in place for the highest governance body to ensure conflicts of interest are avoided.	✓	108		Code of Conduct.
4.7 Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	✓	109		
4.8 Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	✓	6, various others		
4.9 Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	✓	9, 13, various others		
4.10 Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	✓	10, 11, 13		Corporate Business Strategy and Safety Strategy.
4.11 Explanation of whether and how the precautionary approach or principle is addressed by the organisation.	✓	21, 22		
4.12 Externally developed, voluntary economic, environmental, and social charters, sets of principles, or other initiatives to which the organisation subscribes or which it endorses.	✓	6, 9		
4.13 Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization:	✗			
4.14 List of stakeholder groups engaged by the organization.	✓	36	2	
4.15 Basis for identification and selection of stakeholders with whom to engage.	✗			This is primarily dictated by the operation undertaken by Forests NSW. A stakeholder identification procedure is in place.
4.16 Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	✓	36	2	

Indicators	Included	Page	Indicator	Comment
4.17 Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	✓	3, 32, 36	2	
EN1. Total materials use by weight or volume.	partly	45	20	
EN2. Percentage of materials used that are recycled input materials.	partly	46	21	
EN3. Direct energy consumption by primary energy source.	✓	45	20	
EN4. Indirect energy consumption by primary energy source.	partly	45	20	
EN5. <i>Energy saved due to conservation and efficiency</i>	✓	46, 118	21	
EN6. <i>Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.</i>	✓	118		
EN7. <i>Initiatives to reduce indirect energy consumption and reductions achieved.</i>	✗			
EN8. Total water withdrawal by source	✓	46	21	This relates to water used by Forests NSW, rather than water used by the forests themselves.
EN9. <i>Water sources significantly affected by use of water.</i>	✗			
EN10. <i>Percent and total volume of water recycled and reused.</i>	✗			
EN11. Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	✓	Inside back cover, 40, 48	11, 25	
EN12. Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	✓	3, 22, 43	18	
EN13. <i>Habitats protected or restored.</i>	✓	48	25	
EN14. <i>Strategies, current actions, and future plans for managing impacts on biodiversity</i>	✓	21		
EN15. <i>Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.</i>	partly	41	12	

Indicators	Included	Page	Indicator	Comment
EN16. Direct and indirect greenhouse gas emissions.	✓	45	20	
EN17. Other relevant indirect greenhouse gas emissions by weight.	✓	44	19	Reported at CO ₂ e.
<i>EN18. Initiatives to reduce greenhouse gas emissions and reductions achieved.</i>	partly	45	20	Initiative are not addressed.
EN19. Emissions of ozone-depleting substances by weight.	partly	44	19	Factored into native forests carbon model.
EN20. NO, SO, and other significant air emissions by type and	partly	44	19	Factored into native forests carbon model.
EN21. Total water discharge by quality and destination.	✗			Forests NSW does not have processes that result from significant water discharge other than nursery production. In this are significant improvement have been achieved through the upgrade of the Blowering Nursery (page 9).
EN22. Total weight of waste by type and disposal method.	✗			
EN23. Total number and volume of significant spills	partly			While reported non compliances would include spills we do not specifically identify these in the Annual Report.
<i>EN24. Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.</i>	✗			
<i>EN25. Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.</i>	✗			
EN26. Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	✓	48	30	The maintaining the Australian Forestry Standard is such an initiative and is detailed in the report.
EN27. Percentage of products sold and their packaging materials that are reclaimed by category.	partly	46	22	Packaging is not relevant to timber sales.
EN28. Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	✓	43	18	The monetary value of the one fine was \$300.
<i>EN29. Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.</i>	✗			

Indicators	Included	Page	Indicator	Comment
<i>EN30. Total environmental protection expenditures and investments by type.</i>	partly	41, 42, 43	13,14, 16,17	
HR1. Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	X			Significant investment agreements are entered into relating to our estate or services provided within NSW. State and federal legislation relating to human rights applies.
HR2 Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	X			Significant suppliers and contractors are contracted to provide services and goods within NSW. State and federal legislation relating to human rights applies.
<i>HR3 Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.</i>	partly			
HR4 Total number of incidents of discrimination and actions taken.	X			
HR5 Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	X			
HR6. Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	X			Legislation within NSW protects against child labour.
HR7. Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	X			Legislation within NSW protects against forced labour.
<i>HR8. Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.</i>	X			While security personnel are not employed by Forests NSW directly security services are employed in a small number of instances. These were engaged in line with NSW Government policy.
<i>HR9. Total number of incidents of violations involving rights of indigenous people and actions taken.</i>	X			

Indicators	Included	Page	Indicator	Comment
LA1. Total workforce by employment type, employment contract, and region.	partly			Employment type, employment contract, but not region as the organisation is not large enough to warrant this much detail.
LA2. Total number and rate of employee turnover by age group, gender, and region.	×			
LA3. <i>Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.</i>	×			
LA4. Percentage of employees covered by collective bargaining agreements.	×			While not stated in the report specifically, all Government employees are covered by collective bargaining agreements.
LA5. Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	×			
LA6. <i>Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.</i>	×			
LA7. Rates of injury, occupational diseases, lost days, and absenteeism, and number of workrelated fatalities by region..	partly		14 & 15	A number of safety indicators are reported in pages 14 & 15, while data relating to workers compensation is provided on page 121.
LA8. Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	×			
LA9. Health and safety topics covered in formal agreements with trade unions.	×			
LA10. Average hours of training per year per employee by employee category.	×			
LA11. <i>Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.</i>	×			
LA12. <i>Percentage of employees receiving regular performance and career development reviews.</i>	×			

Indicators	Included	Page	Indicator	Comment
LA13. Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	✓		5 & 112	Senior Management Team is detailed on page 5, while Table 1 & 2 on page 112 give percentages of minority groups within the organisation.
LA14. Ratio of basic salary of men to women by employee	✓		115	
SO1. Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	✓	32		
SO2. Percentage and total number of business units analyzed for risks related to corruption.	✗			Not reported.
SO3. Percentage of employees trained in organization's anti-corruption policies and procedures.	✗			Not reported.
SO4. Actions taken in response to incidents of corruption.	✗			None during reporting period.
SO5. Public policy positions and participation in public policy development and lobbying.	✗			As a Publicly Trading Enterprise policy positions are articulated through the minister for the Department of Primary Industries (now Industry & Investment NSW).
SO6. <i>Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.</i>	✗			As a Publicly Trading Enterprise no payment of this kind are made.
SO7. <i>Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.</i>	✗			None during reporting period.
SO8. <i>Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.</i>	✗			None during reporting period.
PR1. Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	✗			
PR2 <i>Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.</i>	✗			

Indicators	Included	Page	Indicator	Comment
PR3. Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	X			The proportion of Timber that is required to meet customer CoC requirements is not currently reported, but this is under development.
PR4. Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	X			
PR5. Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	X			
PR6. Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	X			None reported.
PR7. Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	X			None reported.
PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	X			None reported.
PR 9 Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.	X			
EC1. Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	✓	8		Details contained in financial statement.
EC2. Financial implications and other risks and opportunities for the organization's activities due to climate change.	✓	28		
EC3 Coverage of the organization's defined benefit plan obligations.	✓	73 & 102		Contained in financial statement.
EC4. Significant financial assistance received from government.	✓	65		Contained in financial statement.
EC5 Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	X			

Indicators	Included	Page	Indicator	Comment
EC6 Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	X			Dictated by Government policy.
EC7 Procedures for local hiring and proportion of senior management hired from the local community at locations of	✓	109		Addressed by EEO policy.
EC8 Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, inkind, or pro bono engagement.	✓	36, 16	6	
<i>EC9. Understanding and describing significant indirect economic impacts, including the extent of impacts.</i>	✓	116		

Reported	✓
Partially reported	partly
Not reported	X
Not relevant to the organisation as a Public Trading Enterprise within a Government department	⊖