NSW FOREST AGREEMENTS AND INTEGRATED FORESTRY OPERATIONS APPROVALS

NSW Forest Agreements

Implementation Report

Upper North East

Lower North East

Eden

Southern regions

2008-2009



NEW SOUTH WALES GOVERNMENT

Minister for Climate Change and the Environment

NSW FOREST AGREEMENTS AND INTEGRATED FORESTRY OPERATIONS APPROVALS

NSW Forest Agreements

Implementation Report

A report prepared as part of the implementation of the NSW forest agreements and integrated forestry operations approvals

2008-2009

Upper North East

Lower North East

Eden

Southern regions



NEW SOUTH WALES GOVERNMENT

Minister for Climate Change and the Environment

INFORMATION



This project has been coordinated by the Crown Forest Policy and Regulation Section (formerly the Resource and Conservation Unit) of the Department of Environment, Climate Change and Water NSW.

For more information and for information on access to data, contact: Crown Forest Policy and Regulation Section, Department of Environment, Climate Change and Water NSW Email: info@environment.nsw.gov.au

© NSW Government and Department of Environment, Climate Change and Water NSW 2010

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced without prior written permission from the Department of Environment, Climate Change and Water NSW.

Preferred way to cite this publication: NSW Forest Agreements Implementation Report 2008–2009: Upper North East, Lower North East, Eden and Southern regions. A report prepared by the Minister for Climate Change and the Environment as part of the implementation of the NSW forest agreements and integrated forestry operations approvals. Forest Policy and Regulation Section, Department of Environment, Climate Change and Water NSW, Sydney.

Published by:

Department of Environment, Climate Change and Water NSW

59–61 Goulburn Street, Sydney

PO Box A290

Sydney South, NSW 1232

Phone: (02) 9995 5000 (switchboard)

Phone: 131 555 (environment information and publications requests)
Phone: 1300 361 967 (national parks information and publications requests)

Fax: (02) 9995 5999 TTY: (02) 9211 4723

Email: info@environment.nsw.gov.au

Website address: www.environment.nsw.gov.au

ISBN 978 1 74293 022 0 DECCW 2010/963

Printed on recycled paper

Main contributors: Department of Environment, Climate Change and Water NSW – Parks and Wildlife Group and Department of Primary Industries – Forests NSW and Fisheries.

Disclaimer

While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of New South Wales, its agents and employees, do not assume any responsibility and shall have no liability, consequential or otherwise, of any kind, arising from the use of or reliance on any of the information contained in this document.

Foreword

The Hon Amanda Fazio MLC
President of the Legislative Council
Parliament House
Macquarie Street
Sydney NSW 2000

The Hon Richard Torbay MP Speaker of the Legislative Assembly Parliament House Macquarie Street Sydney NSW 2000

Dear Ms Fazio and Mr Torbay,

I have pleasure in presenting to Parliament the tenth annual implementation report on the NSW forest agreements and integrated forestry operations approvals. There are four NSW forest agreements and four integrated forestry operations approvals in place, which cover the Upper North East, Lower North East, Eden and Southern regions of New South Wales.

In accordance with section 21(1) and 21(2) of the *Forestry and National Park Estate Act 1998*, this report provides progress on the implementation of the NSW forest agreements and integrated forestry operations approvals for the period 1 July 2008 to 30 June 2009.

Progress is reported by the:

- achievement of milestones defined in each of the four NSW forest agreements
- results of monitoring of ecologically sustainable forest management criteria and indicators
- compliance with integrated forestry operations approvals for each region.

This report demonstrates continuous improvement in the management of the New South Wales public forest estate and progress towards ecologically sustainable forest management.

The Hon. Frank Ernest Sartor, MP

Minister for Climate Change and the Environment

Minister Assisting the Minister for Health

Summary

This is the tenth annual report on the implementation of the NSW forest agreements and integrated forestry operations approvals (IFOAs), prepared under section 21 of the *Forestry and National Park Estate Act 1998*. These agreements and approvals provide a strategic and operational framework to manage public forests in New South Wales, with the overall objective of achieving ecologically sustainable forest management (ESFM). Progress towards meeting this objective is achieved partly by regular reporting of the:

- achievement of a range of undertakings or 'milestones' defined in each of the NSW forest agreements
- results of monitoring of the ESFM criteria and indicators
- compliance of harvesting activities in State forests and other Crown timber lands with the IFOAs.

There are four NSW forest agreements and IFOAs in place, covering the Upper North East (UNE), Lower North East (LNE), Eden and Southern regions. The agreements and approvals for the UNE, LNE and Eden regions were put in place in 1999, followed by those for the Southern region in 2002.

Implementation of the agreements and approvals within the four NSW forest agreement areas is a cooperative undertaking between the Parks and Wildlife Group (PWG), and the Environment Protection and Regulation Group (EPRG) of the Department of Environment and Climate Change (DECC), Forests NSW, and NSW Fisheries within Industry & Investment NSW.

This report provides information on stakeholder activities related to the implementation of the NSW forest agreements and IFOAs for the UNE, LNE, Eden and Southern regions during the 2008–2009 financial year, with particular focus on individual stakeholder milestone achievements and progress (Chapter 1), the criteria and indicators used to monitor ecologically sustainable forest management (ESFM) (Chapter 2), and compliance activities pertaining to the integrated forestry operation approvals (IFOAs) (Chapter 3).

Contents

Foreword	iii
Summary	V
Contents	vi
Acronyms and abbreviations	хi
Glossary	xiv
i	1
Introduction	1
DEPARTMENTAL STRUCTURAL CHANGES	1
REPORT STRUCTURE	2
CONCLUSION	2
1	3
Milestone highlights	3
REVIEW OF NSW FOREST AGREEMENTS AND INTEGRATED FORESTRY OPERATIONS APPROVALS	3
DECC PARK MANAGEMENT PROGRAM	3
PWG CONSERVATION RESERVE MANAGEMENT AND ADDITIONS	3
FORESTS NSW OPERATIONAL HEALTH AND SAFETY	4
FORESTS NSW RE-ESTABLISHMENT PROGRAM	4
FORESTS NSW CERTIFICATION TO ISO 14001:2004 AND AS 4708:2007.	5
JOINT STRATEGY TO FACILITATE AN EMPLOYMENT AND DEVELOPMENT PROGRAM FOR ABORIGI PEOPLE	NAL 5
FORESTRY REGULATION ON PUBLIC LAND	5
PRIVATE NATIVE FORESTRY	6
2	7
Monitoring ecologically sustainable forest management – criteria and indicators	7

INTRODUCTION	7
Achieving ecologically sustainable forest management	7
Monitoring obligations	7
Using indicators to assess achievement of EFSM	7
Agency data	8
CRITERION 1 – BIODIVERSITY	9
Forest type and growth stage	9
Forest growth stage change – State forests	12
Fragmentation	14
Forest-dwelling species	15
Threatened species, populations and ecological communities	17
Species management measures	22
CRITERION 2 – PRODUCTIVE CAPACITY OF FOREST ECOSYSTEMS	23
Land available for timber production	23
Total growing stock	26
Timber products compared with sustainable volume	26
Private Native Forestry	29
Plantations authorised under the PR Act	29
Standing volume of species logged	30
Species and royalty of logs harvested	30
Volume of non-timber products	30
Plantations 32	
Regeneration	33
CRITERION 3 - ECOSYSTEM HEALTH AND VITALITY	35
Weeds, feral animals and disease	35
Fire 41	
CRITERION 4 – SOIL AND WATER RESOURCES	44
Roads and crossings	44
Soil erosion	45
CRITERION 5 – MAINTENANCE OF FOREST CONTRIBUTION TO GLOBAL CARBON CYCLES	47
Biomass and carbon	47
Global carbon budget	48
CRITERION 6 – SOCIO-ECONOMIC BENEFITS	50
Visitation 50	
Recreation/tourism facilities	52
Employment	54
Gross income	58
Places of cultural significance	58
CRITERION 7 – LEGAL, INSTITUTIONAL AND ECONOMIC FRAMEWORKS	63
Legal framework	63
Institutional framework	67

Outcomes of the Forests NSW internal compliance program	75
Capacity to measure and monitor change	79
Research and development	80
3	81
Compliance with integrated forestry operations approvals	81
INTRODUCTION	81
IFOA AMENDMENTS	81
ENVIRONMENT PROTECTION LICENCE AND THREATENED SPECIES LICENCE	82
Introduction	82
Summary of auditing program	82
FISHERIES LICENCES	83
NON-LICENCE TERMS	83
FORESTS NSW INTERNAL COMPLIANCE PROGRAM	84
Summary of the Forests NSW internal compliance program	84
Outcomes of the Forests NSW internal compliance program	84
References and bibliography	86
Appendix 1 Individual milestone progress	87
DEFINITIONS OF MILESTONES STATUSES	87
Appendix 2: Threatened flora and fauna species and population recorded in the new additions within UNE and LNE	ns 145
Appendix 3 PWG responsibilities and major policies (2008–09)	149

List of figures

Figure 2-1A: Growth stage extent in State forests – all regions (2008–2009)	13
Figure 2-1B: Forests NSW threatened species survey results – all regions	21
Figure 2-2A: Percentages of committed quota sawlog volumes harvested – all regions (excluding poles and girders)	27
Figure 2-2B: Committed volumes harvested – pulp grade sawlogs (Eden region only)	28
Figure 2-2C: Effective regeneration rates in State forests – all regions	34
Figure 2-3A: Percentages of post-1994 Forests NSW hardwood plantations affected by selected agents 2008–2 (statewide)	2009 39
Figure 2-5A: Sequestered carbon in Forests NSW hardwood and softwood plantations – all regions (2008–200	9) 48
Figure 2-6A: Permits issued for recreation/educational activities in State forests (all regions)	51
Figure 2-6B: Forest sector employment (direct and indirect) – all regions (2008–2009)	55
Figure 2-6C: Total PWG (direct) and Forests NSW (direct and indirect) regional employment – all regions (2008 2009)	8– 56
Figure 2-6D: Numbers of Aboriginal objects recorded off the DECC estate – all regions	60
Error! Objects cannot be created from editing field codes.	60
Figure 2-6E: Numbers of Aboriginal objects recorded on the DECC estate – all regions	60
Figure 3-1A: Non-compliance incidents recorded through Forests NSW internal monitoring – all regions	75
Figure 3-1A: Non-compliance incidents recorded through Forests NSW internal monitoring – all regions	85
List of tables Map 1A: NSW forest agreement regions showing Upper North East, Lower North East, Southern and Eden. The sub-region of Goulburn in the Southern region is not included in the reporting.	e viii
Table 2-1A: Change in area (ha) of old-growth-stage categories within the DECC estate – UNE and LNE region (2008–2009)	
Table 2-1B: Change in area (ha) of growth stage categories within the DECC estate – UNE and LNE regions (2008–2009)	11
Table 2-1C: Change in area (ha) of growth stage and old-growth-stage categories within the DECC estate – Southern region (2008–2009)	12
Table 2-1D: Number of forest-dwelling species recorded on DECC estate for each of the FA regions (2008–200	09) 16
Table 2-1E: Status of forest-dwelling species – all regions (2008–2009)	19
Table 2-1F: Status of endangered populations and endangered ecological communities – all regions	20
Table 2-2A: Area of plantations authorised under the PR Act for the North Coast, Hunter and South Coast. Authorised plantations include existing plantations, newly established plantations and environmental plantations.	25
Table 2-2B: Private Native Forestry PVPs by FA as at 30 June 2009	25
Table 2-2C: Volumes of timber products other than quota sawlogs from State forests – UNE and LNE regions (2008–2009)	29
Table 2-2D: Reported volumes of timber harvested from private native forests covered by PNF PVPs for the 200 calendar year.	08 29
Table 2-2E: Non-timber products obtained from State forests – all regions (2008–2009)	31
Table 2-2F: Non-timber products obtained from DECC Southern and Eden regions (2008–2009)	32
Table 2-3A: Forests NSW control efforts for noxious/environmental weed species in native forests – all regions (2008–2009)	37

Table 2-3B: Forests NSW control efforts (\$) spent on introduced predator management and feral animal management – all regions (2008–2009)	41
Table 2-3C: Areas of park system burned in bushfires (excluding prescribed burns by PWG and regardless of of ignition) (2008–2009)	origin 42
Table 2-4A: Length of road by classification on State forests – all regions (2008–2009)	45
Table 2-4B: Area of Forests NSW native forest assessed for soil erosion hazard and the net area harvested as percentage of the total forest area – all regions (2008–2009)	s a 46
Table 2-5A: Assumptions for carbon sequestration in Forests NSW planted forest estate	47
Table 2-6A: Recreation/tourism facilities and amenities provided for in State forests – all regions (2008–2009)	53
Table 2-6B: Estimated total direct and indirect employment in the forest sector, by Forests NSW. Figures show EFT positions across all regions for 2008–2009 and percentages by forest sector.	w 54
Table 2-6C: Employment numbers for each of the regions	55
Table 2-6D: Key estimates of private native forest activity in the Northern region of NSW (2009)	58
Table 2-6E: Key estimates of private native forest activity in the Southern region of NSW (2009)	58
Table 2-6F: Total numbers of Aboriginal objects recorded within the regions (current to July 2009)	59
Table 2-6G: Total numbers of historic places recorded in national parks and reserves within the regions (current June 2009)	nt to 61
Table 2-7A: Forests NSW records of the number of forums attended by Forests NSW staff as an indicator of p participation in Forests NSW ESFM (2008–2009).	ublic 72
Table 2-7B: PNF PVPs monitored	78

Acronyms and abbreviations

API Aerial photograph interpretation

AFCS Australian Forest Certification Scheme

AFS Australian Forestry Standard

AHIMS Aboriginal Heritage Information Management System

BMAD Bell miner associated dieback

BRIMS Bushfire Risk Information Management System

BVMPs Branch Visitation Management Plans

CAPs Catchment Action Plans

CFPR Crown Forestry Policy and Regulation Section of DECC.

Formally Resource and Conservation Unit of DECC.

CMA Catchment Management Authority

CO₂e Abbreviation of the term 'carbon dioxide equivalents',

which can include a range of greenhouse gases

COG Candidate old growth

CRA Comprehensive regional assessment

CRAFTI Comprehensive regional assessment aerial photo interpretation

CSIRO Commonwealth Scientific and Industrial Research Organisation

DAFF Australian Government Department of Agriculture, Fisheries and Forestry

DECC Department of Environment and Climate Change

(formerly Department of Environment and Conservation)

DEH Commonwealth Department of Environment and Heritage.

As of 3 December 2007, DEH became known as DEWHA (Department of the Environment, Water, Heritage and the Arts).

DLWC Former Department of Land and Water Conservation, now part of the

Department of Planning and the Department of Natural Resources

DNR Department of Natural Resources

DMR Department of Mineral Resources

DOG Disturbed old growth

DPI Department of Primary Industries

EFT Equivalent full-time (employees)

EMS Environmental Management System

EPRG Environment Protection and Regulation Group

(part of the Department of Environment and Climate Change)

EPA Environment Protection Authority (now encompassed within EPRG)

EPL Environment Protection Licence

ESFM Ecologically sustainable forest management

FA Forest Agreement

FMZ Forest management zoning system

FRAMES Forest Resource and Management Evaluation System

FISAP Forest Industry Structural Adjustment Package

GERI Great Eastern Ranges (Alps to Atherton) Initiative

GIS Geographic information system

HCVOG High conservation value old growth

HHIMS Historic Heritage Information Management System

IFOA Integrated Forestry Operations Approval

I&I NSW Industry and Investments NSW, Department of

ILUA Indigenous Land Use Agreement

IUCN International Union for Conservation of Nature

LHPAs Livestock Health and Pest Authorities (RLPBs before 1 January 2009).

LNE Lower North East

MIG Montreal Process Implementation Group

NFMS Native Forest Management System

NFPS Joint State Commonwealth National Forest Policy Statement

NPWS National Parks and Wildlife Service (now encompassed within PWG of DECC)

NRAC Natural Resources Advisory Council

PAS Priorities Action Statement

PMP Park Management Program

RACU/RACD Resource and Conservation Unit of DECC (now Crown Forestry Policy and

Regulation Section of DECCW) and former Resource and Conservation Division

RACAC Resource and Conservation Assessment Council

RFA Regional Forest Agreement

RLPB Rural Lands Protection Board¹

RVMP Regional Vegetation Management Plan

PR Act Plantations and Reafforestation Act 1999

PIN Penalty infringement notices

PWG Parks and Wildlife Group

(part of the Department of Environment and Climate Change)

SEEing Report Social, Environmental and Economic Report

SEEDS database Social, Economic and Environmental Database

developed by Forests NSW

SoP State of the Parks (a survey, report and database managed by the PWG of DECC)

TSL Threatened Species Licence

UNE Upper North East

VCA Voluntary Conservation Agreement

(as per the National Parks and Wildlife Act 1974)

VDS Visitor Data System

Wildlife Atlas Atlas of NSW Wildlife

¹ As of 1 January 2009, RLPBs became known as LHPAs (Livestock Health and Pest Authorities)

XIII

Glossary

afforestation - Act or process of creating a new forest where none had existed previously.

biodiversity – Variety of life forms (the different plants, animals and microscopic organisms), the genes they contain, and the ecosystems they form.

CAR reserve system – National reserve system, or CAR reserve system, aims to ensure the protection of a range of forest values. The acronym 'CAR' defines the goals of the reserve system: *comprehensive* – full range of forest communities recognised by an agreed national scientific classification at appropriate hierarchical levels; *adequate* – the maintenance of ecological viability and integrity of populations, species and communities; *representative* – those sample areas of the forest that are selected for inclusion in reserves should reasonably reflect the biotic diversity of the communities.

The establishment of a CAR reserve system is one of a number of arrangements put in place as a result of the joint State-Commonwealth *National Forest Policy Statement* (NFPS) (Commonwealth, 1992). All Australian governments, as signatories to both the National Strategy for Conservation of Australia's Biological Diversity (1996) and the NFPS, endorsed the goal of a CAR system of reserves for Australia. The CAR system is activated within the *Directions for the National Reserve System — A Partnership Approach* (Natural Resource Management Ministerial Council 2005). Priorities for building the DECC reserve system in each biogeographic region of NSW are identified in the *New South Wales National Parks Establishment Plan 2008*.

carbon sequestration – In terrestrial ecosystems can be defined as the net removal of carbon dioxide from the atmosphere into long-lived pools of carbon, such that the carbon dioxide originally in the atmosphere effectively can no longer physically or chemically act as atmospheric carbon dioxide. The pools can be living, above-ground biomass (e.g. trees); products with a long, useful life created from biomass (e.g. timber); living biomass in soils (e.g. roots and microorganisms); or deeper subsurface environments, such as depleted oil and gas reservoirs, un-mineable coal seams, deep saline formations or deep ocean.

Comprehensive Regional Assessment (CRA)/ Regional Forest Assessment — Assessments made by NSW Government and Australian Government agencies and community stakeholders that looked closely at the impacts of changes to forest use and management on the environment, economy and community. The CRAs (or Regional Forest Assessments as they are termed under the NSW Forestry and National Park Estate Act 1998) included assessments of natural, cultural, social and economic values.

DECC estate – Land acquired, reserved or dedicated under the *National Parks and Wildlife Act 1974*. 'DECC estate' may also refer to land declared as aquatic reserve under the *Fisheries Management Act 1994*, or marine park under the *Marine Parks Act 1997*, when managed by DECC. DECC estate was called 'NPWS estate' in the RFAs.

dedicated reserve – Reserve equivalent to the International Union for Conservation of Nature (IUCN) Protected Area Management Categories I, II, III, IV, as defined by the IUCN Commission for National Parks and Protected Areas (1994). Dedicated reserves include, but are not limited to, parks under the *National Parks and Wildlife Act 1974* and flora reserves under the *Forestry Act 1916*. Status of reserves requires action by Parliament in accordance with legislation for reservation or revocation.

ecological community - An assemblage of species occupying a particular area.

ecologically sustainable forest management (ESFM) – Management of forests so they are sustained in perpetuity for the benefit of society, by ensuring the values of the forests are not lost or degraded for current and future generations.

ecosystem – Communities of organisms and their physical environment interacting as a unit. See 'forest ecosystem'.

ecosystem health and vitality – State of an ecosystem's processes (energy, nutrient, hydrological and biological processes), which maintains the system's vitality, being an ecosystem's ability to perpetuate itself.

Environment Protection and Regulation Group (EPRG) of DECC – Leads the State's response to regulating a diverse range of activities that can affect the health of the NSW environment and its people. 'Regulation' is delivered by using a mix of tools, including education, partnerships, licensing and approvals, audit, enforcement and economic mechanisms. The group generally works outside the protected conservation areas and focuses on the areas where populations and economic activity interact with the environment.

filter strip – Strip of vegetation or groundcover along each side of a watercourse/drainage line, retained for the purposes of retarding or reducing lateral flow of runoff and sediment movement into the watercourse/drainage line and reducing the risk of channel and streambank erosion.

forest – Vegetation type dominated by woody vegetation having a mature, or potentially mature, stand height exceeding six metres, with an overstory canopy cover greater than 20%.

forest ecosystem – Native vegetation overstory of trees with greater than 20% canopy cover. Forest ecosystems were mapped and defined during the CRAs for floristic composition with substrate and position within the landscape. The **JANIS report** identified forest ecosystems as the primary surrogate for biodiversity in CRAs.

Forest Management Zone (FMZ) – Land classification system that sets out management intent across State forests and differentiates between those areas of State forest set aside for conservation and those areas available for timber harvesting and other activities. See also Special Management Zones.

Forest Resource and Management Evaluation System (FRAMES) – Forests NSW statewide forest resource inventory, growth modelling, simulation and harvest scheduling system for the New South Wales public native forest resource.

forest type – Class in the hierarchy of vegetation classification of forests characterised by the taxonomic and or structural composition of canopy trees (usually by a dominant species).

gazettal – Formal process by which land becomes part of the NSW parks system, announced by a notice published in the NSW Government Gazette.

habitat – Living space of a species or community, providing a particular set of environmental conditions.

Informal reserve – Reserve that contains, and is managed for, conservation values that contribute to the CAR reserve system and meets the principles for Informal reserves as described in the **JANIS report**.

JANIS report – Report by the Joint Australian and New Zealand Environment and Conservation Council (ANZECC)/Ministerial Council on Forestry, Fisheries and Aquaculture (MCFFA) National Forests Policy Statement Implementation Sub-committee, titled *Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia* (Commonwealth of Australia 1997).

native forest – Any locally Indigenous forest community containing the full complement of native species and habitats normally associated with that community, or which could develop those characteristics.

old growth – Forest that is ecologically mature and has little disturbance by activities such as logging, building roads or clearing. The definition focuses on forest in which the upper layer or overstory is in the late-mature to over-mature growth phases.

park – In this report refers to any area, within the Forest Agreement regions, of national park (NP), nature reserve (NR), State conservation area (SCA), regional park (RP), Aboriginal area, historic site or karst conservation reserve (KCR) managed by the Parks and Wildlife Group of DECC. Also see **reserve**.

Parks and Wildlife Group (DECC) – Manages NSW protected areas, including national parks, wilderness areas and marine parks for conservation, education and public enjoyment. The group also forms partnerships with communities to protect biodiversity and cultural heritage on private and other public lands.

plantation – Intensively managed stands of trees of either native or exotic species, created by the regular placement of seedlings or seed.

public forest – Any forest on Crown land for which management responsibility has been delegated to government agencies, local governments or other instrumentalities.

reforestation – Restocking of existing forests that have been harvested.

regions - Relates to NSW forest agreement regions (UNE, LNE, Southern and Eden regions).

reserve – Land identified for conservation or related purposes on a range of tenures, including Crown land, State forest and national park. See also **park**. Includes informal reserves and **dedicated reserves**.

snig track – Track along which snigging equipment (i.e. wheeled or tracked vehicles) travels.

species – Group of organisms that are biologically capable of breeding and producing fertile offspring with each other but not with other organisms in other groups.

Special management zones – Pursuant to the *Forestry Act 1916* the Minister for Mineral and Forest Resources may, by notice in the Government Gazette, declare any area of State forest (other than a flora reserve) to be a special management zone if satisfied that the area has special conservation value. Special Management Zones strengthen the conservation status of the informal reserve system and may only be revoked by an act of parliament.

State forest – Land dedicated under the Forestry Act 1916.

sustainable yield – Long-term estimated wood yield from forests that can be maintained from a given region in perpetuity under a given management strategy and suite of sustainable-use objectives.

taxa – Categories in the biological classification system for all living organisms. Taxa (singular: taxon) are used to organise information about the natural world.

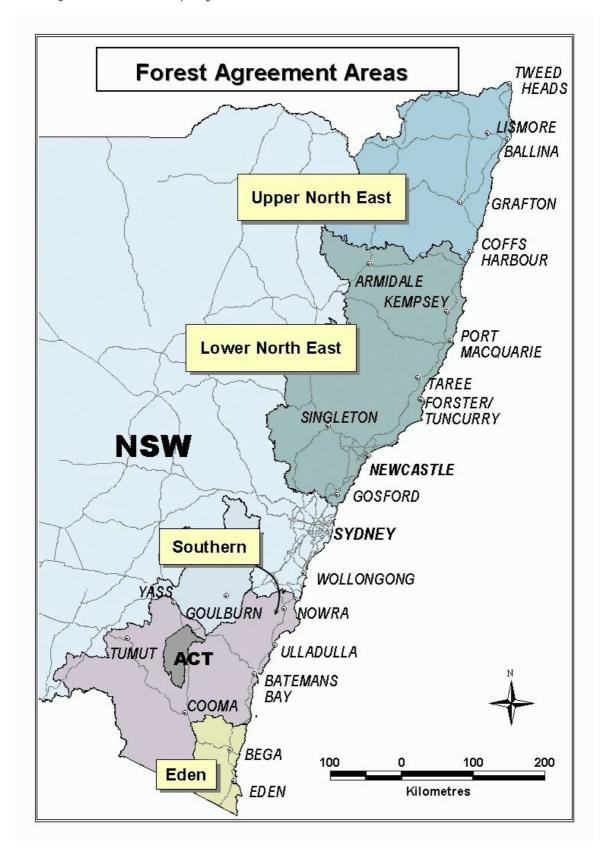
tenure - Title to land as controlled by legislation.

threatened species – Any species of plant or animal listed under Schedule 1 (endangered species), Schedule 1A (critically endangered species) or Schedule 2 (vulnerable species) of the *Threatened Species Conservation Act 1995*, or Schedule 4 (endangered species), Schedule 4A (critically endangered species) or Schedule 5 (vulnerable species) of the *Fisheries Management Act 1994*.

Threatened species, threatened populations, and threatened ecological communities profiles are available at www.threatenedspecies.environment.nsw.gov.au/index.aspx

threatening process – Process that threatens, or may have the capability to threaten, the survival or evolutionary development of species, populations or ecological communities. These include processes listed as key threatening processes under Schedule 3 of the *Threatened Species Conservation Act 1995* and Schedule 6 of the *Fisheries Management Act 1994*.

Map 1A: NSW forest agreement regions showing Upper North East, Lower North East, Southern and Eden. The sub-region of Goulburn in the Southern region is not included in the reporting.



i Introduction

This is the tenth annual report on the implementation of the NSW Forest Agreements and Integrated Forestry Operations Approvals (IFOAs). It gives details of the progress of the forest agreements and IFOAs applying to the Upper North East (UNE), Lower North East (LNE), Eden and Southern regions. The report is a requirement under section 21 of the *Forestry and National Park Estate Act 1998*.

The NSW Forest Agreements and IFOAs provide a strategic and operational framework for achieving ecologically sustainable forest management (ESFM). ESFM is a key objective of the NSW Government's forest policy. Progress towards ESFM is achieved partly by regular reporting on the:

- achievement of milestones as defined in the NSW forest agreements
- results of monitoring of the ESFM criteria and indicators
- compliance of forest operations on State forests and other Crown timber lands with the IFOAs.

The ongoing implementation of the agreements and approvals was a cooperative undertaking between various sections of the Department of Environment and Climate Change (DECC) (including the Parks and Wildlife Group (PWG)² and the former Environment Protection Authority (EPA)³), Department of Primary Industries (DPI) – Fisheries and Forests NSW. Under the NSW Forest Agreements, DECC and I&I NSW now manage public forests in the UNE, LNE, Eden and Southern regions, and their collective work in 2008–2009 produced significant advances in these roles.

Departmental structural changes

On 1 July 2009 the Department of Environment and Climate Change (DECC) became the Department of Environment, Climate Change and Water (DECCW). The department is responsible to the Minister for Climate Change and the Environment, and the Minister for Water.

Also on 1 July 2009, The Resource and Conservation Unit (RACU) and the Forestry Unit of DECC combined to become the Crown Forestry Policy and Regulation Section (CFPR) of DECC. CFPR is the name used in this report.

The Department of Industry & Investment) trading as Industry & Investment NSW (I&I NSW), formed in July 2009. I&I NSW brings together a number of formerly separate NSW Government departments and authorities including the Department of Primary Industries (DPI) and Department of State and Regional Development. Detail on previous agencies and partner agencies in I&I NSW can be found at www.industry.nsw.gov.au. The key agencies relevant to this report include DPI - Forests NSW and Fisheries.

PWG encompasses the National Parks and Wildlife Service.

The Environment Protection and Regulation Division (EPRG) of the Department of Environment and Climate Change encompasses the Environment Protection Authority.

As Departmental structural changes commenced as of July 2009, in this report agencies are referred to as they were known as at 30 June 2009; namely DECC and DPI.

Report structure

Progress on the implementation of the NSW forest agreements and IFOAs is presented in three parts:

Chapter 1 outlines some of the significant achievements that occurred during 2008–2009. The information includes specific milestones required by the agreements, as well as other activities that are part of broader government initiatives to assist the sustainable management of forests in New South Wales. Specific details on the progress of individual milestones, as defined in the agreements, are provided in **Appendix 1**.

Chapter 2 summarises the results of monitoring of the ESFM criteria and indicators. It presents key outcomes and identifiable trends. Comparisons with other years are presented. However, any reported trends are indicative only and are not meant to replace detailed and or statistical interpretation.

Chapter 3 summarises compliance by Forests NSW with the conditions and terms of licences of the UNE, LNE, Southern and Eden IFOAs. Regulatory agencies report on the results of auditing the terms of licences. Forests NSW reports on its internal compliance monitoring and achievement of non-licence requirements under the IFOAs.

Conclusion

This report presents information compiled from the agencies involved in the continued implementation and monitoring of the agreements and approvals. As illustrated in this report, the agreements and IFOAs provide an adaptive framework to continuously achieve ESFM in NSW.

1 Milestone highlights

This chapter briefly outlines significant achievements that occurred during 2008–2009. Specific details on the progress of individual milestones, as defined in the agreements, are provided in **Appendix 1 – Individual milestone progress**.

Review of NSW Forest Agreements and Integrated Forestry Operations Approvals

In June 2008, a review of all NSW Forest Agreements and IFOAs was jointly announced by Minister for Climate Change and the Environment and the Minister for Primary Industries. The proposed terms of reference for the review were previously made available for public comment between July and December 2008 and a number of representations were received. A review report is being drafted in accordance with the finalised terms of reference and is planned to be released for public comment in the later part of 2010.

DECC Park Management Program

DECC continued to develop its Park Management Program. The program defines DECC's objectives for park management, and integrates park policy, planning, operations, monitoring, evaluation, reporting and feedback.

Components of the Park Management Program completed in the 2008–2009 year included:

- Branch Visitor Management Plans (BVMP)
- Regional Operational Plans established across the State (these identify the specific actions for a region over the following year, with consideration to a three-year forward projection).
- Regional Pest Management Strategies in place (these are publicly available documents identifying key directions and priorities in pest animal and weed management).
- Returning State of the Parks analyses to park managers to support improved strategic planning and support decision making.

PWG conservation reserve management and additions

DECC continued to prepare plans of management for dedicated reserves under the *National Parks and Wildlife Act 1974*. Of the 389 DECC reserves in the UNE and LNE regions, 180 had plans of management adopted by the NSW Minister for Climate Change and the Environment. A further 55 draft plans had been publicly exhibited and another 71 were in preparation (11 of these in draft form).

DECC acquired new additions to the reserve system, under the 2008 and 2009 Acquisition Program, funded from Treasury capital allocations and grants from the Environmental Trust. The most significant reserve additions include the:

- 1 353 hectares (ha) to New England National Park. This contains old growth forests, rainforest, riverine gallery forest and 14 km of Bellinger River, which provides prime aquatic habitat for the Bellinger River Emydura turtle, a locally endemic species and possibly Australia's rarest turtle. This addition will improve the resilience of the adjacent Gondwana Rainforests of Australia World Heritage Area to the threats of fire, weed and pest invasion.
- Establishment of Bandahngan Aboriginal Area (2.5 ha) located east of Kyogle incorporating the Tooloom Falls. The reserve is an outcome of the Indigenous Land Use Agreement between the NSW Government and the Githabul people to protect the cultural and spiritual values of the Falls.
- 2 812 ha addition to Oxley Wild Rivers National Park, south-east of Armidale, which has bridged the gap between two previous separate sections of the park and provides for better implementation of reserve management programs to provide for ecosystem functioning, protection of biodiversity, fire management and pest species control.

Forests NSW Operational Health and Safety

In the area of health and safety Forests NSW was recognised during the year by WorkCover NSW for meeting the high standards of its rigorous self-insurers audit. This is the second consecutive year of successful audits, cementing Forests NSW commitment to improving safety performance. A recognised indicator of safety performance is the recordable incident rate, which fell by 58 percent over last year to 4.9 (towards a Forests NSW target of less than one).

Forests NSW re-establishment program

With an extensive re-establishment program covering more than 17 000 hectares of State forests over the 2009-13 period, new investment vehicles have been developed to supplement traditional funding to ensure the program can be completed.

Contracts were executed with Willmott Forests in February 2009 for the establishment of 4 500 hectares of second rotation land in the Eden FA area; and with Forest Enterprises Australia in April 2009 for the re-establishment of 4 500 hectares of hardwood plantation in the UNE FA area in the next three years. In both of these contracts, the trees will be owned by the investors, on land licensed from Forests NSW who will manage the plantations. Importantly, the timber can be included in Forests NSW supply commitments.

Plantings have already commenced in State forests earmarked for re-establishment in 2009-2010 under these contracts. This business model capitalises on Forests NSW skill base and infrastructure, while minimising the capital investment exposure of the private company partners.

Forests NSW maintained certification to both the internationally recognised Environmental Management Systems standard ISO 14001:2004 and Australian forest management standard AS 4708:2007.

During 2008-2009 Forests NSW was audited on one occasion against the Australian Forestry Standard (AS 4708:2007) and the Environmental Management System Standard ISO 14001:2004. Regions audited against the Australian Forestry Standard were Northern and Monaro planted forest regions, as were native forest regions Central and Southern. Auditors also visited the Corporate Offices in Cumberland State Forest during each audit.

Joint strategy to facilitate an employment and development program for Aboriginal people

In 2008–2009 8.9% of the DECC workforce identified as being of Aboriginal descent, while this figure was 2.4% for Forests NSW. These figures are above the NSW Government benchmark of 2% Indigenous employment. Additionally, DECC employs contract and casual Aboriginal staff for work that includes the Discovery Ranger program, research projects and land management activities (e.g. weed control), amongst others. Joint management and ventures have also provided additional employment and industry development and economic opportunities.

In 2009, DECC established an additional five Aboriginal cadetships to make a total of 22 in the agency. Through the Aboriginal cadetship program, cadets study full-time and have 12 weeks of practical work experience each year to complete their undergraduate degree, with guaranteed employment on successful completion.

DECC has also entered a partnership arrangement with the Western Institute of TAFE to provide Aboriginal traineeships, which will lead to the nationally recognised qualification of Certificate II in conservation and land management. The traineeships are for 12 months and allow trainees to combine full-time practical work with structured training sessions throughout the year. The 2009 intake comprises 10 new trainees for trainee field officer and trainee interpretive assistant positions.

Forestry regulation on public land

DECC regulates forestry on public land in NSW to help protect threatened species and water quality from forestry operations. The regulation is provided through IFOAs for each Forest Agreement region and it is implemented through the setting of best practice conditions within licences issued under the *Threatened Species Conservation Act 1995* and the *Protection of the Environment Operations Act 1997*. Non-compliance with conditions of the licences are dealt with through meetings with senior Forests NSW officers, issuing feedback or warning letters, clean-up notices, penalty notices or prosecution action as appropriate to the circumstances.

Between 1 July 2008 and 30 June 2009, DECC conducted 11 audits of Forests NSW pre-operational planning and operations in forest regions covered by an IFOA. As a result of these audits, Forests

NSW was issued with one Penalty Infringement Notice (PIN) and 10 warning letters in relation to identified breaches. Additionally DECC issued Forests NSW with two clean-up notices at two sites in the LNE region. DECC also required that Forests NSW seek expert soil conservation advice in one instance and an engineering assessment in one instance to assist in the remediation at these sites.

Private Native Forestry

The Private Native Forestry Code of Practice came into force on 1 August 2007 under the *Native Vegetation Act 2003*. The Code promotes the sustainable management of private forests, by balancing the requirement that forestry operations improve or maintain environmental outcomes with the need to ensure that communities and businesses that rely on private forests are sustained. The Code protects threatened species and their habitats from harvesting operations. This is achieved by specific requirements for the protection of habitat trees (for example, hollow bearing, nest, feed trees), protection of environmentally sensitive areas of land, including rainforests, old growth forests and streamside vegetation, and protection of known locations of threatened species of both flora and fauna.

Approval through a private native forestry property vegetation plan (PNF PVP) is required to carry out forestry operations on private land. A PNF PVP adopts the PNF Code and is a legally binding agreement between a landholder and the Minister. PNF PVPs are valid for up to 15 years, giving landowners the security they need to make long-term forest management decisions.

As at 30 June 2009, DECC had received 1 938 enquiries, approved 805 PNF PVPs covering 249 296 hectares. DECC is monitoring PNF operations through monitoring activities. Approximately 11% of approved PNF PVPs have been monitored for compliance with the PNF Code through both formal audits and operational inspections. Corrective actions have been taken with two operations, a warning letter has been issued and two other operations have required compliance action. Three further investigations into potential non-compliance with the PNF Code are currently on-going.

The PNF Industry Assistance Program was designed to assist sawmills and other primary processors, harvest and haulage contracts, and timber workers that have been significantly affected by the introduction of the Code. Applications for assistance closed on 15 May 2009, and these were assessed during the year with decisions forthcoming.

The Native Vegetation Assistance Package provides assistance to landholders whose forestry operations have been affected by the introduction of the Code. The program has been extended for a further two years from July 2009 to June 2011 specifically for PNF landholders, with \$400 000 available for Sustainable Farming Grants over the next 2 years.

\$4 million has been allocated to support PNF training of harvesters and landholders until 2012. An accredited TAFE course in Sustainable PNF has now been rolled out for harvesting operators, focusing on protection of forest soil, water, biodiversity and silviculture relevant to the Code. Two further training initiatives will commence by mid 2009: introductory field days on the PNF Code for landholders and contractors delivered by the Department of Primary Industries; and a second accredited TAFE course aimed at contractors and landholders who plan and organise forestry operations.

DECC is also developing key communication guides to assist landholders and contractors apply the Code in the field as well as to support the training courses.

2

Monitoring ecologically sustainable forest management – criteria and indicators

Introduction

This chapter provides a brief summary of the results of monitoring the ESFM criteria and indicators for the UNE, LNE, Eden and Southern regions for 2008–2009. Monitoring the indicators is an ongoing and evolving process.

Achieving ecologically sustainable forest management

The NSW forest agreements and IFOAs set out the strategic and operational framework for the management of public forests in New South Wales. A key objective of the agreements and approvals is the achievement of ecologically sustainable forest management (ESFM). As a means to measure progress towards this objective, a set of criteria and indicators are applied to each region: the ESFM criteria and indicators.

Monitoring and reporting ESFM indicators began in 1999–2000 for the UNE, LNE and Eden regions (ESFM Technical Committee 1998, 1999) and in 2002–2003 for the Southern region (ESFM Technical Committee 2000), following the implementation of the forest agreements for each region.

Monitoring obligations

This chapter summarises the monitoring results for the ESFM criteria and indicators for the UNE, LNE, Eden and Southern regions during 2008–2009. The ESFM indicators are those described in Table 1 and Attachment 9 of the UNE and LNE regions forest agreements and Table 2 and Attachment 9 of the Eden forest agreement, and Table 2 and Attachment 7 of the forest agreement for the Southern Region.

Using indicators to assess achievement of EFSM

The ESFM criteria and indicators allow sustainability to be defined and measured. The system contains information about long-term management objectives for conservation, recreation and timber production in New South Wales. This report sets out achievements against those objectives.

The ESFM indicators have been based largely on the original Montreal Process Implementation Group (MIG) set of sub-national indicators (MIG 1998)^{4,5}. These sub-national indicators were developed at a

Defined in A Framework of Regional (Sub-national) Level Criteria and Indicators of Sustainable Forest Management in Australia (Commonwealth, 1998).

MIG – indicators beginning with the prefix 'MIG' are based on the MIG set of regional (sub-national) indicators

national scale as a result of the Montreal Process. Sub-national indicators are reported as part of the Australian Government's State of the Forests reporting every five years.

Agency data

The data presented in this section of the report by the Parks and Wildlife Group (PWG) of the Department of Environment and Climate Change (DECC) are for all parks within the Forest Agreement (FA) regions. The term 'park' is used in this report to refer to all areas of national park (NP), nature reserve (NR), State conservation area (SCA), regional park (RP), Aboriginal area, historic site and karst conservation reserve (KCR) managed by the PWG of DECC.

In 2004 and 2007, the State of the Parks (SoP) survey provided extra information on some indicators. As the SoP survey is only run every third year, this level of information cannot be reported annually. There was no survey in 2008–2009 and, as a result, the level of information provided for some indicators may differ from the previous year's report. The next survey is due in August 2010, and will provide information that may be reported on for future reporting periods.

Department of Primary Industries

The provision of data from within the Department of Primary Industries (DPI) has mainly been through Forests NSW. Forests NSW data have consisted of information sourced from corporate reports (such as the Forests NSW annual report) as well as a number of Forests NSW databases (such as the Social, Economic and Environmental database). Forests NSW SEEing reporting was incorporated into the Forests NSW Annual Report for the first time in this 2008–2009 report .The provision of information where possible has been by FA region; however, the majority of Forests NSW databases have been designed to provide reports on a Forests NSW regional (operational) boundaries. Information has also been sourced from the Plantations Assessment Unit with DPI.

MIG Indicator 1.1.a: Extent of area by forest type and tenure (UNE, LNE, Southern regions)

Indicator 1.1: Extent of forest ecosystem types and vegetation types by growth stage (Eden region)

Sub-indicator 1.1.a.1: Understorey vegetation layer (Southern region)

MIG indicator 1.1.b: Area of forest type by growth stage distribution by tenure (UNE, LNE, Southern regions) Indicator 1.1: Extent of forest ecosystem types and vegetation types by growth stage (Eden region)

Additions to the DECC estate resulted in increases to the extent of in the UNE, LNE and Southern regions. The extent of growth stage categories within State forests remains relatively stable.

Forest type and growth stage

Area of forest by forest type and tenure - interpretation

This indicator uses the area of each forest type over time as a broad measure of the maintenance of forest ecosystems and their diversity. Reporting on forest tenure helps to understand how different land management administrations can affect forest biodiversity⁶. Changes in the extent of forest ecosystem types are measured against modelled forest type extents that are listed in the RFAs⁷.

Forest type and growth stage change - DECC estate

New gazettals provided an increase in the area of forest candidate old growth within the parks system for both UNE and LNE regions during 2008–2009 financial year.

In the UNE region, six new reserves resulted in the protection of 3019 hectares (ha) of forest, covering a total of 60 forest ecosystems (out of the 163 mapped forest ecosystem types). About 70% of these additions are classified as old growth forest, being mapped as either Candidate Old Growth (COG) forest or Disturbed Old Growth (DOG) forest. Old Growth forests contain significant areas of habitat for those species dependent on old growth elements.

Of the 3019 ha of forest added into reserves, 1323 ha (within 43 forest ecosystem types) were mapped as Candidate Old Growth (COG) forest. Another 814 ha (within 37 forest ecosystem types) were mapped as Disturbed Old Growth (DOG) forest, representing an increase from the previous financial year. See Table 2-1A below for further information.

The area of threatened forest ecosystems given formal protection within the reserve system also increased in UNE region in the 2008–2009 financial year. This included an increase in the reserved area of two endangered forest ecosystems, Rainforest and Swamp, which increased by areas of 7 ha and 16 ha respectively. The reserved area of seven vulnerable forest ecosystems increased by a total of 40 ha, including 18 ha of Lowlands Grey Box. The reserved areas of three rare forest ecosystems increased by a total of 29 ha, including a 26 ha increase in the Dorrigo White Gum forest ecosystem.

Australian Government Department of Agriculture, Fisheries and Forestry, www.daffa.gov.au/_data/assets/word_doc/0004/451642/crit-indicators.doc

Modelled pre-1750 extent of forest types are contained in Tables 1A and 1B, Attachment 1 of the North East RFA; Table 1, Attachment 1 of the Eden RFA; and Table 1, Attachment 1 of the Southern RFA.

The addition of 1437 ha to Washpool National Park in UNE in 2008–2009 has improved the management of the reserve and improved the protection of vegetation communities that are underrepresented in the reserve system, including 51 ha of the endangered Rainforest forest ecosystem.

In the LNE region, 12 new reserve additions protected 6292 ha of forest, covering 74 of the 200 mapped forest types, including 3084 ha (45 types) mapped as COG. For another five forest ecosystems there was an increase in the area of COG forest in the reserve system by seven ha. Around 3083 ha (49%) of these additions are classified as some form of old growth forest, containing significant areas of habitat for those species dependent on old growth elements.

The area of threatened forest ecosystems given formal protection within the reserve system also increased in the LNE region with the gazettal of additions in 2008–2009. The reserved area of 11 vulnerable forest ecosystems increased by a total of 706 ha, including 325 ha of New England Stringybark–Blakely's Red Gum and 91 ha of Escarpment Scribbly Gum-Apple. The reserved areas of six rare forest ecosystems increased by a total of 594 ha, including 503 ha of Rainforest and 44 ha of Tallowwood.

The addition of 3328 ha to Oxley Wild Rivers National Park in LNE in 2008–2009 has increased protection for several under-represented forest ecosystems, including the rare Rainforest and River Oak ecosystems, and the vulnerable Grey Box–Red Gum–Grey Ironbark and New England Stringybark–Blakely's Red Gum ecosystems. Gazettal of this land also conserves habitat for threatened flora and fauna species including a number of vulnerable species: masked owl (*Tyto novaehollandiae*), spotted-tailed quoll (*Dasyurus maculatus*) and the gorge hakea (*Hakea fraseri*), and the endangered brush-tailed rock-wallaby (*Petrogale penicillata*). See Table 2-1B below for further information.

Several other endangered and vulnerable flora and fauna species were recorded in the reserve additions in the UNE and LNE. A full list of threatened species recorded in the newly reserved areas is provided in Appendix 2. No other changes to forest type, structure, or growth stage, including those resulting from fire, were recorded.

Table 2-1A: Change in area (ha) of old-growth-stage categories within the DECC estate – UNE and LNE regions (2008–2009)

Eucalypt forest old growth stage	Total change since last reporting period (ha)			
	UNE region	LNE region		
Candidate old growth forest (COG)*	+1 323	+3 084		
Disturbed old growth forest (DOG)	+814	+7		
Total	+2 137	+3 091		

* Includes any HCVOG Source: PWG of DECC

Table 2-1B: Change in area (ha) of growth stage categories within the DECC estate – UNE and LNE regions (2008–2009)

Eucalypt forest growth stage	Total change since last reporting period (ha)				
	UNE region	LNE region			
Rainforest	+8	+503			
Mature forest	+55	+158			
Disturbed mature forest	+629	+0			
Young forest	+161	+78			
Recently disturbed forest	+0	+1			
Not growth staged	+29	+2 438			
Total	+882	+3 178			

Source: PWG of DECC

There were increases in the area of forest ecosystems by growth stage distribution within the reserve system in Southern region during 2008–2009 as a result of the gazettal of new land, with 13 996 ha of forest added to 20 DECC reserves (Table 2-1C). Additions to nine reserves totalling 6211 ha are mapped as COG, the largest addition of COG being 4964 ha to Woomargama SCA.

Table 2-1C: Change in area (ha) of growth stage and old-growth-stage categories within the DECC estate – Southern region (2008–2009)

Growth stage	Unknown	Candidate old growth	Disturbed old forest	Mature forest	Disturbed mature forest	Young forest	Total
Blue Mountains NP	4.8	0.0	6.4	0.0	0.3	0.0	11.6
Burrinjuck NR	0.0	0.0	71.9	0.0	53.5	8.7	134.2
Coolangatta Mtn AA	15.0	0.0	6.6	0.0	0.0	44.5	66.1
Eurobodalla NP	0.4	0.0	0.0	0.0	0.0	0.9	1.3
Goorooyarroo NR	24.8	0.0	0.0	0.0	0.0	0.0	24.8
Jenolan KCR	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Jervis Bay NP	198.1	5.5	32.1	57.5	0.7	71.3	365.3
Kanangra-Boyd NP	79.3	0.0	0.9	0.0	0.4	0.7	81.2
Keverstone NP	12.8	0.0	320.0	0.0	601.9	61.6	996.4
Keverstone SCA	14.5	37.1	439.2	121.4	1136.2	0.0	1748.5
Kosciuszko NP	0.0	4.6	154.2	0.0	0.0	0.0	158.8
Livingstone SCA	61.8	0.0	0.0	0.0	0.0	0.0	61.8
Monga NP	11.0	102.6	213.5	72.2	119.0	92.8	611.0
Morton NP	0.0	0.7	8.1	0.2	0.0	7.7	16.6
Mullengandra SCA	0.8	98.1	47.7	5.1	3.2	103.3	258.2
Murramarang NP	2.9	0.0	0.0	0.9	24.1	0.0	27.8
Queens Gap NR	47.8	820.9	498.7	300.1	217.1	63.1	1947.7
Razorback NR	0.5	0.0	53.8	0.0	217.7	0.0	272.0
Wiarborough NR	4.0	177.3	10.9	0.0	5.1	10.0	207.3
Woomargama SCA	24.3	4964.3	1145.8	550.0	179.6	124.2	6988.3
Total	505.1	6211.2	3009.7	1122.5	2558.8	588.8	13996.2

In the Eden region, 17.5 ha were added to South East Forests NP. This included 15.2 ha of mature forest and 2.4 ha of unknown type.

Forest growth stage change - State forests

As a result of various land transfers, principally those facilitated by the *National Park Estate* (*Reservations*) *Act 2002, National Park Estate* (*Reservations*) *Act 2003* and the *National Park Estate* (*Reservations*) *Act 2005*, the size of the NSW State Forests estate has decreased since the start of the NSW Forest Agreements.

While the total area of the NSW Forests estate has declined, the distribution of growth stages has remained relatively stable during this period. The largest growth stage extent in State forests continued to be mature forest, followed by regrowth forest and young regeneration (figure 2-1A).

A large area (9%, or 41 000 ha) continued to be 'unassigned' in the LNE. This reflects that no information had been collected about the forest structure layer in the unassigned area and Forests NSW had not been able to enter information into the geographic information system (GIS) structure layer.

In the Southern region, 2726 ha were revoked from State forests and added to the DECC estate, while across all FA regions there were 1159 ha dedicated (added) as State forests (under Section 25e of the *Forestry Act 1916*). Accordingly there has been a net loss of State forests estate of 1595 ha across all FA regions this year.

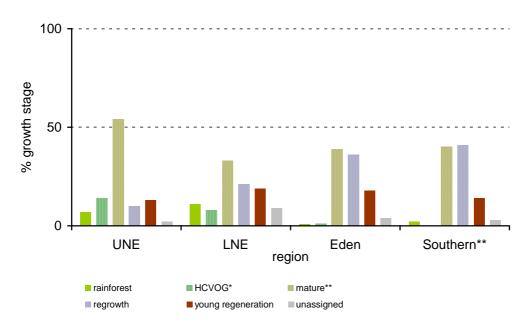


Figure 2-1A: Growth stage extent in State forests – all regions (2008–2009)

Source: Forests NSW data

^{*} High conservation value old growth

^{**} Mature forest includes mature and candidate old growth; regrowth forest includes young forest; young regeneration includes recently disturbed forest; 'unassigned' includes no growth stage assigned by Forests NSW and no information collected about the forest structure layer in the unassigned area.

Vegetation and environmental protection in Private Native Forests

With the introduction of the *Private Native Forestry Code of Practice* (the Code) a range of vegetation areas on private land became explicitly protected by the legislation in NSW. These areas include:

- areas mapped as old growth forest
- areas mapped as rainforest
- riparian zones (5 m exclusion zone for and 20 m for prescribed streams
- wetlands and heathlands.

Timber harvesting activities are not permitted in any of these areas under the Code.

Fragmentation

MIG indicator 1.1.e: Fragmentation of forest types (UNE, LNE, Southern regions)
Indicator 1.2: Extent of connectivity in the forest landscape in relation to threatened species, habitat, general retained habitat on private land and conservation reserves (Eden region)

DECC began an experimental rehabilitation and revegetation project for threatened ecological communities in the LNE. In the Southern FA 610 ha was added to DECC estate in the Southern FA, which increased connectivity in the reserve system.

Newly listed species, populations and communities impacted upon by fragmentation

Fragmentation continues to result in the listing of species, ecological communities and populations under the provisions of the *Threatened Species Conservation Act 1995 (TSC Act)*. Fragmentation of native vegetation was listed as a contributing factor to loss of biological diversity in 'Clearing of Native Vegetation as a Key Threatening Process' under the *TSC Act* in 2001.

www.environment.nsw.gov.au/determinations/ClearingNativeVegKTPListing.htm

In 2008–2009, three species, one population and four ecological communities occurring in the FA regions were newly listed on the *TSC Act*. Of the three newly listed species, two (*Thelymitra* sp. 'Adorata', the Wyong sun orchid; *Pultanaea humilis*, the dwarf bush pea) have habitat fragmentation or clearing of vegetation listed as threatening processes. Also affected are the newly listed endangered population of yellow-bellied gliders (*Petaurus australis*), the vulnerable ecological community, Lower Hunter Valley Dry Rainforest in the Sydney Basin and NSW North Coast Bioregions, the endangered ecological communities of White Gum Moist Forest and Coastal Cypress Pine Forest, and the critically endangered ecological community of Kincumber Scribbly Gum Forest.

Additionally, three threatened species, *Diuris flavescens* (a terrestrial orchid), *Genoplesium plumosum* (Tallong midge orchid) and *Fontainea oraria* (rainforest tree coastal fontainea), list habitat fragmentation and clearing of vegetation as known threats, and have been upgraded from endangered to critically endangered.

Rehabilitation initiatives

The Great Eastern Ranges (Alps to Atherton) Initiative (GERI) continued in 2008–2009. In 2008–2009, key activities in the GERI project were partnership building, including Aboriginal land management partnerships and developing a partnership website (due for completion in 2009–2010), establishing

conservation agreements, wildlife refuges and covenants on private land in targeted conservation areas, preparing a scientific principles report on continental-scale connectivity conservation, a draft tourism marketing strategy, and a short film to promote the Great Eastern Ranges Initiative.

Additions to the DECC estate in the Southern region that aimed to increase the connectivity of the reserve system included 610 ha, which connected two disjunct portions of Monga NP, and 161 ha added to South East Forest NP.

DECC also completed Stage 1 of a project on experimental rehabilitation and revegetation of threatened ecological communities in the Lower Hunter (LNE) by establishing 4 ha of plantings of Lower Hunter spotted gum-ironbark forest and Kurri sand swamp woodland at two sites. The plantings will be monitored for the next 10–15 years to provide information on restoring endangered ecological communities.

Forest-dwelling species

MIG indicator 1.2.a: A list of forest-dwelling species (UNE, LNE, Eden, Southern regions)
Indicator 1.3.b: List of representative species by abundance. Representative sample to include threatened species, key functional groups and indicator species (Eden region)

There were large increases in the total number of forest-dwelling flora species reported across all regions, mainly due to the new inclusion of information from DECC's systemic vegetation survey database.

DECC data and interpretation

The list provided at Table 2-1D should not be considered a true measure of change in species diversity. A key concern is that the source of the information, the Atlas of NSW Wildlife (the Atlas), relies on the initiative of public and government researchers for it to be maintained. Increases in species records are therefore more likely to reflect research or reporting efforts rather than true changes in the range of species occurring on DECC estate. Significant increases in the number of forest-dwelling species within a region for a given year are often due to the contribution of large data sets that can have records dating back over many years. Reported increases in species may therefore include species recorded prior to the reporting period. Additionally, even true changes in the local distribution of a species are meaningless in isolation from records from other locations and environmental data.

The 2008–2009 data should not be closely compared to the last data extraction, which took place in the 2003–2004 financial year. The national list of forest-dwelling species has not been updated to reflect taxonomic changes, including species being renamed, which have occurred since the list was generated. This has resulted in an apparent drop in the number of species for some areas due to species names not matching the names on the national list during the Atlas data extraction process. Some forest dwelling fauna species that have been renamed have been accounted for and included in the 2008–2009 dataset, however, forest-dwelling flora species that have been renamed have not been included.

Additionally, flora data from the DECC YETI (systemic vegetation survey) database have been included in the 2008–2009 extraction. These data have not been included in previous years.

Table 2-1D: Number of forest-dwelling species recorded on DECC estate for each of the FA regions (2008–2009)

		Forest dwelling species								
	эрсско		UNE		LNE		Sout	hern	Eden	
			Total number as at 16 Oct 2009	No of new species recorded during 2004–09	Total number as at 16 Oct 2009	No of new species recorded during 2004–09	Total number as at 16 Oct 2009	No of new species recorded during 2004–09	Total number as at 16 Oct 2009	No of new species recorded during 2004–09
		Native Amphibia	50	0	41	1	35	0	21	0
		Native Aves	344	3	330	5	295	1	232	2
		Native Mammalia	79	0	76	2	64	0	51	2
		Native Reptilia	94	1	98	2	65	4	36	1
NATIVE	CIES	Total native vertebrate species	567	4	545	10	459	5	340	5
	FAUNA SPECIES	Native invertebrate species	4	0	1	0	0	0	1	0
	F/	Total number of native species	571	4	546	10	459	5	341	5
INTRODUCED		Introduced vertebrate species	26	1	27	0	25	0	19	0
INTRO		Introduced invertebrate species	0	0	0	0	0	0	0	0
		ALL Fauna (native and introduced vertebrate and invertebrate species)	597	5	573	10	484	5	360	5
NATIVE	S	Native vascular plant species	2231	366	2151	478	1768	824	1166	285
INTRO-DUCED	PLANTS	Introduced vascular plant species	249	97	365	181	321	257	112	83
		ALL vascular plant species	2480	463	2516	659	2089	1081	1278	368
		ALL FOREST DWELLING SPECIES	3077	468	3089	669	2573	1086	1638	373

Source: DECC Atlas of NSW Wildlife

Threatened species, populations and ecological communities

MIG indicator 1.2.b: The status (threatened, rare, vulnerable, endangered or extinct) of forest-dwelling species at risk of not maintaining viable breeding populations, as determined by legislation or scientific assessment (UNE, LNE, Eden, Southern regions)

Sub-indicator 1.2.b.1: The status of endangered populations and ecosystems as determined by legislation or scientific assessment (UNE, LNE, Southern regions)

Additional forest-dwelling species, populations and ecosystems have been listed on the schedules of the Threatened Species Conservation Act this year. However, this does not necessarily mean there has been a decrease in the status of forest-dwelling species.

Data and Interpretation

DECC Estate

In NSW, the TSC Act is the main legislation that provides for the protection of endangered, vulnerable or presumed extinct flora and fauna species, populations and ecosystems. Flora and fauna species may be listed for protection under Schedules 1 (endangered species, populations and ecological communities) and 2 (vulnerable species) of the TSC Act. Determinations for listings are made by the NSW Scientific Committee⁸ and details of these determinations can be found at:

www.environment.nsw.gov.au/committee/ListOfScientificCommitteeDeterminations.htm

Schedules of the TSC Act apply across all tenures and are maintained by the NSW Scientific Committee.

This measure does not necessarily reflect the true rate at which species are becoming threatened. Nor does it identify whether the condition of species already listed as threatened is improving or worsening. The rate at which species are listed on the schedules under the TSC Act can also reflect:

- the state of knowledge about species populations and ecological communities
- changes to the Scientific Committee process in processing proposals for listing
- changes to the TSC Act about what can be listed and
- changing awareness among the general community about the listing process.

Listing of forest-dwelling species

The information below provides details on the data (specifically in relation to the additions or deletions) that are presented in Table 2-1E.

There was one reclassification during 2008–2009 for vertebrate fauna, and five for vascular plants:

- The black flying-fox *Pteropus alecto* (Temminck 1837) in Northern NSW, previously classified as vulnerable, was delisted from the *TSC Act*.
- Acacia macnuttiana (Maiden & Blakelya) in the UNE region was reclassified from endangered to vulnerable in Part 1 of Schedule 2 of the Act.
- The mallee *Eucalyptus approximans* Maiden in the LNE region was reclassified from endangered to vulnerable in Part 1 of Schedule 2 of the Act.

⁸ An independent committee of scientists appointed by the Minister for the Environment.

- The rainforest tree *Fontainea oraria* Jessup & Guymer (Coastal Fontainea) in the UNE region was reclassified from an endangered to a critically endangered species in Part 1 of Schedule 1A of the Act.
- The terrestrial orchid, *Diuris flavescens* D.L.Jones in the LNE region was reclassified from an endangered to a critically endangered species in Part 1 of Schedule 1A of the Act.
- The Tallong midge orchid, *Genoplesium plumosum* (Rupp) D.L.Jones & M.A.Clem in the Southern region was reclassified from an endangered species to a critically endangered species in Part 1 of Schedule 1A of the Act.

In the LNE region, there were two new listings for vascular plants during 2008–2009:

- Thelymitra sp. 'Adorata' (B. Branwhite JAJ1030) J. Jeanes in ed. (Wyong sun orchid) was listed as critically endangered in Part 1 of Schedule 1A of the Act.
- The shrub *Dracophyllum macranthum* E.A.Br. & N. Streiber was listed as a vulnerable species in Part 1 of Schedule 2 of the Act.

In the Southern region there was one new listing for vascular plants during 2008–2009:

- The dwarf bush pea, *Pultenaea humilis* Benth. ex Hook. F. was listed as a vulnerable species in Part 1 of Schedule 2 of the Act.
- The pretty beard orchid, *Calochilus pulchellus* D.L. Jones was listed as an endangered species in Part one of Schedule 1 of the Act.

Table 2-1E: Status of forest-dwelling species – all regions (2008–2009)

	Schedule 1	endangered	Schedule 2	vulnerable			
Region	Listed before 2008–2009	Listed during 2008–2009	Listed before 2008–2009	Listed during 2008–2009			
UNE region	UNE region						
Vertebrate fauna	18	0	92	0			
Invertebrate fauna	3	0	0	0			
Vascular plants	86	0	56	0			
Total listed	107	0	148	0			
LNE region							
Vertebrate fauna	12	0	80	0			
Invertebrate fauna	1	0	0	0			
Vascular plants	48	1	71	1			
Total listed	61	1	151	1			
Eden region	Eden region						
Vertebrate fauna	11	0	40	0			
Invertebrate fauna	1	0	0	0			
Vascular plants	25	0	16	0			
Total listed	37	0	56	0			
Southern region							
Vertebrate fauna	19	0	58	0			
Invertebrate fauna	0	0	0	0			
Vascular plants	37	1	29	1			
Total listed	56	1	87	1			

Source: PWG of DECC

Note -: The 'listed during 2008–09' column only shows new listings.

Listing of endangered populations and ecological communities

In 2008–2009, DECC completed assessments of 16 rare, endangered and vulnerable forest ecosystems and nominated nine as threatened ecological communities to the NSW Scientific Committee across NSW. The results of the assessments were presented at scientific workshops and published in the journal *Environmental Management and Restoration*.

Determinations in the forest agreement regions 2008–2009 were as follows:

LNE

The Lower Hunter Valley Dry Rainforest in the Sydney Basin and NSW North Coast Bioregions was listed as a Vulnerable Ecological Community in Part 2 of Schedule 2 of the Act. Kincumber Scribbly Gum forest in the Gosford LGA was listed as a Critically Endangered Ecological Community in Part 2 of Schedule 1A of the Act.

UNE

White Gum Moist Forest in the NSW North Coast Bioregion (currently known from the Clarence Valley, Coffs Harbour, Kyogle and Tenterfield LGAs) and Coastal Cypress Pine Forest in the NSW North Coast Bioregion (found in the Tweed, Byron, Ballina, Richmond Valley and Clarence Valley LGAs) were each listed as Endangered Ecological Communities in Part 3 of Schedule 1 of the Act.

Southern

Yellow-bellied Gliders *Petaurus australis* (Shaw 1791) on the Bago Plateau were listed as an Endangered Population in Part 2 of Schedule 1 of the Act. The Bago Plateau is a westward extension of the Kosciuszko highlands in southern New South Wales, and the listed yellow-bellied glider population is distributed over Bago and Maragle State Forests, a small area of Kosciuszko National Park, and some freehold land.

There were no new threatened species determinations for the Eden FA in 2008–2009.

Table 2-1F summarises the status of endangered populations and endangered ecological communities for all regions.

Table 2-1F: Status of endangered populations and endangered ecological communities – all regions

All ragions	Schedule 1		
All regions	Listed before 2008–2009	Listed during 2008–2009	
Endangered population	14	1	
Endangered ecological community	45	4	
Total listed	59	5	

Source: PWG of DECC

State forests

Trained Forests NSW staff survey flora and fauna during the planning phase of forestry operations. Threatened species surveys are required for current terms of licensing under the *Threatened Species Conservation Act 1995*⁹. Threatened species surveys mainly focus on locating target species. However, as part of the survey process, Forests NSW ecologists and suitably trained staff record most fauna and flora species detected. If threatened species are detected during surveys Forests NSW applies protective measures (as per the conditions of the IFOAs).

In 2008–2009, Forests NSW conducted 1416 pre-harvest flora and fauna surveys on State forest in the FA regions. Surveys across all regions resulted in a total of 2780 individual sightings of threatened flora and fauna species under the *Threatened Species Conservation Act 1995* (Figure 2-1B).

Several findings were made in the FA regions for the 2008–2009 financial year. In the UNE, 541 individuals of threatened species were recorded. In addition, 55 sightings of *Petauroides volans* (greater glider) were recorded. Although this species is not currently listed under the Act, it is an important indicator of sustainable forest management. Examples of other species recorded include 123 sightings of *Petaurus australis* (yellow-bellied glider), 147 sightings of *Calyptorhynchus lathami* (glossy black cockatoo), 12 of *Pteropus poliocephalus* (grey-headed flying-fox), and 44 sightings of

Threatened Species Licence contained in the IFOA for each region.

Phascolarctos cinereus (koala). Also recorded in the UNE were 51 occurrences of Amorphospermum whitei (rust plum), a vulnerable small to medium-sized tree found on the coast and adjacent ranges of northern NSW.

In the LNE, 11 631 threatened species were recorded: an increase from the previous financial year's 843 recorded species. In addition to these records, 74 sightings of *Petauroides volans* (greater glider) were made. Other examples of species recorded include 682 sightings of the nomadic *Pteropus poliocephalus* (grey-headed flying-fox) and 38 *Mixophyes balbus* (stuttering frog)¹⁰. In the Southern region, 245 threatened species surveys were undertaken, resulting in 468 sightings recorded. Records are in addition to 91 observations of *Petauroides volans* (greater glider), but include 11 observations of *Tyto tenebricosa* (sooty owl), 20 observations of the powerful owl, 59 of *Callocephalon fimbriatum* (gang-gang cockatoo) and six observations of (eastern false pipistrelle).

In Eden region, 140 threatened species observations were recorded in Eden region, including 57 observations of *Petaurus australis* (yellow-bellied glider), 36 *Isoodon obesulus obesulus* (southern brown bandicoot), 22 *Pseudomys fumeus* (smoky mouse), and five observations of *Calyptorhynchus lathami* (glossy black cockatoo). Records are in addition to 26 observations of *Petauroides volans* (greater glider)

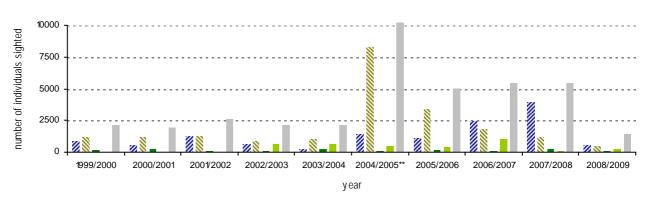


Figure 2-1B: Forests NSW threatened species survey results – all regions

LNE

* Monitoring for the Southern region began in 2002–2003.

WUNE

** For clarity reasons 2004/–2005 figures do not include records for *Macrozamia johnsonii* (11 768 individuals in UNE) or *Euphrasia ciliolata* (11 350 individuals in the LNE). In subsequent years only 70 individuals of *Euphrasia ciliolata* were recorded. The high numbers recorded in 2004–2005 are likely to be a result of targeted surveys

Eden

From 2005–2006, data for the UNE and LNE and Southern regions have been obtained from Forests NSW biodata system as opposed to SEEDS. Biodata provides a more comprehensive list of threatened species recorded than SEEDS. For Eden region data continues to be supplied from SEEDS at this stage. Forests NSW is in the process of reviewing SEEDS with the aim of linking the biodata and SEEDS systems for more comprehensive reporting outcomes in the future.

Southern*

total

Source: Forests NSW data

21

¹⁰ Figure for stuttering frog includes tadpole numbers.

Species management measures

Indicator 1.3: Management measures in place to maintain species extent and abundance (interim for the first 5 five years of

Agreement) (Eden region)

Data and interpretation

This indicator has been reported by DECC for all of the FA regions annually from 2001–2002 until 2004–2005. In 2004–2005 and 2006–2007, data was provided from PWG's State of the Parks (SoP) assessment. The next SoP survey is due in August 2010, and will provide information that may be reported for future reporting periods

Land available for timber production

An estimated 52% (approximately 843 000 ha) of native and plantation State forests are available for timber production across all regions.

MIG indicator 2.1.a: Area of forest land and net area of forest land available for timber production (UNE, LNE, Eden, Southern

Information provided for this indicator applies to State forests only. Figures reported do not include private forestry activities.

Data and interpretation

Native forest

The total area of State forest in the UNE, LNE, Southern and Eden regions was approximately 1.6 million ha in 2008-2009.

The native forest estate covers approximately 1.27 million ha. Of this, approximately 785 000 ha (48%) is estimated to be not available for native forest harvesting due to a number of restrictions. These include areas reserved for conservation, special prescription areas and non-harvest management areas (they do not include softwood plantation areas - reported separately). An area of 353 000 ha (29% of the total native forest) is especially protected for conservation¹¹.

The following were reported at 30 June 2009:

- Total Forests NSW native forest in the UNE region was approximately 385 600 ha. Approximately 41% was available for harvest and 59% reserved for conservation purposes 12 or unable to be harvested because of other restrictions¹³. Ten per cent of the native forest estate requires further assessment¹⁴.
- Total Forests NSW native forest in the LNE region was approximately 451 000 ha. Approximately 64% was available for harvest. Approximately 36% was unable to be harvested which included areas reserved for conservation, harvest exclusions and other restrictions, and areas requiring further assessment.
- Total Forests NSW native forest in the Eden region was approximately 170 000 ha. It is estimated that 71% was available for harvest. Approximately 29% was reserved for conservation or was unable to be harvested because of other restrictions.

Areas for further assessment are classified as FMZ 8 under the FMZ system.

Land for conservation purposes are classified as FMZ 1, 2 or 3A under the FMZ system described in Managing Our Forests Sustainably: Forest Management Zoning in NSW State Forests (SFNSW, 1999).

The area of State forest identified as available for harvest (FMZ4) is not representative of the actual 'on ground' area available for harvest. Harvestable areas may be subject to the conditions of the IFOAs, which protect various forest values, such as riparian filter strips and threatened species habitat exclusions. Further operational exclusions may arise due to 'on ground findings', such as unmerchantable forest types, accessibility, rock, and low volume areas and these are termed 'operational exclusions'.

As for footnote 12.

■ Total Forests NSW native forest in the Southern region was approximately 271 000 ha. It is estimated that around 64% was available for harvest. Approximately 36% was reserved for conservation or was unable to be harvested because of other restrictions. All native forest estate in Southern region has been assessed for the availability of timber.

Forests NSW plantations

Softwood plantation estate accounts for approximately 18% (287 000 ha) of the total State forest estate across all regions. The figure does not include formal reserves (e.g. flora reserves) within the planted forest estate, which have been reported as part of the native forest estate, but they do include large areas of native forest, retained vegetation, and environmental exclusion zones that have not been planted with trees.

Most plantation softwood estate, approximately 204 000 ha, is found within the Southern region. This equates to around 43% of the total State forest estate in the Southern region (which excludes Goulburn sub-region for the purposes of this report). The Eden, UNE and LNE regions have around 42 500 ha, 23 000 ha and 17 500 ha of softwood plantation respectively. Of the total Softwood plantation estate it is estimated that 67% of the area is available for harvest (excluding formal reserves, which have been attributed to native forests).

About 4% of total State forest estate across all regions is hardwood plantation estate and is mainly found within the UNE (approx 48 500 ha) and LNE (approx 16 800 ha). It is estimated that 54% of the total area of hardwood plantation estate is available for harvest.

Some of the changes in area figures provided from year to year are a result of improved analysis of the spatial layers within the Forests NSW Geographic Information System. Strategic estimates of harvestable and non-harvestable areas are also subject to change depending on a range of factors, including market price and operational efficiency. The environmental licence conditions under the IFOAs have not changed.

Plantations authorised under the PR Act

The *Plantations and Reafforestation Act 1999* (PR Act) came into effect in 2001 with the intention of streamlining the approval process required to invest in plantations while maintaining existing environmental standards¹⁵.

The Department of Primary Industries (DPI) is the consent authority for plantations under the PR Act. The Plantations and Reafforestation (Code) Regulation 2001 (the Plantations Code) sets clear guidelines for plantation establishment and seeks to prevent land degradation and other environmental problems, while also providing sustainable timber resources and a diversified source of income for rural producers. A statutory review commenced in 2005 recommended a number of amendments to the PR Act and Plantations Code that are expected to be made in 2010. These amendments will include the introduction of fire standards and improved environmental protection provisions.

Reference: www.dpi.nsw.gov.au/agriculture/resources/private-forestry/plantation-authorisations/guidelines-for-applicants#Existing-plantations

DPI has not supplied PR Act plantation figures by FA regions, but has provided data for the north coast, Hunter and South Coast. Table 2-2A shows the area of existing, new and environmental plantations authorised each year under the PR Act for these regions.

Table 2-2A: Area of plantations authorised under the PR Act for the North Coast, Hunter and South Coast. Authorised plantations include existing plantations, newly established plantations and environmental plantations.

Year	North Coast		South Coast		
Teal	Area (hectares) of plantations approved under the PR Act				
2001–2002	919	134	1 038		
2002–2003	3 425	118	322		
2003–2004	2 915	200	1 523		
2004–2005	8 060	2 233	4 397		
2005–2006	123 457	1 664	2 033		
2006–2007	14 038	438	1 826		
2007–2008	14 567	2 506	584		
2008–2009	10 283	2 434	809		

Private Native Forests

Under the *Native Vegetation Act 2003*, all forestry activities on private land now require a Private Native Forestry (PNF) Property Vegetation Plan (PVP). PNF PVPs require a landholder to undertake their operations in accordance with a Code of Practice. A public register of approved PNF PVPs can be found at www.environment.nsw.gov.au/pnf/approvedpnfpvps.htm

The number and area of PNF PVPs by NSW Forest Agreement region is provided in Table 2-2B. The majority of PNF PVPs are located in the UNE and LNE FAs.

Private Native Forests

The number and area of PNF PVPs by NSW Forest Agreement region is provided in Table 2-2B. The majority of PNF PVPs are located in the UNE and LNE FAs.

Table 2-2B: Private Native Forestry PVPs by FA as at 30 June 2009

FA	No of PVPs	Area of PVPs (ha)
Upper North East (UNE)	385	137 857
Lower North East (LNE)	289	46 946
Eden	16	5 988
Southern	26	9 865
Tumut	1	275

Total growing stock

Indicator 2.1.b: Total growing stock of both merchantable and non-merchantable tree species on native forest land available for timber production (UNE, LNE, Southern regions)

No outcomes to report.

Data and interpretation

No new data are available from Forests NSW on this indicator for this reporting period.

Timber products compared with sustainable volume

Indicator 2.1.d:	Annual removal of wood products compared with sustainable volume (UNE, LNE, Southern regions)
Indicator 2.1.b:	Annual removal of timber and non-timber products from forest ecosystems compared with those estimated to be
	ecologically sustainable by tenure (Eden region)
Indicator 2.1.d:	Annual removal of timber products and non-timber products from forest ecosystems by volume (Eden region)
Indicator 6.1.a:	Value and volume of wood and wood production (Southern region)

280 144 m³ of quota sawlogs (or 317 444 m³ including poles and girders) were harvested from Forests NSW native forest and hardwood plantations across all regions. Regional volumes did not exceed those permissible under the terms of the NSW forest agreements and IFOAs.

Quota sawlogs defined

In reports before 2006–2007, Forests NSW reported 'quota sawlogs' as veneer logs and high quality large sawlogs only¹⁶. High Quality Large logs are defined in the UNE, LNE and Southern IFOAs as having a diameter under bark of at least 40 cm. In Eden IFOA the definition of high quality large logs are 40 cm under bark butt diameter or 36 cm under bark butt diameter for logs over 4 m long. Large veneer logs are defined in the UNE and LNE IFOAs as having a centre diameter under bark of at least 40 cm.

Committed volumes harvested

Timber volumes permitted to be harvested by Forests NSW are specified in the NSW forest agreements, RFAs and IFOAs. An annual variation from the designated volume is permissible to accommodate changes in environmental and economic circumstances. This provision, as identified in the IFOAs, allows for harvest volumes in any one year to vary from the committed volume¹⁷ by 25%, but not to exceed 5% over a five-year-period.

In 2008–2009, there were decreases in the quota sawlogs harvested in UNE, LNE, Eden and Southern, with 254 668m³ harvested across all regions (or 286 371 m³ including poles and girders), compared to 280 144m³ (or 317 444 m³ including poles and girders) in the previous year. This represented 66% of the 388 500 m³ committed native forest quota volume (or 74% including poles and girders). Figure 2-2A provides details on the percentage of committed quota sawlog harvested by region.

Forests NSW had not included poles or girders as quota logs although in some cases they would qualify as high quality large sawlogs (and would need to be reported). For comparisons with previous years before 2006–2007, Figure 2-2A below does not include poles and girders in the quota figures. However, poles and girders have been reported in the text and in Tables 2-2B and 2-2C.

¹⁷ The volume of timber that may be harvested each year under the terms of the NSW forest agreements and IFOAs.

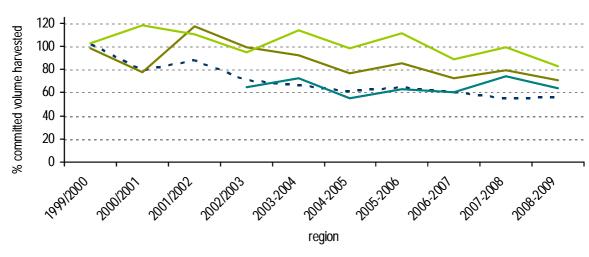


Figure 2-2A: Percentages of committed quota sawlog volumes harvested – all regions (excluding poles and girders)

** All quota sawlogs harvested from native forest.

UNE region

Eden region*

Source: Forests NSW data

In the UNE during 2008–2009, 60 622 m³ of quota sawlogs (66 985 m³ when including poles and girders) was harvested from Forests NSW native forests and hardwood plantations. This represents 56% of the committed volume (109 000 m³ a year, as specified in the UNE IFOA) and is a reduction from the previous year.

LNE region

Southern region**

For the LNE region, quota sawlogs harvested from the region during 2008–2009 totalled 112 853 m³ (137 394 m³ when including poles and girders) representing 71% committed volume of 160 000 m³ per annum as specified within the LNE IFOA.

Quota sawlogs harvested from the Eden region are wholly obtained from Forest NSW native forests. Quota sawlog volumes in 2008–2009 totalled 19 164m³, which represented 83% of the committed volume (of 23 000m³ in accordance with the Eden IFOA). 237 m³ of poles and girders were harvested in Eden.

Quota sawlogs harvested in Southern Region totalled 62 028 m³ (62 592 m³ when including poles and girders). This volume represents 64% of the committed volume, which was a decrease of 10% on the previous year, based on a committed volume of 96 500 m³ per annum (48 500 m³ South Coast and 48 000 m³ Tumut).

Pulp grade sawlogs also form part of quota sawlog volumes for the Eden region. 229 554 m³ of quota pulp grade sawlogs were allocated in Eden in 2007–2008 or 67% of the committed volume based on a committed volume of 315 839 tonnes (t) a year. Committed volume percentages of pulp grade sawlogs since 1999–2000 are shown in Figure 2-2B.

^{**} Timber harvesting under the terms of NSW forest agreements and IFOA began in 2002.

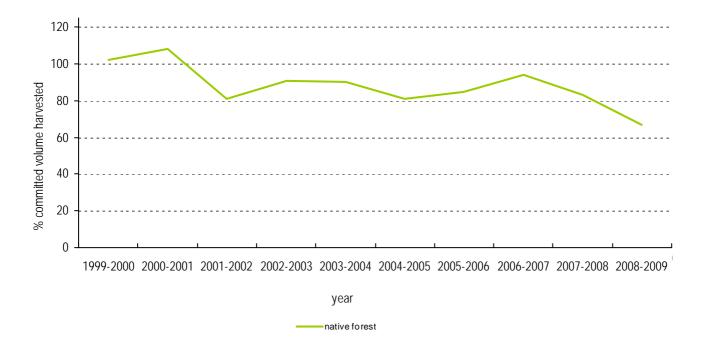


Figure 2-2B: Committed volumes harvested – pulp grade sawlogs (Eden region only)

Source: Forests NSW data

As well as 2007–2008 figures being reported, figures for 2005–2006 and 2006–2007 have been updated and modified since the previous report (2006–2007).

Non-quota sawlogs and pulp-grade timbers

In 2008–2009, 384 463 m³ of non-quota logs were harvested from Forests NSW native forests and hardwood plantations across all regions. This represents a decrease from the 435 492 m³ of non-quota logs harvested in 2007–2008 financial year. Forests NSW advises that a major contributing factor to this decrease is the impact of the global financial crisis, particularly on housing construction. Non-quota pulp grade timber harvested from Forests NSW native forest and hardwood excluding Eden totalled 323 462 t in 2008–2009. This is an increase of around 40 000 t from the previous year. Native forest and hardwood plantation pulp grade timbers for Eden region are not included here as they form part of the quota volumes designated in the IFOA. Non-quota figures are presented in Table 2-2C.

Table 2-2C: Volumes of timber products other than quota sawlogs from State forests – UNE and LNE regions (2008–2009)

		UNE region			LNE region		
Log type	Unit	Native forest	Hardwood plantation	Softwood plantation	Native forest	Hardwood plantation	Softwood plantation
Veneer*	m^3	n/a	n/a	20 091	n/a	n/a	1 462
High quality large*	m³	n/a	n/a	64 188	n/a	n/a	6 919
High quality small sawlogs	m³	22 122	1 704		27 763	12 256	0 919
Low quality sawlogs	m³	55 421	12 936	21 274	95 683	68 196	13 861
Poles/piles and girders**	m^3	5 398	965	0	15 423	9 118	0
Fencing / landscape / sleepers (sawn)	m³	0	0	0	0	0	0
Non-quota logs total	m³	82 941	15 605	105 553	138 868	89 570	22 242
***Pulp grade and chipwood	tonnes	26 945	13 065	11 370	94 602	75 446	5 123

Veneer and high quality large sawlogs harvested from Forests NSW native forests and hardwood plantations comprise quota log volumes. Quota sawlog volumes are reported under Criterion 2 in chapter 2.

Private Native Forestry

The Private Native Forestry Code requires landholders to report to DECC if they have carried out PNF operations in the previous calendar year, or if they plan to undertake PNF operations in the coming year. Reports are due at the end of March in each calendar year.

.Annual reports indicate that an estimated 21 293 hectares was logged in 2008 calendar year. The annual removal of wood products from private native forests covered by PNF PVPs for the 2008 calendar year as reported by landholders are shown in Table 2-2D.

Table 2-2D: Reported volumes of timber harvested from private native forests covered by PNF PVPs for the 2008 calendar year.

Volume	No of operations
< 500 m ³	150
500–2000 m ³	59
> 2000 m ³	19

Note these are statewide figures and include areas outside the FA regions. Additionally, no estimates of the sustainable yield for these forests are available.

Plantations authorised under the PR Act

I&I NSW do not collect overall figures for timber volumes and other products supplied from plantations,

Poles and girders have been reported as non-quota in this table, but see discussion above under the heading 'Quota sawlogs defined'.

^{***} Non-quota pulp grade timber Source: Forests NSW data

Standing volume of species logged

Indicator 2.3:

Standing volume of log stocks by species groups and diameter-at-breast height class for multi-aged and regrowth native forest and available for timber production by land tenure (Eden region)

No outcomes to report.

No new data are available from Forests NSW on this indicator for this reporting period.

Species and royalty of logs harvested

Indicator 6.1:

Average volume and royalty value of logs harvested per annum by species and grade by tenure (Eden region) (This indicator was defined within the Eden region set of criteria and indicators under Criterion 6 – Socioeconomic Benefits. For continuity of reporting it has been included under Criterion 2 – Productive capacity of forest ecosystems.)

No outcomes to report.

No new data are available from Forests NSW on this indicator for this reporting period.

Volume of non-timber products

Indicator 2.1.b:	Annual removal of timber and non-timber products from forest ecosystems, compared with those estimated to
	be ecologically sustainable by tenure (Eden region)
Indicator 2.1.d:	Annual removal of timber products and non-timber products from forest ecosystems by volume (Eden region)
Indicator 2.1.e:	Annual removal of non-timber forest products (e.g. berries, mushrooms, game, honey, wildflowers, tree ferns
	and possums) compared with the sustainable level (Southern region)
These indicators a	are applicable to the Eden and Southern regions. However, for Forests NSW, data have been provided on the
quantities of non-ti	mber products harvested in all regions (including the UNE and LNE regions).

The quantities of non-timber products removed from State forests have generally decreased across all regions. For national parks, honey continues to be the key major non-timber product obtained.

Data and interpretation

Forests NSW

State forests are a source of numerous non-timber forest products. For the purpose of measurement against this indicator, non-timber products in State forests have been determined to be those products that are not supplied to sawmills or processing plants. Non-timber forest products include firewood, seed, gravel and bark. In addition to non-timber products, Forests NSW also continues to provide details on commercial activities that occur in State forests (such as beekeeping and grazing).

Specific details on actual products and quantities of products taken from State forests, by region, are provided in Table 2-2E. Similar to the previous FA annual report (2007–2008), there was a general decline in most forest products taken from State forests in 2008–2009.

Table 2-2E: Non-timber products obtained from State forests – all regions (2008–2009)

Forest product	11-:4	Region				
Forest product	Unit	UNE	LNE	Eden	Southern	Totals
Grazing	ha	171 209	76 405	10 730	37 401	295 745
Apiculture	number of sites	934	95	1	17	1 047
Seed	kg	0	0	2	165	167
Firewood	t	510	1 438	993	3 344	6 285
Craft timber	m³	0	0	0	13	13
Misc. native timber pieces	number	435	0	0	1 250	1 685
Wood blocks	number	0	0	0	0	0
Film/documentary	permits	0	2	0	3	5
Communication sites	number of permits	39	54	2	11	106
Other structures	number of permits	29	37	3	2	71
Powerlines / cables / pipelines	km	8	16	50	2	76
Gravel / sand / rock	t	10 777	0	22 574	14	33 365
Research	number of permits	11	19	2	9	41
Maps sold to public	number	212	200	8	200	620

Source: Forests NSW

DECC Southern and Eden regions

In the Southern region the only non-timber forest product licensed for removal is honey. Across the region 55 licences are currently active. These licences were for a total of 174 sites (Table 2-2F). Apiary licence conditions neither specify the number of hives allowed per site nor require the licence holder to provide an annual report on the volume of honey removed from each site. Accordingly, it is not presently possible to report on trends in production of non-wood products removed under licence from DECC estate. Under the bee keeping policy¹⁸¹⁹, existing sites will be allowed to continue but no new/additional bee keeping sites will be permitted.

Other non-forest products licensed in the Southern region during 2008–09 included those that are intangible, products such as film documentary permits (7), communication site permits (37), transmission lines, cables and pipelines (625 km), and permits for other structures (19).

¹⁸ DECC Beekeeping Policy can be found at www.environment.nsw.gov.au/policies/BeekeepingPolicy.htm

In the Eden region, there were four beekeepers across 21 sites, with an unknown number of hives (Table 10). Currently Data are limited for other non-timber products, although two permits were issued for communication sites and one permit for other structures.

Table 2-2F: Non-timber products obtained from DECC Southern and Eden regions (2008–2009)

2008 / 2009	Southern region	Eden region
No of beekeepers ¹	55	4
No of sites ²	174	21
No of hives	Unknown	Unknown
Film/documentary (permits) ³	7	
Communication sites (permits) ⁴	37	2
Other structures (permits) ⁴	19	1
Transmission lines/cables/pipelines (km) ⁵	625	

Source: PWG

- Data review indicates 38 apiary companies have designated set-down sites in part of Southern region.
- 2 Number of consented set-down sites. Approx 85 actual set-down sites in designated ranges are "yet to be determined or consented" by PWG and apiarists.
- 3 Data from leases and concessions officer.
- 4 Others present not currently having permit.
- 5 Revised estimate from updated regional GIS roads, trails, tracks data based on where access roads follow infrastructure for the NPWS Estate 2005 within the Southern CRA area in South Coast region (298 142 ha.).

Plantations

MIG indicator 2.1.f: Area and per cent of plantation established meeting effective stocking one year after planting (UNE, LNE, Eden, Southern regions)

Approximately 6280 hectares of hardwood and softwood plantation were established this year.

Plantations establishment and effective stocking 2021

The 2008 age-class²² afforestation areas are 82.8 ha for hardwoods (under fee for service arrangements) and 1036 ha of reforestation on State forests within Upper and Lower North East. For softwood plantations, the 2008 age-class area figures are 1158 ha of afforestation and 4005 ha of reforestation.

Of the 2008 age-class softwood area planted, 24% required restocking after one year. While restocking of hardwood areas did occur, figures were not available for 2008 age-class.

During 2008–09, Forests NSW continued to build nursery capacity and improve stock quality. These initiatives were spearheaded by the further development of the containers seedling production line at the Blowering nursery in Tumut. This has helped the increased planting programs required to restock areas burnt by the Billo Road wildfire in December 2006.

²⁰ Effective stocking is the survival of planted trees one year after planting at a level that promotes a cost-effective return upon harvest.

Data reported for Southern FA have previously included Goulburn Sub-region. This has been corrected for this report, with the previous years data also amended. This was due to a collating error in the SEEDS database.

Age class is defined as being planted between April and March. That is, the 2008 Age Class is planted between April 2008 and March 2009.

Forests NSW re-establishment program

Forests NSW Contracts were executed with Willmott Forests in February 2009 for the establishment of 4 500 hectares of second rotation land in the Eden FA area; and with Forest Enterprises Australia in April 2009 for the re-establishment of 4 500 hectares of hardwood plantation in the UNE FA area in the next three years. In both of these contracts, the trees will be owned by the investors, on land licensed from Forests NSW who will manage the plantations.

Plantings have already commenced in State forests earmarked for re-establishment in 2009-2010 under these contracts.

MIG indicator 2.1.g: Area and percent of harvested area of native forest effectively regenerated (UNE, LNE, Eden, Southern regions)

Regeneration

Forests NSW carried out 38 regeneration surveys in 2008–2009 over an area of 4 363 ha of State forest.

Regeneration activities on DECC estate

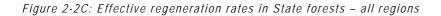
In previous years, the PWG has recorded the regeneration of previously harvested lands transferred from State forest to the reserve system under the FA process. Regeneration as part of this process is complete. No timber is harvested from the reserve system. PWG continues to regenerate its lands where necessary (see Indicator 1.1.e: 'of forest types'). There has been no new region-wide information on this indicator since the 2004–05 reporting period for DECC estate. DECC has reviewed areas of plantation that are now within the reserve system. A report has been prepared suggesting options for future management. Recommendations are yet to be determined.

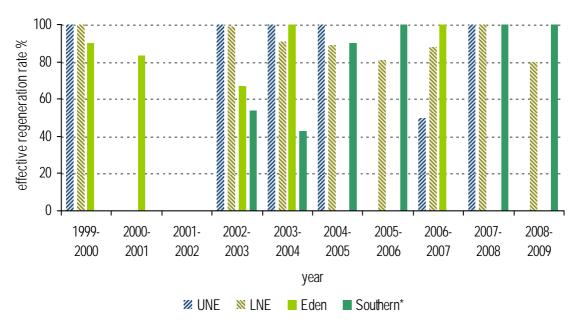
Regeneration on State forest estate

Forests NSW endeavours to regenerate harvested native forest to re-establish pre-harvest forest structure and species composition, specific to each forest type and locality. Surveys identify effective regeneration rates.

Two additional regeneration surveys occurred when compared to the previous reporting period. Forests NSW carried out 38 regeneration surveys in 2008–2009 over an area of 4363 ha of State forest. No regeneration surveys occurred in the Eden or UNE regions in 2008–2009.

Data indicate that effective regeneration rate for LNE fell from 100% down to 80% (see Figure 2-2C). In Southern, the only other region where surveys were reported, 100% regeneration was recorded.





Where value is

Source: Forests NSW data

zero, no regeneration surveys occurred.

Monitoring for the Southern region began in 2002–2003.

Weeds, feral animals and disease

Indicator 3.1.a: Area and percent of forest affected by processes or agents that may change ecosystem health and vitality

(narrative as interim) (UNE, LNE, Eden, Southern regions)

Indicator 3.1: List of biological factors influencing forest health and vitality, including weeds, feral animals, insects and disease

(Eden region)

Forests NSW spent approximately \$605 000 towards the control of a feral animals and noxious or environmental weeds in the UNE, LNE, Eden and Southern regions. All FA areas have supplementary weed and feral animal management plans in place with associated schedules.

DECC received significant recognition for the Bitou Bush Threat Abatement Plan as an on-ground ecosystem restoration project and notable results for fox and wild dog control programs.

To maintain and improve biodiversity and productive capacity, DECC and Forests NSW continue efforts try to control noxious weeds, feral animals (including introduced predators), pests and diseases. Control programs often take place in cooperation with other land management agencies and neighbours.

The effect of feral animals, invasive pests, overabundant native species and weeds on ecosystem health on public lands is a continuing concern for land managers. The problem requires sustained, long-term management. Feral animals, animal pests, and noxious or environmental weeds can cause financial losses to agriculture and other industries and can damage areas of environmental and cultural significance.

Forests NSW and PWG do not have data on the area and percentage of native forest affected by negative agents. Forests NSW continues to provide information for this indicator by reporting expenditure for targeted weed and feral animal species across its estate. PWG continues to provide information for this indicator by providing case studies of pest and weed control programs in regions. In addition, every three years, PWG assesses how weeds and pest animals are being managed across the DECC reserve system, and how effective that management has been at reducing their negative impacts.

Overarching Plans and Strategies for feral animal and weed management

PWG regional pest management strategies²³ for 2008–2011 for areas within all FAs have been completed and adopted in 2008.

35

²³ DECC Pest Management Strategies can be accessed via the following link: www.environment.nsw.gov.au/pestsweeds/RegionPestManagement.htm

In 2008, NSW DPI and DECC jointly published the 'NSW Invasive Species Plan 2008–2015²⁴. This provides actions to minimise the threat of invasive species via prevention and effective management and relies on collaboration and action by other government organisations, industry and the wider community.

Pest animal management is integrated into Forests NSW ESFM Plans, which were published in 2005. Supplementary Pest Animal Management Plans have been produced for all regions for 2006–2011. The supplementary plans contain details of objectives, strategies, actions and cooperative arrangements with other government agencies, land managers and neighbouring land owners for the control of priority pest animals. Forests NSW regions produce annual Pest Animal Management Programs, in close cooperation with stakeholders, to maximise program delivery across the landscape. The programs are developed through meetings and correspondence, as is their integration with programs of other parties. See details on various programs within the regions below.

Weed Management

DECC - weed control programs

During 2008–2009, the PWG of DECC continued to use weed control programs in parks and in targeted catchment areas, areas where threatened species are vulnerable to weeds and pests, along roads, and in high-visitation recreation areas. Programs and planning were developed and implemented in partnership with the NSW Department of Primary Industries, catchment management authorities (CMAs) and other organisations and landholders.

Control of broom and willow trees, hawkweed location and (in partnership with Green Fleet Australia) destruction, and long-term control of weeds such as St John's wort, viper's bugloss and serrated tussock were undertaken in Kosciuszko NP (Southern). Bitou bush is under control and no longer represents a threat to biodiversity over the 350 kilometres of coastline from Sussex Inlet to the Victorian border. Ground asparagus and cape ivy were controlled to protect littoral rainforest at Cape Hawke on the mid north coast (LNE).

The draft Plan to Protect Environmental Assets from Lantana, was developed jointly by DECC and QLD Department of Primary Industries and Fisheries in 2007–2008. It establishes a national framework to guide and coordinate Australia's response to lantana invasions in native ecosystems and was placed on public exhibition during May and June 2009. During the plan's development, workshops were held throughout Qld and NSW to determine the native biodiversity at risk from lantana. Species ranking and site selection processes were developed, ecological communities and native plant and animal species (including those listed as threatened) at risk from lantana were identified, native animal species that benefit from the presence of lantana were also identified, as well as a list of other weeds that are associated with lantana (www.environment.nsw.gov.au/lantanaplan).

Implementation of the Bitou Bush Threat Abatement Plan (TAP) is in its third year; and control programs at 106 sites along the NSW coast (all regions) have been implemented over the past three years. This plan was developed to ensure that control of the weed led to the protection and restoration of coastal plant communities. The implementation of the Bitou Bush TAP was 'highly commended' as an on-ground ecosystem restoration project by the Society for Ecological Restoration International and

-

²⁴ The NSW Invasive Species Plan can be found at: www.dpi.nsw.gov.au/agriculture/pests-weeds/nsw-invasive-species-plan

the Ecological Management and Restoration journal. The Bitou Bush Management Manual was launched in 2009. It contains information aimed at all land managers, from government agencies to landholders and community groups, on how to manage the weed at all stages, from planning the management and control of bitou bush infested areas through to land restoration and rehabilitation.

Further information can be found at:

www.environment.nsw.gov.au/pestsweeds/BitouBush.htm

In 2008–2009, DECC worked with NSW Industry and Investment (formerly DPI) and the NSW Department of Education and Training to raise public awareness of weeds by implementing NSW: 'No space 4 weeds' (www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/no-space) and education programs such as Weeds Attack! and Weed Warriors (www.dpi.nsw.gov.au/agriculture/pests-weeds/weeds/schools). NSW: 'No space 4 weeds' is a statewide campaign to raise awareness of weeds in the community by teaching people about the impacts of weeds and highlighting the benefits of preventing weed spread. Weed Warriors is a national program that empowers children to 'do something' about weeds by raising and releasing biological control agents. This program is supported in the school curriculum by Weeds Attack!, an interactive computer package that teaches school students about the impacts of weeds and the principles of weed control.

Forests NSW weed control program

Eighteen weed species were subject to control works by Forests NSW during the year, including blackberry, nodding thistle and Scotch broom. The largest expenditure (\$147 750 approx) was on blackberry control. Table 2-3A contains further detail on the cost of Forests NSW noxious/environmental weed control activities during 2008–2009.

Table 2-3A: Forests NSW control efforts for noxious/environmental weed species in native forests – all regions (2008–2009)

Region	Number of species treated	Expenditure (\$) (approx.)
UNE	2	\$15 420
LNE	3	\$76 750
Eden	6	\$30 370
Southern	9	\$98 800
Total	12*	\$221 340

Total number of individual species treated across all regions.

Source: Forests NSW data

Pests, diseases and physical agents

Bell Miner Associated Dieback Strategy

Bell miner associated dieback (BMAD) continues to be a management issue for DECC/PWG in UNE, LNE, Central, Southern and Eden regions. Forests NSW and DECC jointly supported the work of the BMAD Working Group, along with non-government organisations such as the North East Forest Alliance. The BMAD Working Group is an interagency group tasked with administration and management of the BMAD Strategy and Action Plan and a Scientific Reference Group that provides scientific advice to the working group.

The causes of BMAD remain unclear although associated factors include disturbance, inappropriate fire regime, presence of lantana (*Lantana camera*), poor vegetative structure and complexity, abundant lerps and soil attributes.

Implementation of the BMAD Strategy continued throughout 2008–2009. Adaptive management trials aimed at controlling landscape level Lantana populations containing abundant bell miners, lerps and varying levels of dieback have been carried out in UNE and LNE. Methods trialled include removal of Lantana with splatter gun application of herbicide, and burning. Trial monitoring will continue for five to fifteen years and will provide valuable management information about techniques for managing BMAD and Lantana. Preliminary results indicate some success in ridding sites of bell miners by removing thick Lantana understoreys.

The Bushfire Cooperative Research Centre is currently researching Eucalypt dieback in the Southern and Eden Regions, and these trials may provide valuable insight for managing landscape level BMAD sites. Bell miner removal trials have taken place on private land and invertebrate diversity and abundance are being monitored. BMAD continues to be a problem in the Blue Mountains World Heritage Area in the Southern region.

Agency initiatives and activities

In April 2008, DECC released its Statement of intent 1: Infection of native plants by *Phytophthora cinnamomi*, in response to the key threatening process listed under the TSC Act. This is DECC's first in a proposed series of statements of intent. It outlines DECC's approach to implementing actions over the next five years to manage the threat and minimise its impact on biodiversity. It is a resource for government and other organisations, land managers and the public to tackle this threat into the future. (see www.environment.nsw.gov.au/resources/threatenedspecies/08119soipc.pdf)

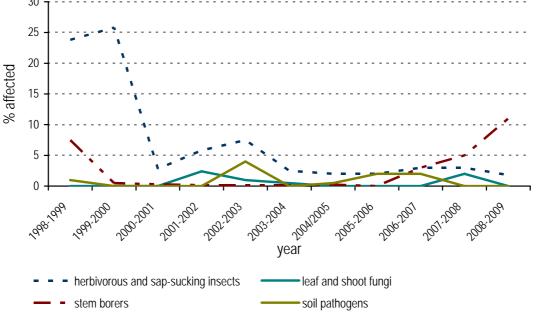
Additionally for Forest NSW, fungal diseases, insect pests or other physical agents can severely affect productivity by altering the growth rate and survival of trees. Forests NSW carries out regular surveys to monitor the extent of biological agents and critical nutrient deficiencies in both hardwood and softwood plantations.

Surveys are carried out in hardwood plantations for all agents, but only six agents were reported in hardwood plantations during 2008–2009: herbivorous insects, leaf and shoot fungi, stem borers and soil pathogens, *Creiis lituratus*, bell-miner associated dieback and frost.

As illustrated in Figure 2-3A, while herbivorous and sap-sucking insects affected around 25% of the hardwood plantations in 1999–2000, the proportion has decreased to around 1.8% in 2008–2009. Stem borers affected 11% of the hardwood plantations in 2008–2009 – up from 5% in the previous reporting period. Leaf and shoot fungi were not reported in 2% of the hardwood plantations in the 2008–2009 surveys. Bell miner associated dieback was reported in 0.001% of the hardwood plantations, and the psyllid *Creiis literatus* and *cardiaspina* were reported in 0.07% of the sampled hardwood plantations.



Figure 2-3A: Percentages of post-1994 Forests NSW hardwood plantations affected by selected agents



Note: The percentages shown are calculated across the entire planted hardwood forest (post-1995) estate in all Forests NSW regions (mainly within the forest agreement regions). Note that Forests NSW has not established hardwood plantations in Eden.

Source: Forests NSW data

Forests NSW surveys for six agents in softwood plantations: *Dothistroma* (needle blight), boron deficiency, *Sirex* (wood wasp), possum damage, drought, *Ips* (a beetle) and *Diplodia* (a fungus) and since 2004–2005 *Essigella californica* (Monterey pine aphid).

In 2008–2009, the most extensive agent continued to be the Monterey pine aphid, which is now estimated to affect around 32% of State forests softwood plantations (a decrease of 15% on 2007–2008).

The extent of other agents is shown in figure 2-3B — *Dothistroma* needle blight damage was estimated to affect 1% of the State forests softwood plantations, while Sirex wood wasp affected 0.8%. Damage by possums was estimated to affect 6% State forests softwood plantations (which is unchanged from the previous year).

Feral and pest animals

DECC lead feral animal initiatives and programs

The NSW Threat Abatement Plan for Predation by the Red Fox (Fox TAP, see www.environment.nsw.gov.au/resources/pestsweeds/RedfoxApproved.pdf) identifies the threatened species that will benefit most from a reduction in fox predation and establishes monitoring programs to measure the effectiveness of control programs at priority sites. A review of the Fox TAP continued in the 2008–2009 financial year. This review will include a critical assessment of the recovery of threatened species targeted for protection from foxes and has, for example, found that fledgling success is much greater for threatened shorebirds such as the little tern and pied oystercatcher at sites where foxes are controlled. An inter-agency working group is overseeing the review. Input from independent scientists will be sought before a revised draft is released for public comment in 2009.

In some areas, fox control has been expanded onto private lands around priority threatened species sites in national parks. This has been a collaborative approach involving government agencies, catchment management authorities, livestock health and pest authorities and the community (*DECC Annual Report 2008–09*).

DECC continued research into new and innovative control methods for wild dogs and foxes, including a specially designed bait delivery device known as the M-44 ejector. Results across a number of study sites show that ejectors have reduced wild dog and fox activity by up to 80%.

During 2008–2009, in northern NSW, DECC coordinated and supplied fencing materials for a dogproof fence along the western boundaries of Guy Fawkes (UNE) and Cathedral Rock (LNE/UNE) national parks.

Work continued in the Southern region to put in place a number of cooperative wild dog management plans, including areas such as Brindabella and Wee Jasper valleys (53 wild dogs shot), Adaminaby/Yaouk (41 wild dogs shot), Woomargama National Park on the Victorian border (19 wild dogs shot) and the Goobragandra/Blowering area of Kosciuszko National Park (16 wild dogs shot).

Deer browsing, trampling and wallowing are having a serious and increasing environmental impact in the Illawarra region. In Kangaroo Valley (Southern), rural landholders have formed a Landcare group in partnership with DECC to help control feral deer in specially approved shooting zones in national parks and on adjoining properties. The program has been running for the past three years. Thirty deer were culled during 2008–2009.

An ongoing feral goat culling program in Morton and Tarlo national parks (Southern) and neighbouring properties took place in September 2008 and March 2009. The program, which has been running for over 10 years, is a collaborative effort with Goulburn Livestock Health and Pest Authority. More than 400 goats were culled in 2008–2009.

Forests NSW feral animal management activities

Feral animal and introduced predator control efforts on State forests (all regions) were undertaken at a cost of \$384 000 (Table 2-3B). Six feral or pest animal species were targeted in 2008–2009, including *Sus scrofa* (pig) *Capra hircus* (goat), *Felis catus* (cat) and *Oryctolagus cuniculus* (rabbit). As with the previous year, control efforts were most extensive in the

Southern region, where an estimated \$298 000 was spent. The bulk of this spending was directed towards programs to control wild dogs.

Specific declared State forests are available to licensed hunters who are responsible for removing a range of feral species. Statewide figures on the number of animals removed from declared State forests are expected to be available in the Forests NSW Annual Report 2009–2010.

Table 2-3B: Forests NSW control efforts (\$) spent on introduced predator management and feral animal management – all regions (2008–2009)

Region	Number of species treated	Expenditure (approx.)
UNE	3	\$16 000
LNE	3	\$59 000
Eden	5	\$11 000
Southern	6	\$298 000
Total	6*	\$384 000

^{*} Total number of individual species treated across all regions.

Source: Forests NSW data

Fire

Indicator 3.2: Impact of fire on forest-related values (Eden region) (This is an Eden region indicator. For continuity of reporting all regions are reported here.)

On the DECC estate bushfires affected an estimated 24 190 ha and prescribed burns were carried out on 43 611 ha within the forest agreement regions.

On the State forest estate bushfires affected an estimated 1 510 ha and prescribed burns and were conducted over 24 988 ha of State forests across the State.

Data and interpretation

The size, intensity and frequency of fire events are monitored across public forest areas to help identify the impact of fire on biodiversity and economic values and improve emergency and land management practices. A fire event may be a bushfire or a prescribed burn. In general, prescribed burns are of lower intensity than bushfires and occur during the cooler months of the year. The exception to this is backburning to control the spread of bushfires. The PWG of DECC and Forests NSW use the Bushfire Risk Information Management System (BRIMS) to track hazard-reduction proposals and activities. This system is the central repository for all bushfire risk management reporting for NSW and is maintained by the Rural Fire Service. The NPWS Incident database is used to record wildfire suppression.

Forests NSW can no longer provide detail on area burnt by bushfire or prescription burns by Forest Agreement region because it no longer maintains its WILDFIRES database and instead contributes information to the Rural Fire Service databases (Incident Control Online (ICON & BRIMS)).

Bushfires

The incidence of fire varies greatly from year to year. The number of fires is most closely linked to prevailing weather patterns and, in particular, the occurrence of extreme fire conditions, best indicated by the number of statewide fire bans declared in a fire season. The main factors determining the severity and extent of bushfires are wind speed, temperature and humidity. Contributing factors include the available fuel load, the physical structure of vegetation and the degree of dryness. The effectiveness of fire suppression actions also determines the extent and severity of running fires (*NSW State of the Environment 2006*, see www.environment.nsw.gov.au/soe/soe2006)

DECC estate

In 2008–2009, DECC estate in the FA regions experienced a decrease in the total amount of land burnt by wildfire (24 190 ha, compared with 46 131 ha in 2007–2008) (Table 2-3C). The largest decreases occurred in the UNE and LNE regions, while the Southern and Eden regions experienced increases.

Table 2-3C: Areas of park system burned in bushfires (excluding prescribed burns by PWG and regardless of origin of ignition) (2008–2009)

Region (2008–09)	Area of parks system burned in bushfires (ha)
UNE	9430
LNE	2613
Southern	9266
Eden	2881
Total	24 190

State forest estate

Across the State, the total area of native forest within State Forests affected by bushfire decreased from 5 081 ha in 2007–2008 down to only 1 510 hectares in 2008–2009. Despite this decrease, bushfires still cost Forests NSW \$1 million to combat in the 2008–2009 financial year. For the entire Forests NSW estate around 0.1% was affected by wildfires, down from 3.9% in 2006–07 and 0.3% in 2007–08.

Prescribed burning

Prescribed burning is an important part of fire management that helps reduce the incidence and severity of bushfires and improves bushfire control. Planning involves predicting fire behaviour using rainfall or drought history, weather (temperature, humidity, wind speed and direction), vegetation and fuel characteristics and topography.

In 2008–2009, prescribed burning on DECC estate took place on 43 611 ha across all regions, which was a similar area to 2007–2008 (43 294 ha). The LNE region underwent the largest area of prescribed burns covering 21 017 ha. The Southern region conducted 13 813 ha of prescribed burns, Eden region 5458ha and UNE region 3324 ha. Additionally 697 ha of the DECC estate was mechanically treated (e.g. slashed), mainly in the UNE region where 346 ha were treated followed by 215 ha in LNE region, 135 ha in the Southern Region and less than 1 ha in the Eden region.

Data on prescribed burns and mechanical treatment are collected on a park basis. Wadbilliga NP falls within both Southern and Eden FA regions and the 4700 ha of prescribed burns in this park has been counted only for the Southern region.

Forests NSW

Prescribed burning carried out in State forests includes hazard reduction burns, post-logging burns, pre-logging burns and area establishment burns (for plantations). In 2008–2009, Forests NSW had planned for hazard reduction burns and post-logging burns to be carried out on about 49 132

Grazing is an effective fire hazard reduction method and covers nearly 500 000 ha of State forest across the four forest agreement regions. Hazard reduction and post-log burns then took place over approximately 42 408 ha (86% of forests were leased for grazing, generating \$870 000 in revenue from across the State). Forests NSW has developed a model grazing management plan that is expected to be released for implementation in 2009–2010. Each region will develop its own plan based on this model. Regulators are yet to approve this model plan in accordance with requirements within the planned area), while the hazard reduction burns represented 42% of this figure. A further 3111 ha of plantation land was subject to area establishment burns and 2414 ha was subject to pre-harvest burns. In addition Forests NSW staff contributed to hazard reduction burns on 612 ha of other tenures. Forests NSW spent \$9.6 million on hazard reduction burning during 2008–2009.

Roads and crossings

Indicator 4.1.a: Area and percent of forest land covered by Comprehensive Road Management Plans, which include an assessment of the extent of existing road infrastructure, processes for ongoing improvement, targets and

milestones (UNE, LNE, Southern regions).

Indicator 4.1: Road density by category and catchment, and stream-crossing density by catchment, for the total forest agreement

area, including forest and non-forest areas. Calculation of an ecologically sustainable road index and ecologically

sustainable crossing index (Eden region).

DECC progressed a statewide rollout of its Asset Maintenance System, being informed and supported by the PWG Roads Manual project. The system will allow more efficient maintenance and monitoring of all PWG owned and or maintained assets.

For Forests NSW Nine regional road management plans apply across forest agreement regions. The total length of the road network within State forests across the forest agreement regions is approximately 28 700 km.

DECC estate

No new quantitative data are available from PWG on this indicator. Comparison between PWG regions remains difficult because of different road classification systems.

In the 2008-2009 reporting period, the PWG of DECC progressed the statewide distribution of the asset maintenance system (AMS) progressed to all regional PWG offices. The rollout of AMS will allow more efficient maintenance and monitoring of all PWG owned and or maintained assets, including specifically designed Cyclic Maintenance Plans (CMPs) for roads and trails, and a tool that may help analyse this infrastructure in future.

The AMS will be informed and supported by the PWG Roads Manual project, began in 2008–2009. The Roads Manual is being developed in conjunction with DECC's Urban & Coastal Water Reform Group of DECC to provide guidance in the effective construction and maintenance of road assets together with advice on dealing with the environmental impacts of these activities.

State forest estate

Forests NSW has nine regional road management plans that cover the four forest agreement areas. The plans are applicable to each Forests NSW softwood and native forests region²⁵. Currently, road management plans are internal Forests NSW documents, but may be used in the future as a basis for preparing a regional ESFM supplementary plan for road management. The plans cover all of the State forests within the FA areas.

The total length of the road network within State forests across the forest agreement regions totalled about 28 755 km (Table 2-4A).

Forests NSW regional boundaries do not correspond with forest agreement area boundaries. As a result, a number of Forests NSW road management plans may be applicable to each forest agreement region (for example, the UNE region is covered by road management plans for the North East Native Forest Operations Branch, Western Native Forest Operations Branch and Northern Planted Forest Operations Branch).

Table 2-4A: Length of road by classification on State forests – all regions (2008–2009)

Length of road by classification (km)	UNE	LNE	Eden	Southern
Primary access	286	109	382	713
Secondary access	0	704	759	987
Feeder	0	1 409	362	5 269
Harvesting, link and boundary	4 101	1 172	1 311	5 083
Fire trail and service trail	3 782	931	500	895
Total road length	8 169	4 325	3 314	12 947

Source: Forests NSW data

Private Forests

Native forests

Forestry operations on private land must now take place in line with a Code of Practice. The code includes prescriptions to protect drainage features and on the construction and maintenance of infrastructure within the forest.

Soil erosion

MIG indicator 4.1.a (interim):	Area and percentage of forest land systematically assessed for soil erosion hazard, and for which sites varying scientifically-based measures to protect soil erosion and water values are implemented (UNE, LNE, Eden, Southern regions)
	(UNE, LNE, Eden, Southern regions)

There were soil erosion hazard assessments on State forests on approximately 94 000 ha (gross) this year. DECC does not make broadscale assessments of soil erosion potential.

DECC estate

Only activities associated with roads, park management infrastructure and visitor facilities are likely to result in soil erosion on DECC estates. As a result, DECC does not make broad area assessments of soil erosion potential. However, when engaging in activities on parks, the PWG carries out a review of environmental factors (REF) under the provisions of the *Environmental Planning and Assessment Act* 1979, which considers the protection of soil and water values.

Target ten of the NSW Natural Resources Monitoring, Evaluation and Reporting Strategy (MER) is that by 2015 there is an improvement in soil condition. As part of this work, a number of sites on DECC estate within FA regions will be subject to soil profile and soil structure sampling/description.

State forest estate

Forests NSW assesses harvest areas for potential and existing soil erosion issues during the harvest planning process. In 2008–2009, across all regions, Forests NSW carried out soil surveys across an estimated gross area of 86 880 ha (down from 88 726 ha reported in 2007–2008) and a net harvest

area of 26 075 ha (down from 34 672 ha reported in 2006–2007). Table 2-4-B details the gross, net harvest and the percentage of total net area harvested for each region during the year. Where Forests NSW identifies soil issues associated with operations (mainly roading and harvesting), action is taken to remedy the issue in line with conditions in the IFOAs.

Table 2-4B: Area of Forests NSW native forest assessed for soil erosion hazard and the net area harvested as a percentage of the total forest area – all regions (2008–2009)

Region	Gross area (ha)	Net harvest area (ha)	Percentage (%) of region's production area harvested
UNE	21 230	5 044	1.3%
LNE	26 239	4 327	1.0%
Eden	7 524	2 641	1.6%
Southern	31 887	4 739	1.8%
Total	86 880	16 751	1.4%

Source: Forests NSW data

Private Native Forestry

All forestry operations on private land must now take place in line with a Code of Practice, which includes prescriptions to protect drainage features and on the construction and maintenance of infrastructure within the forest.

The code contains the following prescriptions that are designed to minimise soil erosion risk including:

- Exclusion and buffer zones for forest riparian zones include restrictions on timber harvesting, machinery use and road construction and maintenance.
- Requirements for the construction of and maintenance of roads that are designed to minimise disturbance to the forest and groundcover, and potential for erosion, through ensuring adequate drainage.
- Requirements for log landings, portable mill sites and snig tracks to be located and constructed to minimise soil disturbance and erosion potential.

Biomass and carbon

MIG indicator 5.1.a: Total forest ecosystem biomass and carbon pool, and if appropriate, by forest type, age class, and successional stages (UNE, LNE, Eden Southern regions)

Approximately 3 575 000 tonnes of CO₂e sequestered is estimated to be sequestered in Forests NSW hardwood and softwood plantation estate.

Forests NSW estimates the amount of CO₂e sequestered in its planted forest estate. This includes both softwood and hardwood plantation. The assumptions for the CO₂e sequestration calculations are shown in Table 2-5A. For more details on the basis for this estimate see the *Forests NSW Annual Report 2008–2009 Social, Environmental and Economic Report (*Forests NSW, Pennant Hills NSW).

The total amount of CO_2 sequestered in Forests NSW total native forest was estimated to be 4.11 mega tonnes of CO_2 during 2008–2009.

Table 2-5A: Assumptions for carbon sequestration in Forests NSW planted forest estate

Assumptions	Softwood	Hardwood		
CO ₂ sequestered (tonnes CO ₂ e) = net plantation area x mean tree biomass increment (MTBI) X carbon proportion (CP) x carbon to carbon dioxide factor (CCF), where:				
MTBI = SBI + CBI + RBI	10.021	10.327		
SBI (stem biomass Increment) = TSVI x BD	7.1	7.32		
TSVI (total stem volume increment)	16.9 m³/ha/year	13.3 m³/ha/year		
BD (basic density)	0.42 t/m ³	0.55 t/m ³		
CBI (canopy biomass increment) = SBI x 0.1765	1.253	1.291		
RBI (root biomass increment) = (SBI + CBI) x 0.2	1.67	1.721		
CP = 0.5	0.5	0.5		
CCDF = 3.667	3.67	3.67		

Source: Forests NSW

In 2008–2009, Forests NSW estimated that approximately 3 575 000 t of CO_2 -e was sequestered in its planted forests within the Forest Agreement regions (refer to figure 2-5A). While this is an increase in the amount of CO_2 -e in plantations, this is not considered to be related to on the ground changes, but instead adjustments to the model.

Forests NSW estimates that the sum of CO_2 -e sequestered in plantation estate in the UNE, LNE and Eden regions was 604 801 t (652 340 t previous year), 385 150 tonnes, 528 528 t (517 415 t previous year), respectively. In the Southern region approximately 2.16 million tonnes of CO_2 -e is estimated to be sequestered in the Softwood plantation estate.

2,100,000 1,890,000 1,680,000 carbon sequestered (tonnes) 1,470,000 1,260,000 1,050,000 840,000 630,000 420,000 210,000 0 **UNE** LNE Eden Southern

Figure 2-5A: Sequestered carbon in Forests NSW hardwood and softwood plantations – all regions (2008–2009)

Source: Forests NSW

Global carbon budget

MIG indicator 5.1.c: Contribution of forest products to the global carbon budget (UNE, LNE, Eden, Southern regions)

region

softwood plantation

No significant Progress - Ongoing.

DECC lead initiatives

hardwood plantation

The Commonwealth Government's focus on climate change is allowing NSW to develop new initiatives that complement those of the Commonwealth. DECC is working with the Commonwealth on the development of the potential Carbon Pollution Reduction Scheme.

DECC coordinates the whole-of-government policy for NSW on climate change, which is driven by the *NSW Greenhouse Plan* and the *State Plan – A New Direction for NSW (www.nsw.gov.au/stateplan)*DECC also coordinates the NSW Government's response to climate change, which includes strategies to reduce emissions, encourage efficient use of water, promote sustainability, and research adaptability to climate change.

In October 2007, DECC produced The 2007–2008 NSW Biodiversity and Climate Change Adaptation Framework, which was prepared by the NSW Inter-agency Biodiversity and Climate Change Impacts and Adaptation Working Group, in which DECC and Forests NSW are major participants. This document identifies ways in which NSW public sector agencies will tackle climate change and its effect on biodiversity.

The state-wide framework above was followed in November 2007 by the release of the 2007–2008 DECC NSW Adaptation Strategy for Climate Change Impacts on Biodiversity. This document outlines priority areas for action to be taken by DECC to act on over the next two years to help buffer NSW's natural and cultural heritage against climate change impacts. This practical approach to climate change adaptation planning in DECC includes a range of measures, such as maintaining and expanding the reserve system, establishing connectivity between habitats to allow species to move to more favourable environments, scientific research, monitoring and modelling on which to base natural resource management and planning, and improved communication between and awareness raising within the community, scientists and policy makers.

The Great Eastern Ranges (Alps to Atherton) Initiative (GERI), in which Forests NSW is a partner, is an example of a strategic response to climate change and other threats by both agencies.

Achievements of this initiative during the 2008–2009 period are discussed under Criterion 1: Fragmentation.

Visitation

MIG indicator 6.2.c: Number of visits per annum (UNE, LNE, Eden, Southern regions)

The total number of permits issued for activities in State forests decreased slightly this year when compared with previously available (2004–2005) figures. On DECC estate in the regions, two parks received more than 1 000 000 visitors and 26 received in excess of 100 000 visitors.

Park visitation increased in 2008–2009 compared to previous years across all regions, with an estimated 38 million visits to NSW national parks in 2008.

DECC PWG

Under the NSW State Plan, DECC is working to increase visits to national parks by 20% by 2016. It will do this by developing programs that foster an appreciation of parks and provide access to recreational opportunities.

In 2008–2009, DECC implemented a new system of estimating visitor numbers to parks across the state. The system involved a Roy Morgan telephone survey that systematically surveyed a proportion of Australia's population asking about NSW parks they had visited. More than 1200 people were interviewed every four weeks from February 2008 to February 2009, giving a total of 15 715 interviews.

Using this new, more reliable method, it is estimated that NSW national parks received 38 million visits in 2008, which is considerably higher than previous estimates. While it is thought that previous methods significantly underestimated the number of visits, the increase is due in part to promotional work undertaken to encourage visitation in 2008. There were high visitor numbers in the summer of 2008–2009, with many parks recording one of the busiest summers on record.

Further research will explore the demand for outdoor nature-based recreation across the state, with results to be reported in 2009–2010. An inventory of visitor sites has been compiled to provide an overview of the supply of recreational opportunities, and plan for broad-scale visitor planning.

A new licensing system for recreation and tour operators in NSW national parks and reserves called the Parks Eco Pass was completed in 2009, to be implemented in 2009–2010. The Parks Eco Pass is a more streamlined statewide licensing process that will support the growth of nature- and culture-based recreation and tourism, while better ensuring the sustainable use of NSW parks and reserves. DECC currently licenses 200 recreational and tour operators for a large range of activities, including sightseeing, bushwalking, mountaineering, surfing and kayaking, and cultural, educational and eco tours.

DECC's promotions and marketing plan for NSW national parks was implemented during 2008–2009, following its development the previous year. The electronic newsletter, *Explore and Naturescapes*, was established and an active public relations campaign conducted in travel and lifestyle media.

Forests NSW

A variety of recreational and educational activities occur in State forests. Forests NSW provides some measure of recreational use from the number of permits issued for recreational and educational activities. Recreational and educational activities that may require a permit include horse riding, car rallies, some bushwalking activities, and military training exercises. In 2008–2009, 273 permits were issued for recreational or educational activities in State forests (37 fewer than the previous year). Permits were issued in all regions: UNE (96), LNE (136), Southern (102), and Eden (12). See Figure 2-6A.

Note that permits represent organised events recorded with Forests NSW and are not a measure of passive recreation, bushwalking, camping, or other casual visits to State forests. No information pertaining to the total number of visits made to State forests was available for the 2008–2009 reporting period.

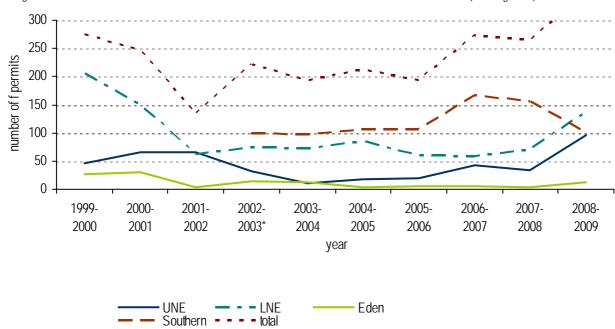


Figure 2-6A: Permits issued for recreation/educational activities in State forests (all regions)

^{*} Monitoring began in the Southern region in 2002–2003 Source: Forests NSW data

Indicator 6.3: Availability and usage of recreation/tourism facilities (Eden region) (Data have been provided for all regions.)

During the year, DECC upgraded visitor facilities in the UNE, LNE and Southern regions.

The total number of recreation/tourism facilities in State forests was assessed differently in 2008–2009 to previous years. While tourism and recreation on State forests increased in 2008–2009, a comparison to previous years is not possible because a new inventory system is now used.

PWG Data discussion

During the year, DECC upgraded visitor facilities in many parks in the FA regions, including:

- Work began in September 2008 on the Minnamurra Rainforest boardwalk and visitor centre and is planned to continue over the next four years (Southern).
- Restored a park house in Gibraltar Range National Park (UNE).
- Constructed a 4WD-accessible camping and day-use facility at Halls Peak in Oxley Wild Rivers
 National Park (LNE), which was completed in February 2009.

Forests NSW

Forests NSW changed the way it reports the number of recreational facilities to provide more relevant information to visitors about facilities available to them. This information is readily available in a user-friendly format on the Forests NSW website (www.dpi.nsw.gov.au/forests).

In 2008–2009, there were a total of 621 recreation and tourism facilities (Table 2-6A) available in State forests. A total area of nearly 3000 ha of State forest is designated 'special value' tourism and recreation under the forest management zoning system. The significant increase of 621 recreation and tourism facilities compared to 128 recreation and tourism facilities last year is a result of how facilities were counted under the new inventory system. In 2008–2009, for example, a camping site with toilet facilities is counted as two facilities rather than one, and so on. LNE continues to report the most facilities, providing an attractive destination for Sydneysiders and other urban populations within a few hours drive. This is in addition to Cumberland State Forest, situated in West Pennant Hills within the Sydney metropolitan area. At Cumberland State Forest visitors can enjoy a great range of facilities from an amenity nursery, café, several picnic areas, an information centre, as well as a number of activities designed for children and schools.

In line with the implementation of the new inventory methodology this year saw the finalisation of a new recreational strategy, which focuses on the provision of quality recreational facilities.

Table 2-6A: Recreation/tourism facilities and amenities provided for in State forests – all regions (2008–2009)

Recreational facilities and amenities		Total			
provided for in State forests	UNE	LNE	Eden	Southern	Total
4WD/trail bike access in State forest	2	61	13	27	103
Adventure recreation	1	4	0	0	5
Bicycle riding trails	3	7	2	7	19
Cabin/hut	1	0	1	0	2
Camping area	3	35	5	16	59
Camping area at recreation site	2	19	5	16	42
Camping fee	0	1	0	0	1
Canoeing/kayaking	0	0	1	4	5
Car touring (2WD Access) in State forest	2	58	12	21	93
Caravan site at recreation site	3	0	6	3	12
Fireplace/BBQ at recreation site	3	28	9	8	48
Fishing	1	2	2	4	9
Horse riding	2	0	0	6	8
Lookout points	0	14	1	4	19
Picnic area	3	54	11	10	78
Picnic area at recreation site	3	33	11	9	56
Power boats and boat ramp at recreation site	0	0	0	0	0
Promote in SF recreation brochure publication	0	4	1	14	19
Rubbish collection at recreation site	2	19	1	2	24
Toilets at recreation site	3	30	9	9	51
Walking trails	2	53	2	17	74
Water (not for drinking) at recreation site	2	19	6	9	36
Wheelchair accessible toilets at recreation site	1	1	1	3	6
Total numbers of facilities	33	362	76	150	621
Total area (ha)zoned mainly for recreation	151	2 272	27	520	2 970

Source: Forests NSW data

Employment

MIG indicator 6.5.a: Direct and indirect employment in the forest sector and forest sector employment as a proportion/percentage of

total employment (UNE, LNE, Eden, Southern regions)

Indicator 6.4: Employment numbers by type across all forest users in the Eden region

Employment in the forest sector by DECC increased in the UNE, Southern and Eden regions in 2008–2009 compared with 2007–2008 figures.

Employment in the forest management and conservation sector is important to many regional economies. Data within this indicator have been provided by Forests NSW (direct and indirect employment) and PWG (direct employees only).

In 2008–2009, the estimate for total employment in forest sector decreased slightly (Figure 2-6B). At the end of 2008–2009, direct employment by Forests NSW was estimated to be 491 and DECC PWG was estimated to be 757 equivalent full-time (EFT) employees.

Forests NSW - direct and indirect employment

The direct and indirect employment figures provided by Forests NSW cover a range of activities, including growing and managing of forests, harvesting and haulage, primary processing, apiary, grazing and other activities (such as gravel extraction and plantation establishment contractors).

Estimated total direct and indirect employment in the forest sector, by Forests NSW, totalled 5423 EFT positions across all regions for 2008–2009 (Table 2-6B). Similarly with last year, the largest employment sector was primary processing, which made up 64% of its total employment across all forest agreement regions (Figures 2-6B and 2-6C). Harvesting and haulage accounted for 16% of employment, growing and managing forests accounted for 9%, and apiary 4%. Forests NSW direct employment fell from 511 down to 491 since last year by FA area.

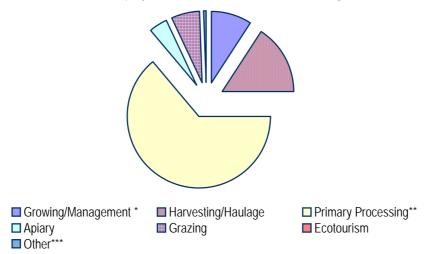
Table 2-6B: Estimated total direct and indirect employment in the forest sector, by Forests NSW. Figures show EFT positions across all regions for 2008–2009 and percentages by forest sector.

Forest sector	LNE	UNE	Eden	Southern	Totals	Percentage
Growing/managing*	132	115	73	171	491	9 %
Harvesting/ haulage	209	103	140	410	862	16%
Primary processing**	714	818	220	1 711	3 463	64%
Apiary	70	82	10	66	228	4%
Grazing	93	250	0	5	348	6%
Ecotourism	1	0	0	2	3	0.1%
Other***	21	7	0	0	28	0.5%
TOTAL	1 240	1 375	443	2 365	5 423	100%

Note: These figures are derived from the SEEDS database. Regional staff enter data for all categories except primary processing based on the Permits and Licence database. Primary processing figures are based on regionally sourced estimates.

A continuing trend in rationalising businesses was reflected in a further drop in employment numbers in the forest sector reported by Forests NSW.

Figure 2-6B: Forest sector employment (direct and indirect) – all regions (2008–2009)



- * Includes administration, maintenance activities, consultants and contractors.
- ** Processing occurs at a site where the input is raw material supplied by Forests NSW.
- *** Includes gravel extraction, forest product removal and miscellaneous timber harvesting.

Source: Forests NSW data

PWG direct employment

Table 2-6C outlines employment figures for DECC in each FA region. These figures include permanent and temporary EFT; they do not include casual or seasonal positions. In 2008–2009, there was an increase in employment numbers in forest-related positions for the UNE, Southern and Eden regions and a slight decrease in LNE (275, down from 276) compared to the previous year.

Table 2-6C: Employment numbers for each of the regions

Region	UNE	LNE	Eden	Southern
Staff employed	175	275	59	248

Source: PWG of DECC

As at 30 June 2009, DECC's Human Resources database listed 235 staff (including 40 casuals) attached to PWG who were Aboriginal or Torres Strait Islander. This figure includes full-time, part-time and casual staff and covers all of NSW (it is not restricted to the FA regions).

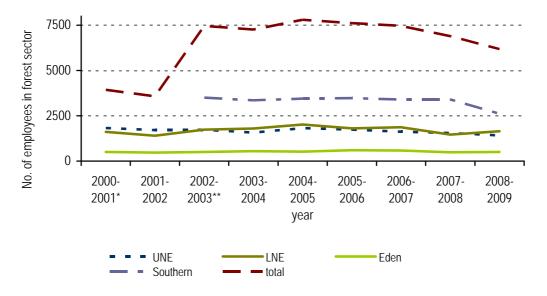
Method for Calculating FA Employment Figures: PWG

The method used to calculate the PWG employment numbers is outlined below.

The proportion of each PWG field based area that fell within a FA region was calculated and the proportion applied to the employment figures for that area. The proportion calculated for the 2005–2006 year for employment in other PWG administrative units was adopted for the 2006–2007, 2007–2008 and 2008–2009 years and applied to other relevant PWG Regional, Section or Unit staff. These figures were added to give a total employment figure for each FA region.

For all FA regions, total employment figures included all permanent and temporary staff located within each PWG region, although some proportion of staff time would also be spent outside the region. For PWG Sections or Units that do not have a defined boundary it is difficult to determine how many staff should be included when calculating total employment figures, as it is not possible to isolate forest-related tasks from the broader range of work done by PWG. All staff from PWG Northern and Southern Branches, and relevant staff from PWG Central Branch have been included whether they may or may not do forest-related tasks. Staff from the PWG Reserve and Wildlife Conservation Branch has only been included where able to be identified as doing forest-related tasks. There may be other staff within PWG or elsewhere in DECC who have minor roles in forest-related tasks in relation to the FA regions, but these are not easily identifiable and therefore have not been captured.

Figure 2-6C: Total PWG (direct) and Forests NSW (direct and indirect) regional employment – all regions (2008–2009)



Data for 1999–2000 have not been included, as an accounting error was made in employment figures for Forests NSW and incomplete data were available for employment by the PWG.

^{**} Marked rise in total employment in 2002–2003 due to the inclusion of employment figures for the Southern region. Source: PWG and Forests NSW estimates.

Private Native Forestry

Information reported in this section has been drawn from the *NSW Private Native Forestry Industry Study* completed by GHD in September 2009.

The total number of employees that depend on the PNF sector in NSW is estimated to be between 2200 and 2300 people. Note that this is a statewide figure and not restricted to the FA regions.

On a statewide basis, it is estimated that between 825 and 930 harvest and haulage workers are dependent on the PNF sector. This figure is presented as full-time equivalent (FTE) employees. If the total number of people who depend partly or wholly on the PNF sector is examined, the number is much larger than the FTE figure as a majority of harvest and haulage contractors work across both the public and private native forest sectors, and hence PNF forms a component of work for a large number of harvest and haulage contractors across the state. As a large majority of contractors combine harvest and haulage activities, it is difficult to separate employment attributable to each sector – for example, a small business is likely to have employees involved in harvest and haulage activities, with the proportion of their time spent on either varying at different times.

An estimated 1380 people are employed in wood and paper processing in NSW derived from the PNF sector.

This is based on adjusting 2006 data from the ABS Census of Population and Housing to identify the proportion of employment dependent on private native forest, using data on relative volumes of plantation, public native forest and private native forest timber processed in NSW during this period.

For the purposes of PNF reporting, there are four forestry regions within NSW: Northern, Southern, River Red Gum and Cypress and Western Hardwood. The Northern and Southern PNF regions are the most likely to correlate to some extent with NSW Forest Agreement regions. Accordingly a breakdown of estimated employment in the Northern and Southern regions is provided below.

Northern region

The Northern region (north of Sydney) is estimated to supply the highest volume of timber of all regions and also has the highest number of estimated FTE PNF dependant employees.

Typical species harvested in the Northern region include blackbutt, spotted gum, iron barks, blue gums, tallowwood, stringy barks, bloodwood, brush box, messmate, flooded gum, maiden eye gum, monkey gum, cypress pine and various other mixed hardwoods.

Table 2-6D summarises key estimates of PNF activity in the Northern region of NSW. Although it uses 2007–2008 data it was the most up-to-date source for the 2008–2009 reporting period.

Table 2-6D: Key estimates of private native forest activity in the Northern region of NSW (2009)

	Estimated number of FTE workers dependent on PNF industry during FY 2007–08	Estimated volume of timber input to processors (total) during FY 2007–08
Harvest and haulage contractors	610 –705	N/A
Processors	1 040	475 000 m ³

Southern region

The Southern region (south of Sydney) supplies a smaller volume of timber than the Northern region. Typical species used in the Southern region include iron bark, blackbutt, spotted gum and cypress pine. The estimated FTE employees dependant on PNF in Southern region is less than in the Northern region.

Table 2-6E summarises key estimates of PNF activity in the Southern region of NSW. Although it uses 2007–2008 data it is the most up-to-date source for the 2008–2009 reporting period.

Table 2-6E: Key estimates of private native forest activity in the Southern region of NSW (2009)

	Estimated number of FTE workers dependent on PNF industry during FY 2007–08	Estimated volume of timber input to processors (total) during FY 2007–08
Harvest and haulage contractors	157–158	N/A
Processors	270	122 000 m ³

Gross income

Indicator 6.5: Gross income index related to forests (Eden region)
--

No outcomes to report.

No new data are available from PWG or Forests NSW for this indicator. These data are not applicable to the PWG.

Places of cultural significance

Indicator 6.4.c:	Change in condition and number of recorded places, artefacts, sites, buildings or other structures (UNE, LNE regions)
Indicator 6.6: Indicator 6.4.c(i):	Change in condition and number of recorded places, artefacts, sites, buildings or other structures (Eden region) Change in condition and number of Aboriginal cultural heritage features within the forest estate, including recorded
Indicator 6.4.c(ii):	places, artefacts, sites, or other structures (Southern region) Change in condition and number of historic heritage features within the forest estate, including recorded places, artefacts, sites, buildings or other structures (Southern region)

During 2008–2009, DECC completed several projects for information held on AHIMS. Forests NSW continued to survey for Aboriginal sites as part of its pre-harvest survey process

Cultural, social and aesthetic cultural values of an area are often difficult to quantify because their values are often intangible and subjective. A simple indicative measure of how well forests are being

managed for cultural values is the number of places or areas of cultural, social or aesthetic significance identified and/or conserved.

As in previous reports, the data for these indicators have been split in to Aboriginal and historic cultural heritage recorded places, artefacts, sites or other structures. This is done for consistency and clarity across the regions.

Aboriginal cultural heritage on and off DECC estate

For this set of indicators the number of Aboriginal cultural heritage recorded places, artefacts, sites or other structures has been reported for all of the FA regions annually from the first year of reporting.

Aboriginal Heritage Information System (AHIMS) is a database that contains detailed archaeological information on more than 55 000 Aboriginal sites in NSW and more than 9000 Aboriginal heritage reports. It is used by government, industry and heritage professionals for land use planning, regulation and conservation management, and by local Aboriginal communities to help them manage, conserve and protect local sites and heritage. It is essential to note that a report from AHIMS does not represent a comprehensive list of all Aboriginal objects or Aboriginal places in a specified area. A report lists recorded sites only. In any given area there may be undiscovered and/or unrecorded Aboriginal objects.

As at July 2009, a total of 6055 Aboriginal objects have been recorded on-park, with a further 19 458 Aboriginal objects recorded off-park, across all regions (Table 2-6F, and Figures 2-6D and 2-6E). Overall, compared with the 2008 figures, there was an increase in the total number of Aboriginal objects, places and values recorded both on and off-park.

During 2008–2009, DECC completed several digitising projects for information held on AHIMS, including the rock art tracings project, Aboriginal site cards and archaeological report projects, and photographs and slides of moveable heritage items. These digitising and data management activities are ongoing and greatly enhance the services and capabilities of AHIMS.

Table 2-6F: Total numbers of Aboriginal objects recorded within the regions (current to July 2009)

Region	UNE	LNE	Eden	Southern	Total
Aboriginal objects recorded in region off-park*	1 971	10 041	1 015	6 431	19 458
Aboriginal objects recorded in region on-park	512	2 631	541	2 371	6 055

Note: *Number of sites off-park includes those on private land and non-DECC public tenure, including State forests.

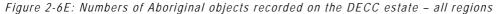
Source: DECC AHIMS

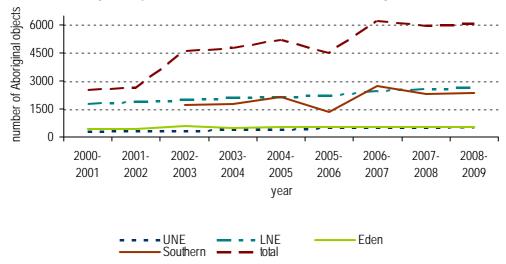
number of Aboriginal objects 20000 15000 10000 5000 0 2000-2001-2002-2003-2004-2005-2006-2007-2008-2001 2002 2003 2004 2005 2006 2007 2008 2009 year

Figure 2-6D: Numbers of Aboriginal objects recorded off the DECC estate – all regions



Note: Number of sites off-park includes those on private land and other public tenure, including State forest. Source: PWG data (AHIMS)





Source: PWG data (AHIMS). Compiled by Crown Forestry Policy and Regulation Section DECC

Historic (non-Indigenous) cultural heritage on DECC estate

The number of historic heritage features, including recorded places, artefacts, sites, buildings or other structures, has been reported for all of the FA regions annually from the first year of reporting. Data are sourced from the Historic Heritage Information Management System (HHIMS). HHIMS contains information on over 9 000 historic heritage sites (around two-thirds of these are located in FA regions), moveable heritage collections, reports and DECC statutory permit delegations under the *Heritage Act* 1977.

A total of 5341 historic items and places was recorded on-park across all of the regions (Table 2-6G).

Table 2-6G: Total numbers of historic places recorded in national parks and reserves within the regions (current to June 2009)

	Region				
No. of historic places recorded	UNE	LNE	Eden	Southern	Total
on-park	771	1950	276	2344	5341

Note: These figures do not include State forests

Source: DECC Cultural Heritage Division

DECC has one of the largest holdings of historic heritage sites in NSW. Each year, DECC manages major planning, works and maintenance projects to conserve significant heritage. Highlights in 2008–09 include:

- Completing 3D modelling in June 2009 for the historic Innes Ruins at Lake Innes Nature Reserve (LNE) by British firm Plowman Craven. This is thought to be the first use of the 3D technology in NSW, and will enable DECC to monitor the condition of the ruins more effectively.
- Continuing to rebuild iconic alpine huts burnt by wildfires in 2003, with O'Keefe's Hut in the Jagungal Wilderness area completed in January 2009, and Sawyers Rest House and Brooks Hut in Kosciuszko National Park completed in March 2009 (Southern).
- Awarding a contract for architectural design works to restore the Kiandra Courthouse site (Southern). Removal of cement render from the external western (front) and northern walls of the courthouse was completed.

DECC is refining the information it holds to provide a comprehensive register to the NSW Heritage Office by December 2009, in line with Heritage Council guidelines for NSW Government agencies managing heritage assets. The draft register currently contains over 3000 items from parks and reserves across the state. It includes 37 items DECC manages, which are also on the State Heritage Register. DECC is still collating information about the items on the register, including information on the condition and cartilage of each item. When completed by December 2009, the dataset will also form part of SoP reporting, which will require a review of information on the condition of these items every three years.

Aboriginal cultural heritage in State forests

Forests NSW surveys for Aboriginal sites as part of its pre-harvest survey process. If a site is detected, protection is determined in consultation with the local Aboriginal land council or Indigenous representatives. Forests NSW also seek advice about the long-term management of these sites. Forests NSW uses the DECC AHIMS system to check that the Forests NSW system has not missed any detected sites. In addition, previously detected sites are protected from the impact of harvesting operations.

Forests NSW contributes to the AHIMS, which records Aboriginal sites found on all tenures (Table 2-6F). In 2008–2009, Forests NSW did not report on the number of additional Aboriginal sites identified in State forests. No sites of Aboriginal significance were reported as destroyed²⁶ during 2008–2009.

²⁶ The destruction of sites requires licence approval from DECC and consultation with the relevant local Aboriginal land council.

Historic heritage features in State forests

Forests NSW Regions maintain a Section 170 Heritage and Conservation Register using the State Heritage Inventory database developed by the NSW Heritage Office. The register identifies sites and objects of heritage significance for internal reference. Site details are also submitted to the NSW Heritage Office for inclusion on the State Heritage Register when required. All sites of non-Indigenous exploration and settlement that are assessed and recognised to be of local or regional historical significance are incorporated within Forests NSW GIS system. Potential buffers around significant sites are incorporated into the FMZ system.

The total area of State forest zoned for heritage value across the regions was 3204 ha, with a further 20 140 ha zoned mainly for aesthetic value. These figures remain unchanged compared with last year.

Legal framework

MIG indicator 7.1 (narrative):

Extent to which the legal framework (laws, regulations, guidelines) supports the conservation and sustainable management of forests (UNE, LNE, Eden, Southern regions)

The legal framework for sustainable management of forests and forest management is extensive. It includes legislation, amendments to existing legislation, policies, guidelines and codes of practice.

Reporting against this indicator is done at a statewide level, and when any policy or other document is specific to a region, it is indicated. The following discussion includes only information on the legal framework for forests and forest management not previously reported.

Additions and changes to legal framework

Legislation

DECC - PWG

The extent to which the legal frameworks in PWG provide for aspects of ecologically sustainable forest management has not changed from the previous reporting period.

For updates on specific legislation and legal changes relevant to Acts, new and amending Acts and new and amending Regulations that are administered by DECC, refer to Appendix 7 (page 198) of the DECC Annual Report 2008–09.

New and amending regulations reported by DECC (but not necessarily administered by PWG) that support the conservation and sustainable management of forests in 2008–2009 include:

Threatened Species Conservation (Biodiversity Banking) Regulation 2008.

Legislative reviews relevant to management of forested areas commenced this year include:

- Catchment Management Authorities Act 2003
- Native Vegetation Act 2003
- Filming Approval Act 2004

Forests NSW

The Forestry Act 1916 was amended under the Statute Law Revision Program of 2008 to increase the maximum term for a forest materials licence from 5 years to 20 years. The Forestry Regulation 2004 was amended to increase the fees for licences and permits based on CPI and Average Wage Movements.

Additional detail on Legal framework that Forests NSW operates within can be found on p.27 of the SEEing report supplement within *Forests NSW Annual Report 2008–09 Social, Environmental and Economic Performance* (http://www.dpi.nsw.gov.au/aboutus/resources/corporate-publications/forests-nsw-annual-report-2008-09).

Management policies, guidelines and codes of practice

Under the *Native Vegetation Act 2003*, all forestry activities on private land now require a Private Native Forestry (PNF) Property Vegetation Plan (PVP). PNF PVPs require a landholder to undertake their operations in accordance with a Code of Practice. The Code came into effect on 1 August 2007. Harvesting native vegetation under a PNF PVP is deemed to improve or maintain environmental outcomes if it complies with the requirements of the Code. A PNF PVP is a legally binding agreement between a landholder and the Minister for Climate Change and Environment and has a maximum term of 15 years.

A PVP comprises:

- a declaration by the landholder that the forests identified in the PVP will be managed according to the PNF Code
- a map with a background satellite image or aerial photograph of the property, identifying the part of the property that is subject to the PVP and the areas where forestry operations are not permitted (e.g. old growth and rain forests).

The PNF Code requires that PNF operations improve or maintain environmental outcomes by protecting landscape features, such as old growth forests, rainforests, steep lands and drainage. Site-specific biodiversity and habitat features are also protected through compulsory retention of hollow bearing and feed trees, and by limiting harvesting techniques. The limitations on harvesting techniques include retaining a minimum basal area during single tree selection and thinning operations, and maximum canopy opening sizes associated with Australian Group Selection harvesting.

Before the PNF Code was introduced, approximately 20% of PNF activities required consent under the *Native Vegetation Conservation Act 1997*, while the remaining 80% of activities operated under an exemption to the *Native Vegetation Act 2003*.

The Minister for the Environment has granted the Code Biodiversity Certification. This means its landscape, biodiversity and habitat protection features meet the objectives of the *Threatened Species Act 1995*. Biodiversity Certification means landholders are not required to obtain licences or permits under the *Threatened Species Conservation Act* 1995 to harvest native timber.

On a State basis, as at 30 June 2009, DECC had issued 805 private native forestry property vegetation plans covered approximately 249 296 ha since the

On a State basis, as at 30 June 2009, DECC had issued 805 private native forestry property vegetation plans covered approximately 249 296 ha since the introduction of the Code was introduced on 1 August 2009. Of these, 387 private native forestry property vegetation plans covering 133 129 ha were approved during the 2008–2009 financial year. DECC continues to work with landowners and industry to ensure that they are aware of the new regulatory arrangements.

Legal framework and Aboriginal interests

The extent to which facets of Indigenous participation in ecologically sustainable forest management is provided for in the legal frameworks for nature conservation reserves in NSW has not changed from the previous reporting period.

In 2004–2005 and 2006–2007, the level of Aboriginal community consultation and input into decision making for parks in each FA region was reported using data from the SoP qualitative assessment so as to align the two reporting processes. SoP survey was not conducted in the 2008–2009 financial year, and therefore no update is available.

On 16 April 2009, the NSW Government released proposed amendments to the *National Parks and Wildlife Act 1974* and the *Threatened Species Conservation Act 1995* that will have implications for cultural heritage conservation. The proposed amendments will:

- modernise and streamline the protection of Aboriginal cultural heritage and related regulatory processes under Part 6 of the *National Parks and Wildlife Act 1974*
- make enforcement provisions more consistent with other environmental legislation
- update wildlife management licensing provisions
- make minor changes to the management of Aboriginal-owned parks under Part 4A of the National Parks and Wildlife Act 1974
- update a range of miscellaneous park management provisions.

Following consultation about the proposed changes in May 2009, DECC expects to progress these proposed amendments during 2009–2010.

The joint management of parks and reserves involves DECC and Aboriginal people sharing responsibility for management, and is an important recognition of the special link that communities have to their traditional lands. In addition to the joint management initiatives reported previously, initiatives for 2008–2009 included the following.

LNE

- In February 2007, three new Aboriginal owned and leased back parks were created near Newcastle, known as the Worimi Conservation Lands. These parks are owned by Worimi Local Aboriginal Land Council and jointly managed between DECC and the Worimi people.
- DECC continued to work with Forster Local Aboriginal Land Council to cooperatively manage lands at Seal Rocks.

UNE

No new initiatives

Eden/ Southern

■ Aboriginal ownership and lease back of Biamanga (Eden) and Gulaga (Eden/Southern) national parks on the far south coast.

In 2008–2009, DECC delivered eight Aboriginal site awareness training programs to 119 participants from the Roads and Traffic Authority, Energy Australia, catchment management authorities and DECC. All programs were delivered with local Aboriginal community representatives, and were designed to improve people's understanding of Aboriginal cultural heritage site values.

Attendees learnt about the cultural values of Aboriginal sites and landscapes, and about the value of community consultation. Attendees also learned about DECC's responsibilities and procedures, and the legislation that applies to cultural heritage and its management.

Public participation

Public participation in the extent to which the legal frameworks provide for aspects of ecologically sustainable forest management has not changed from the previous reporting period for either DECC or Forests NSW estate.

DECC

During 2008–2009, the National Parks and Wildlife Advisory Council (the Council) considered and made recommendations on draft plans of management covering 36 parks and reserves. Significant plans included those for far south coast escarpment parks (Eden) and Chaelundi National Park and State Conservation Area (UNE). The Council also commented on tourism and national parks, the review of the *National Parks and Wildlife Regulation 2002*, the biodiversity strategy discussion paper, and various lease proposals for land in Kosciuszko National Park (Southern).

Further information is in the *DECC Annual Report* 2008–09, Chapter 4: Conserve natural and cultural values through an integrated system of public and private lands (pp. 88) and Appendix 5: Significant statutory bodies and advisory committees (pp. 184–195).

The Aboriginal Cultural Heritage Advisory Committee (ACHAC) advises the Minister and the Director General of DECC on any matter relating to identification, assessment and management of Aboriginal cultural heritage in NSW. Some of DECC's initiatives in 2008–2009 to facilitate Aboriginal participation included:

- On 31 March 2009, the committee members finished their three-year term and work was under way to reconstitute the committee.
- At the final ACHAC meeting on 25 and 26 March 2009 the committee reviewed the goals and priorities of its three-year strategic agenda. Committee members agreed that ACHAC is an empowering mechanism that helps Aboriginal people to have an instrumental role in advising the NSW Government on cultural heritage issues that affect Aboriginal people across the state.

Further information on participation in the ACHAC described in the DECC *Annual Report 2008–09* – Chapter 4: Increase Aboriginal participation in land, water and natural resource management (pp. 96) and Appendix 5: Significant statutory bodies and advisory committees (pp. 184). Increasing Aboriginal participation in reserve management is described in the DECC *Annual Report 2008–09* – Chapter 4: Increase Aboriginal participation in land, water and natural resource management (pp. 96–98).

The community participates in policy formulation through the various consultative bodies. DECC also seeks public submissions when developing and reviewing policies, plans and programs. DECC's website regularly features calls for public comment and describes how to make submissions on its proposals.

Additional information about public participation in managing the reserve system during 2008–2009 can be found by referring to Appendix 5: Significant statutory bodies and advisory committees (pp. 184–195) of the DECC *Annual Report 2008–09*.

Forests NSW

Forests NSW staff attended 83 forums relating to cultural management in FA areas. Specific figures on public participation in forums are contained within Table 2-7A. Formal consultation also occurs on a range of policy and operational issues including the development of the ESFM Plans, policy directions on cultural heritage management at an operational level.

Institutional framework

MIG indicator 7.2 (narrative): Extent to which the institutional framework supports the conservation and sustainable management of forests (UNE, LNE, Eden, Southern regions)

Institutional framework, policies and planning for ecologically sustainable forest management

DECC park management framework and planning, assessment and policy review

The concept of an environmental management system (EMS) for park management is being delivered through the Park Management Program (PMP). The PMP is intended to cover all areas of Parks and Wildlife Group (PWG) operations on park. Integral to the PMP is the Park Management Framework (PMF), which was adapted from the ICUN protected areas framework for assessing the effectiveness of management in protected areas. The cycle allows park management actions to respond to experience as knowledge gained and lessons learned are fed into the management cycle. It provides the tools to make better decisions and improve coordination across DECC, making it easier for staff to access information to guide park management decisions and allow for adaptive management.

Many of the components of the Park Management Framework are already in place; they include, for example, the Plan of Management Manual (2003) and Fire Management Manual, which are regularly updated. Additional components, such as the Park Management Guides, regional operations planning, State of the Parks evaluations, and the Asset Maintenance System continue to advance.

Key achievements in the 2008–2009 year included:

- The Park Management Policy Manual is a single electronic document that provides summaries and links to all relevant documents (DECC and others) related to park management. It continues to be regularly updated so accurate information is available to staff.
- The Park Operating Procedures Manual provides consistent and high quality procedural guidance to staff by centralising adopted DECC procedural documents as well as documents from other

- sources that may provide useful advice on procedural best practice. The draft of the Park Operating Procedures Manual was released for comment during 2008; all comments from this consultation are now being addressed as part of finalising the document.
- The Monitoring and Evaluation Guide (MEG) is being designed to serve as a practical resource for field staff and provides guidance on standard practices for a wide range of monitoring and evaluation activities. A draft of this document is being finalised to be released for comment to PWG staff in late 2009. The format of this document follows the other Park Management Manuals to allow easy cross-referencing for specific issues.
- Standardised operational plans were developed in 2008 for all PWG Regions. These help to standardise and align planning through PWG and link the various planning document to onground works. They also ensure a rigorous approach to operational planning, help prioritise competing management requirements, improve the management consistency within the agency, and improve the ability to report against strategic targets.
- The Fire Management Manual brings together the policy and procedural information necessary for DECC to achieve its fire management objectives across the state. The manual provides guidelines for staff and strengthens DECC's ability to work cooperatively with other fire authorities, emergency services and the community. The manual was published in 1990, first revised in 2001, and continues to be revised annually.
- The Asset Maintenance System provides a comprehensive inventory of all assets owned and/or maintained within parks and is a tool for consistent and efficient scheduling and implementation of asset maintenance. This system is a major information source for determining long-term asset strategies and helps in determining DECC's on-going minor works requirements. The AMS roll-out began in 2008 and is approaching finalisation in 2009, with all assets across the park system included.
- DECC has developed Branch Visitor Management Plans (BVMPs) as a key action under *Living Parks Sustainable Visitation Strategy (2006)*. BVMPs identify initiatives that will enhance visitor opportunities and regional tourism in the short to medium term. These internal documents were released to staff in 2009 to support planning and decision making.

Forests NSW management framework and planning, assessment and policy review

During 2008–2009, Forests NSW maintained an environmental management system (EMS) certified to ISO 14001:2004 standard to ensure a systematic and continually improving approach to managing, measuring and monitoring Forests NSW activities that interact with the environment.

In addition to meeting ISO 14001:2004, Forests NSW is certified to the Australian Forestry Standard (AS 4708:2007), which is made up of nine criteria. Criterion one requires an environmental management system be in place; Forests NSW meets this by complying with ISO 14001:2004. Details on how Forests NSW meets the remaining criteria can be found by going to the Forest Management Certification page on: www.dpi.nsw.gov.au. The Forests NSW Australian Forest Standard and EMS Manual is available at: www.dpi.nsw.gov.au/ data/assets/pdf_file/0005/268052/005-forests-nsw-afsems-manual.pdf

As part of the implementation of Forests NSW EMS, all operational control documents are regularly reviewed and updated in accordance with the timeframes specified within the documents, or within the Document Control Procedures, which describe the process for reviewing documents (including internal Forest Practices Circulars) for consistency with current standards.

For example in August 2008, the Model Regional Fuel Management Plan was finalised and is now due for review in July 2011.

PWG policies for reserve management

Appendix 4 lists the PWG of DECC's responsibilities for forests and major, publicly available non-legislative policies specifically relevant to reserve management. Policies for information technology, human resources, occupational health and safety, or finance management, have not been included in the list, except where they specifically relate to park management (e.g. safety issues associated with using aircraft in park management).

The extent to which the non-legislative policy frameworks in PWG provide for aspects of ecologically sustainable forest management has not changed from the previous reporting period.

Forests NSW policies for State forests management

Forests NSW has comprehensive range of policies, codes and guidelines that help in sustainable forest management. A number of Forests NSW's policies, and the most recent Summary of Affairs, can be found on the Forests NSW website (www.dpi.nsw.gov.au/forests).

Additionally Forests NSW's ESFM Plans provide some detail on the non-legislative policy framework to be applied in each FA region.

DECC park management planning

Information on achievements within the Park Management Planning program in 2008–2009 can be found by referring to the DECC *Annual Report 2008–09*, specifically the following pages in Chapter 4:

- pp. 65–70, Chapter 4: Improve the condition of natural resources
- pp. 71–83, Chapter 4: Protect and restore biodiversity and native vegetation
- pp. 88–91, Chapter 4: Conserve natural and cultural values through an integrated system of public and private lands.

Information in these sections of the report includes research, monitoring and rehabilitation programs, wildlife and reserve management and planning, conservation agreements and partnership programs.

Forests NSW management planning

Indicators and further information on the implementation of Forests NSW ESFM plans at a corporate level are provided in the *Forests NSW Annual Report 2008–09 Social, Environmental and Economic Report*, published by Forests NSW, Pennant Hills NSW.

Public involvement and education for ecologically sustainable forest management

DECC PWG public education and awareness

Throughout 2008–2009, DECC continued to improve community awareness through its website, through targeted community education programs and through the Environment Line telephone information service. The discovery program and volunteer programs are ways in which PWG seeks to raise public education and awareness. More information on these programs follows.

DECC Discovery program

DECC's Discovery program delivers on legislative responsibilities for interpretation and education under the *National Parks and Wildlife Act 1974* (NPW Act), the *Wilderness Act 1987*, *TSC Act, Marine Parks Act 1997* and Two Ways Together, the NSW Government's Aboriginal Affairs Plan. It also contributes to the State Plan objective of providing increased opportunities for the community to enjoy a diverse range of recreational opportunities in parks.

The National Parks *Discovery – Walks Talks and Tours* program provides community education and interpretation to bring natural and cultural heritage themes alive. Discovery employs local people with appropriate backgrounds to deliver tours and events in national parks and reserves, and through outreach programs in schools. Discovery activities during 2008–2009 included wildflower walks, bird watching, tree planting, spotlighting and bike riding.

Discovery guide training was held at Mangrove Mountain near the Central Coast (LNE) for new and existing volunteer guides. Nine new guides were recruited and trained.

In the 2008–09 *Discovery for Schools* program, more than 74 000 students took part in cultural and environmental educational activities across the state, including almost 10 000 teachers and students at Kosciuszko NP (Southern).

Volunteering

For information in relation to volunteers and the results achieved for the projects that done during 2008–2009, refer to DECC *Annual Report 2008–09* Chapter 4: Contribute to increased tourism, community wellbeing and regional development through parks and reserves, page 84.

In 2008–09, volunteers contributed greatly to conservation and public appreciation of national parks. It is estimated that each year at least 3800 volunteers contribute more than 172 000 volunteer hours to weed and fire control, conservation works, threatened species programs and community education.

DECC continued its partnership with Conservation Volunteers Australia (CVA), engaging 119 volunteers from Australia and overseas who contributed more than 356 volunteer days to planting, removing weeds, and repairing and constructing a walking track.

DECC worked in partnership with the National Parks Association of NSW on 'HarbourKeepers, CoastKeepers and NatureKeepers' programs, which included engaging volunteers in and around the Central Coast. The programs involved 145 volunteers contributing more than 11 142 hours to bush regeneration and community biodiversity surveys. For example, the

biodiversity survey in Marramarra National Park (LNE) contributed valuable data on botany, mammals, herpetology and birds.

In 2009, DECC finalised a volunteering policy to support and encourage volunteering across the agency. A training course in volunteer management was also piloted for DECC staff and will be available later in 2009.

Electronic services delivery

The website (www.environment.nsw.gov.au) is one way in which DECC informs the public of its activities and strategies. The website also provides a range of online services, making it easier for people to access publications, apply for licences or record sightings of native species.

DECC further improved the website this year, including a significant upgrade of information for visitors to national parks, with new mapping features, additional photographs and expanded information. In particular, information about accommodation offered in national parks was upgraded and new information for and about commercial tour operators in the parks was added to the site. The website search engine was also refined to improve search result relevance and accuracy.

As DECC has a large proportion of staff located outside metropolitan areas, its internal intranet site, known as DECCnet, is an important way to communicate with staff and provide them with tools and resources for their work. The first stage of the new DECCnet was released in December 2008, the second stage was completed in June 2009.

For additional information relevant to this indicator refer to Appendix 10 (pp. 215–217) Statement of affairs of the *DECC Annual Report 2008–09*. This information is specifically in relation to DECC's statement of affairs, which is a requirement under the *Freedom of Information Act, 1989*.

During 2008–2009, DECC published a number of documents in a number of formats, including print and online. For a comprehensive list of these publications refer to Appendix 13 (pp. 224–227) 'Publications' and Appendix 14 (pp. 228–239) 'Papers published and presented' of the DECC Annual Report 2008–09.

Forests NSW public education and awareness

Forests NSW has a range of public education programs and activities relating to forest management. The majority of activities are developed through the Corporate Public Affairs Branch, but all regional staff are involved in communication and public consultation through attending meetings and forums.

Although Forests NSW does not have access to much qualitative information on public education and awareness for 2008–2009, considerable consultation with stakeholders occurs through various forums (Table 2-7A) and for specific purposes. A number of programs took place during the year aimed at addressing issues associated with recreational use of the forests for different purposes, while continuing to provide a great venue for recreational uses as responsible off-road riding.

Table 2-7A: Forests NSW records of the number of forums attended by Forests NSW staff as an indicator of public participation in Forests NSW ESFM (2008–2009).

Community forum categories	UNE	LNE	STH	Eden
Catchment management	5	1	4	2
Community bushfire management	10	2	38	42
Community/school/education	5	3	10	11
Conservation/environmental	5	5	7	2
Cultural management	50	5	1	27
Feral animals/noxious weed control	10	2	6	7
Flora and fauna management	10	5	1	11
Forestry/forest practices	10	5	4	15
Industry/stakeholders	5	3	10	21
Local emergency management	3	0	1	3
Local government	5	10	1	2
Other	0	10	1	3
Recreation/tourism	5	5	2	3
Regional planning/RFA	5	5	0	2
Total	128	61	86	151

Forests NSW has developed two forest studies centres that provide educational opportunities for schools in Sydney and Newcastle (in the LNE region). The forest-based education program and other programs provided to teachers and students were reported in the previous annual report (2007–2008).

Volunteering

Forests NSW recognises the invaluable role of community staff volunteers who donate their time and efforts to helping Forests NSW in various activities, particularly at Cumberland and Strickland State forests, both of which are outside FA boundaries and therefore not reported here. The total number of programs reported was 13, with 186 participants in the programs across the state. As a Public Trading Enterprise, Forests NSW sponsored, donated or waived fees on 214 occasions in relation to a total sum of \$57 485 during the reporting period.

Electronic services delivery

Forests NSW publications are available from www.dpi.nsw.gov.au or by contacting Forests NSW.

Private native forestry public education and awareness

Before the PNF Code little information was introduced, little information was available to PNF landholders and operators on how to manage the forest to achieve the best silvicultural outcomes. Since the code was introduced, information material has been developed specifically targeted at the PNF audience, including guidelines for identifying EECs that are affected by forestry; advisory notes on

various threatened species and their habitat; and cultural heritage awareness. These resources are available on the PNF webpage of DECC's website. The PNF webpage also includes further information to explain the PNF regulations as well as fact sheets and guidelines to explain and support the code's prescriptions.

Over the past two years DECC has identified the need for additional extension material to support the code and assist PNF training. DECC is preparing a range tools, including a PNF Field Guide; Silvicultural Guidelines; and Guidelines for Measuring Stand Basal Area. These tools will help contractors and landholders to understand and comply with the PNF Code.

The NSW Government provided a \$37 million reform package to support the implementation of the PNF Code. It includes three major components:

- \$3.7 million to accelerate the code's implementation
- \$4 million for training industry
- \$29.3 million for industry assistance for businesses adversely affected by introducing the code.

PNF training program

The \$4 million training and education activities with landholders and operators play an important role in supporting the auditing and compliance strategy to increase compliance with the code, so that landholders and contractors understand the code and can implement it. DECC began developing the PNF training program in early 2008; training courses in March 2009. The main objective of the PNF training project is to ensure industry can comply with the code and improve private native forest management. More specifically, training is intended to ensure that contractors and landholders will:

- minimise soil erosion and protect the health of waterways
- protect threatened species and habitats
- improve silvicultural management of private native forests.

There are two main parts to the PNF training program — the first is accredited training targeting contractors, and landholders who are involved in forestry operations on their land, and the second is a program of awareness days for landholders.

Accredited training - TAFE Sustainable PNF and Planner courses

Accredited PNF training is being delivered by TAFE NSW. Since June 2008, TAFE NSW, on behalf of DECC, has delivered 24 operator-level courses with 265 participants on various aspects of the PNF Code: soil and water protection, silviculture principles, and biodiversity protection principles. Participants in these courses are heavily subsidised – 80% of course costs are covered by DECC with participants contributing \$90 to participate in each course. The courses will continue to be run in Grafton, Casino, Taree, Kempsey and Deniliquin over the next two years. There has been considerable enthusiasm from the industry for the TAFE courses, with many participants driving long distances to attend the courses.

TAFE is developing a new supervisor (or forest operations planner) level course, which will give PNF supervisors and planners the skills to plan their forestry operations to comply with the code. It is expected to start around September 2009.

PNF landholder and contractor awareness

The PNF awareness days are designed to encourage landholders to consider taking up PNF on their land and, if appropriate, to attend the accredited PNF training courses run by TAFE. The awareness days are being delivered by the NSW Department of Industry and Investment (DII, formerly the Department of Primary Industries) and will take place in regions of NSW with existing or potential for private native forestry. The field days were piloted in June and July 2009; the main program will start in August 2009. Fifteen awareness days in each PNF region are planned for the second half of 2009.

Enforcement of laws, regulations and guidelines

DECC conservation compliance audit

The following conservation compliance audits (relevant to the FA regions) were made as part of the 2008–2009 Plan of Management Self Audit Program. Dates in parentheses are the year of Plan of Management adoption:

- Wambina Nature Reserve (2003) (LNE)
- Killarney Nature Reserve (2004) (LNE)
- Dunggir National Park (2004) (LNE)
- Wingham Brush Nature Reserve (2003) (LNE)
- Duval Nature Reserve (2003) (UNE)
- Tooloom National Park (1999) (UNE)
- Wombeyan Karst Conservation Reserve (1999) (Southern)
- Eagles Claw Nature Reserve (1990) (Southern)
- Murramarrang Aboriginal Area (1998) (Southern) and
- Benambra National Park (plan also includes Tabletop Nature Reserve which is located outside the FA regions) (2004) (Southern).

Forests NSW internal compliance program

Forestry operations on forests and on other Crown timber lands are governed by the terms and conditions of IFOAs and Forests NSW internal requirements (such as codes of practice) and occupational health and safety requirements. To ensure compliance, Forests NSW regularly monitors internal compliance. Any non-compliance requires corrective action to minimise any future re-occurrence. The Forests NSW internal audit system consists of a four-tiered approach.

- **Tier 1 monitoring**: on-site monitoring by the supervising forest officer, to ensure compliance with operational conditions.
- **Tier 2 monitoring**: on-site checking of Tier 1 by the supervising forest officer's supervisor to ensure correct application of standards.
- Tier 3 audits: independent audits of Tiers 1 and Tier 2 by regional staff not directly involved in the operation, and/or independent audits by the EMS Audit team from Forests NSW.

- Tier 4 audits: independent audits by the Management Audit and Review Branch of Forests NSW.
- All operations are covered by the audit procedure, with risk assessments determining the focus of Tier 1 and Tier 2 monitoring and of the Tier 3 and Tier 4 audits.

Further external audits occur as a requirement of the EMS/AFS certification. The EMS monitors and assesses trends in non-conformances through the Non-Conformance Improvement Request system (NCIR). The incidents are recorded throughout all tiers. NCIRs are monitored at a regional and corporate level to ensure each issue is resolved and built into a continuous improvement cycle, and that any emerging trends are addressed through appropriate means, such as inclusion in the relevant environmental management program (EMP).

Outcomes of the Forests NSW internal compliance program

During 2008–2009, Forests NSW staff filled out 2220 compliance sheets under the four-tier audit system across all regions. Among the 190 000 or more potential compliance issues identified and assessed under Tier one audits, 371 incidents of non-compliance were identified.

The incidents across all regions represent a 40% decrease in non-compliance incidents when compared with the 2007–2008 figures (see Figure 3-1A). The number of incidents fell in the LNE, Southern, and UNE, regions during the reporting period, while an increase was recorded in Eden.

Results of compliance findings are broadly classified and reported by Forests NSW under soil and water quality, flora and fauna, fish habitat and passage, and other issues (such as safety). Non-compliance results for 2009/10 were proportionally spread as follows: water quality (25%), flora and fauna (8%) and other issues such as safety (67%).

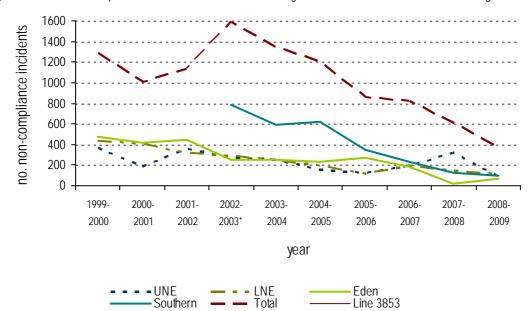


Figure 3-1A: Non-compliance incidents recorded through Forests NSW internal monitoring – all regions

^{*} Monitoring for the Southern region began in 2002–2003. Source: Forests NSW data

Forests NSW has advised they have been successful in reducing the number of non-compliance incidents recorded through internal monitoring thanks to:

- Successful implementation of relevant training for staff an contractors
- Further development of a culture of the importance of operating with minimal impact and within regulations
- OHS non-conformances are also collected as part of the monitoring program and improving safety performance has been a particular focus for Forests NSW, including improving the safety performance of contractors

During 2008–2009 Forests NSW was audited against the Australian Forestry Standard (AS 4708:2007) and the Environmental Management System Standard ISO 14001:2004. Regions visited during this audit were Northern and Monaro planted forest regions, as were native forest regions Central and Southern. In addition the auditors visited the Corporate Offices in Cumberland State Forest. While audits were carried out in all FA regions, the audit was limited to Planted Forests Operations Branch in UNE.

The audit identified that ESFM plans and schedules had not been finalised and this was subsequently achieved to the auditors' satisfaction. Another issue related to the Adverse Impacts Identification Register and Procedure, which is part of the Environmental Management System. Social and economic aspects had not been included and this has since been rectified. A number of minor issues (referred to as minor non-conformances) and observations were also reported with an agreed schedule to address these put in place. Summary reports of these audits are available on request from Forests NSW.

In the area of health and safety Forests NSW was recognised during the year by WorkCover NSW for meeting the high standards of its rigorous self-insurers audit. The recordable incident rate fell by 58 percent over last year to 4.9 (towards a Forests NSW target of less than one).

PNF auditing and compliance

Harvesting timber for the purposes of private native forestry on all lands now requires approval through development consent or the preparation of a Private Native Forestry Property Vegetation Plan (PNFPVP). As at the end of June 2009, DECC had issued 805 PNF PVPs across the State.

PNF PVPs require that harvesting occurs under a Code of Practice. The code requires that private forestry operations improve or maintain environmental outcomes. Previously, forestry on private land was largely unregulated, often resulting in poor silviculture and poor environmental outcomes.

DECC has also established an audit program to ensure compliance with the new arrangements. As at 30 June 2009, DECC had carried out 92 site inspections and formal audits.

The new program represents major progress in reducing the negative impact of logging on private property. Previously, logging was largely unregulated, resulting in some cases in poor silviculture and environmental impacts. The PNF Code sets out requirements that substantially upgrade forest management practices and establishes sustainable practices as the new standard for all private native forestry operations. The reforms are being supported by training programs.

DECC's auditing and compliance strategy is central to the successful implementation of the PNF program. Auditing and compliance activities provide an important link between DECC officers and industry, providing education and assistance to landholders and operators as they make the transition from minimal regulation to a full regulatory system. DECC's PNF officers carry out auditing and compliance activities to ensure industry is complying with the PNF Code, as well as ensure they understand what is required of them under the Code and how to implement it.

Operational inspections and compliance audits

DECC's auditing and compliance strategy involves two key activities: operational inspections and compliance audits. Operational inspections are valuable educational and relationship-building activities that help establish effective working relationships between DECC's PNF officers and members of the timber industry. Operational inspections can occur at short notice and PNF officers will often provide advice to landholders on operational practices as part of these inspections.

Compliance audits check whether forestry operations are compliant with the PNF Code. Up until June 2009, a total of 90 monitoring inspections were completed across NSW, made up of 50 operational inspections and 40 formal audits. This equates to approximately 11% of approved PNF PVPs being inspected or audited.

Compliance investigations and actions

DECC also investigates and enforces PNF compliance. In the 2008–2009 financial year, DECC issued PenaltyPINs to one operation and is investigating two other alleged breaches of the PNF Code. Notifications of alleged unauthorised logging (i.e. those harvesting on private land without a PNF PVP or other form of consent) are reported to the Department's Enviroline and are investigated. Details of monitoring instances are provided in Table 2-7B for the Northern and Southern areas of the state (the areas most likely to correlate with Forest Agreement areas).

Table 2-7B: PNF PVPs monitored

Forest Type	Operational Inspections	Total audits completed	TOTAL monitoring Instances
Northern NSW	31	21	52
Southern NSW	9	9	18

Plantations auditing and compliance (for plantations authorised under the Plantations and Reafforestation Act)

DPI Departmental officers audit authorised plantations based on the provisions of the Plantations Code and any conditions attached to the authorisation. DPI officers undertake audits randomly and on the basis on risk of environmental harm. Officers have received formal training in environmental auditing and hold recognised audit qualifications. Regional plantation officers provide information and extension services when making site inspections. This advice is aimed at ensuring compliance with the Plantations Code, rather than at sustainable forest management.

The PR Act contains enforcement provisions. To date no enforcement action has been taken. However; many corrective action requests have been issued as a result of audits, sometimes resulting in considerable cost to the plantation owner. DPI will soon have the capacity to issue penalty infringement notices for relevant offences under either the PR Act or the Plantations Code.

Up to 30 June 2009, 62 plantations have been audited. Corrective action requests were issued to 28 of these plantation owners to remediate environmental harm caused as a result of non-conformance with Code provisions.

Reporting on compliance and enforcement activities

IFOA compliance and enforcement reporting

Information on Forests NSW compliance with the Integrated Forestry Operations Approvals for the 2008–2009 reporting period is contained within Chapter 3 of this report.

Forests NSW compliance and enforcement reporting

Forests NSW continues to publicly report at a statewide level compliance and monitoring results and has integrated this and the remainder of its Social Environmental and Economic indicators in its Annual report. The compliance summary lists infringements notices issued by external regulators. It also lists the compliance checks made by Forests NSW as part of the internal monitoring and auditing strategy and associated compliance, expressed as a percentage.

DECC compliance and enforcement reporting

Details of prosecutions completed under conservation legislation (for native vegetation, threatened species, parks, wildlife and Aboriginal heritage), the proportion that were successful and the resulting value of fines awarded in the 2008–09 reporting period are provided in Chapter 4: Improve the condition of natural resources (pp. 65–70) of the DECC *Annual Report 2008–09*. Appendix 8: Infringements and prosecutions (pp. 199–205) of the DECC *Annual Report 2008–09* lists infringements and prosecutions under parks, wildlife threatened species, Aboriginal heritage and native vegetation

legislation completed during the 2008–2009 reporting period.

Staff training and development

DECC

Reporting on the number of staff directly employed within each FA region, categories of training and numbers trained in each category is not possible in detail for DECC in the 2008–2009 financial year.

Updated figures to June 2009 on employees by classification for DECC staff, the location of staff (Regional or Metropolitan) is provided in Appendix 6 (pp.196–197) of the DECC *Annual Report* 2008–09. Information on the DECC Learning and Development Framework, Aboriginal Cadetship Program, Fire Management Training and other staff training and development programs is provided in Chapter 5: Skilled people and smart systems (pp. 113–120) of the DECC *Annual Report* 2008–2009.

Forests NSW

Forests NSW has published information for staff training and development, as well as number of staff directly employed by Forests NSW in the *Forests NSW Annual Report 2008–09 Social, Environmental and Economic Report,* Forests NSW, Pennant Hills NSW. However, reporting on the categories of training and numbers trained in each category for each of the Forest Agreement areas is not possible for Forests NSW, as reporting boundaries do not match Forest Agreement boundaries.

Capacity to measure and monitor change

MIG indicator 7.4 (narrative): Capacity to measure and monitor changes in the conservation and sustainable management of forests (UNE, LNE, Eden, Southern regions)

DECC - PWG

State of the Parks is the program in which PWG makes a three-yearly assessment of the effectiveness of management for all issues across all parks in the NSW park system. The NSW SoP program is the largest and most comprehensive of its type in the world. The information is used to assist in operational planning within our parks as well as assisting a variety of reporting needs. The last evaluation was made in late 2007, with the results actively returned to park managers in 2008. Evaluations from the assessment were made available to support regional operational plan development, with specific tools developed to target areas for possible improvement.

As discussed in indicator 7.2, PWG is developing a monitoring and evaluation guide to further support its capacity to measure and monitor change. This will help in collecting quantitative information that can further underpin evaluations made within the State of the Parks program.

Forests NSW uses a number of tools and systems to monitor conservation and sustainable management of forests. The Forests NSW FRAMES project has been managed under a program of continuous improvement. Further information on improving FRAMES is provided in Appendix 1. To improve monitoring performance, Forests NSW is integrating FRAMES into its Forest Management Information processes.

Forests NSW developed the SEEDS database system as a central repository of information for monitoring and reporting on sustainability indicators and ESFM values. It includes the monitoring of timber products by various log categories and volumes. Information from other Forests NSW information systems is automatically and/or manually entered into SEEDS.

Research and development

MIG indicator 7.5 (narrative): Capacity to conduct and apply research and development aimed at improving forest management and delivery of forest goods and services (UNE, LNE, Eden and Southern regions)

DECC

As in previous years, PWG continues to take part in specific local project-based research, as well as supporting the work of other divisions, agencies and institutions in this area, but does not have a primary responsibility for research within DECC. It is therefore not possible to identify forest-related research that may be done. Details of DECC's involvement during the 2008–09 reporting period with the Monitoring, Evaluation and Reporting (MER) Strategy and specific research projects that may be relevant to the ESFM Criteria and Indicators can be found by referring to the DECC *Annual Report* 2008–09, specifically; the following pages in Chapter 4:

- pp. 65–70 (Chapter 4: Improve the condition of natural resources)
- pp. 71–83 (Chapter 4: Protect and restore biodiversity and native vegetation)
- A list of 2008–2009 DECC publications can be found on in (Appendix 13: Publications, pp. 224–227).

DECC papers that were published and presented in 2008–2009 are listed in Appendix 14: Papers published and presented (pp. 228–238).

Forests NSW

Progress on Forests NSW research and development aimed at improving forest management and delivery of forest goods and services can be found in the Science and Research and Forests NSW Research and Development Annual Report 2008–09:

www.dpi.nsw.gov.au/aboutus/resources/corporate-publications .

Compliance with integrated forestry operations approvals

Introduction

Integrated Forestry Operations Approvals (IFOAs) provide the operational framework for the conduct of forestry operations in State forests and on other Crown timber land. The approvals, made under the Forestry and National Park Estate Act 1998, contain non-licence conditions and terms of licences under the Protection of the Environment Operation Act 1997 [Environment Protection Licences (EPLs)], Threatened Species Conservation Act 1995 [Threatened Species Licences (TSLs)] and the Fisheries Management Act 1994 (Fisheries Licences). Threatened Species Licences and Environment Protection Licences are administered by DECC. Fisheries Licences are administered by Department of Primary Industries (DPI) – Fisheries.

An IFOA provide the basis for clear and consistent environmental regulation of native forest harvesting operations. There are four IFOAs currently in place and each covers a forest agreement region.

IFOA amendments

Amendment Number 5 to the IFOA for the Eden Region was granted on 7 July 2008 and includes amendments to the terms of the licence under the *Threatened Species Conservation Act 1995*.

New conditions extend former conditions originally inserted in 2006 to identify areas of land to be set aside as exclusion zones for the protection of the species listed below:

- giant burrowing frog
- southern brown bandicoot
- smoky mouse.

The amendments are accompanied by the adoption of a Species Management Plan (SMPs) for each species, which includes a survey and monitoring programs for each species undertaken by Forests NSW. SMPs provide for adaptive management of threatened species. The programs are different from the survey methods previously required by the licence. Accordingly, the licence was also amended in 2008 to remove the requirements relating to surveys specifically for the species.

Introduction

DECC's role in managing Forests NSW forestry operations is to protect the aquatic environment from water pollution and protect threatened species and their habitats. Compliance with the conditions set out in the EPLs and TSLs, which are issued to Forests NSW, are the chief means by which this is achieved. These licences are contained within the IFOAs for the UNE, LNE, Southern and Eden regions.

TSL coverage is mandatory in all active native forestry operations. Forests NSW may exercise its right not to seek EPL coverage for certain operations, but these operations remain subject to the water pollution provisions outlined under section 120 of the *Protection of the Environment Operations Act* 1997, which prohibits the pollution of waters.

Summary of auditing program

To determine Forests NSW compliance with licence conditions and other relevant legislative requirements, DECC maintains an active audit program of Forests NSW forestry operations. DECC's audit program ensures that Forests NSW is taking the required measures to protect the environment, threatened species and its habitat through planning and operational activities.

Non-compliance with licence conditions is addressed through meetings with senior Forests NSW officers, the issuing of feedback or warning letters, clean-up notices, or penalty notices, or prosecution action, as appropriate to the circumstances.

Between 1 July 2008 and 30 June 2009, DECC undertook 11 audits of Forests NSW pre-operational planning and operations in forest regions covered by an IFOA. DECC identified a total of 432 non-compliances with the IFOAs.

DECC identified 163 non-compliances with Environment Protection Licence conditions, including:

- waste left at logging sites
- incorrect or insufficient drainage structures on roads and snig tracks
- incorrect or insufficient drainage structures at drainage feature crossings
- administration errors, including the failure to complete and the inclusion of incorrect information in pre-logging planning documents and
- incomplete or insufficient recording of Environment Protection Licence breaches.

DECC identified 269 non-compliances with Threatened Species Licence conditions, including:

- incomplete or insufficient pre-logging and pre-roading surveys for threatened species
- damage to recruitment and habitat trees
- failure to exclude forestry operations from rainforest areas
- failure to protect riparian habitat
- inadequate selection of recruitment and habitat trees
- no/insufficient recording of breaches of the Threatened Species Licence conditions.

As a result of these audits, Forests NSW was issued with 1 PIN and ten warning letters in relation to identified breaches. It should be noted that DECC generally issues Forests NSW with one warning letter for each relevant audit. As such, one warning letter may include reference to numerous breaches.

During the 2008–2009 financial year, DECC issued two clean-up notices to Forests NSW for separate sites in the Lower North East region. DECC required that Forests NSW also seek expert soil conservation advice in one instance and engineering assessment in one instance.

Fisheries licences

DPI–Fisheries investigated one incident in Yabbra State Forest (UNE region) under the Fisheries Licences for 2008–2009. The investigation was not completed during the 2008–2009 reporting period.

Non-licence terms

DECC oversees the implementation of, and investigates complaints in relation to, non-licence terms²⁷ in the UNE, LNE, Eden and Southern IFOAs. DECC also coordinates discussions about various IFOA implementation issues with DPI as they arise. Complaints about non-licence terms were received from the public during 2008–2009 and included those made in relation to:

- publicly available documents
- annual logging reports
- regeneration assessments
- clause 21 principal purpose
- harvest planning
- enforcement
- timber volumes.

In 2008–2009, Forests NSW continued to draft a number of plans required under the non-licence terms, such as model Grazing Management Plans. Forests NSW also provided a number of reports (such as annual logging reports) in accordance with non-licence requirements.

The non-licence terms are the conditions in the IFOA in addition to the terms of the licences. They include description of forestry operations, duration, and area that the IFOA applies.

Forests NSW internal compliance program

Summary of the Forests NSW internal compliance program

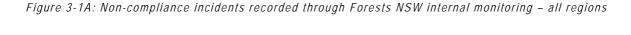
Forestry operations carried out in State forests and on other Crown timber lands are governed by the terms and conditions of IFOAs and Forests NSW internal requirements (such as codes of practice) and occupational health and safety requirements. To ensure compliance, Forests NSW regularly monitors internal compliance. Any non-compliance requires corrective action to minimise any future reoccurrence. The Forests NSW internal audit system consists of a four-tiered approach summarised on page 75 of this report.

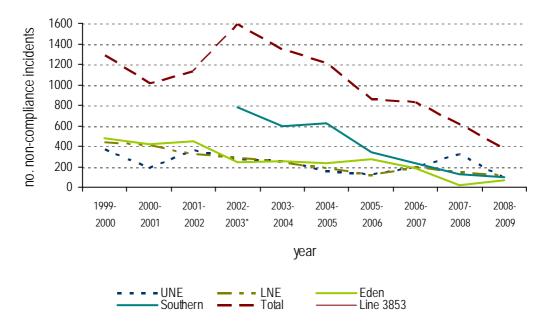
Outcomes of the Forests NSW internal compliance program

During 2008–2009, Forests NSW staff filled out 2 220 compliance sheets under the four-tier audit system across all regions. Among the 190 000 or more potential compliance issues identified and assessed under Tier one audits, 371 incidents of non-compliance were identified.

The incidents across all regions represent a 40% decrease in non-compliance incidents when compared with the 2007–2008 figures (see Figure 3-1A). The number of incidents fell in the LNE, Southern, and UNE, regions during the reporting period, while an increase was recorded in Eden.

Results of compliance findings are broadly classified and reported by Forests NSW under soil and water quality, flora and fauna, fish habitat and passage, and other issues (such as safety). Non-compliance results for 2008–2009 were proportionally spread as follows: water quality (25%); flora and fauna (8%); and other issues such as safety (67%).





^{*} Monitoring for the Southern region began in 2002–2003. Source: Forests NSW data

Forests NSW has advised it has been successful in reducing the number of non-compliance incidents recorded through internal monitoring thanks to:

- successful implementation of relevant training for staff and contractors
- further development of a culture of the importance of operating with minimal impact and within regulations

OHS non-conformances are also collected as part of the monitoring program; improving safety performance has been a particular focus for Forests NSW, including improving the safety performance of contractors.

In addition to the four-tier audits, there was one external audit of Forests NSW EMS by an external EMS auditing company; this was NCS International in 2008–2009.

References and bibliography

(Note additional references may be listed in footnotes or as website text links within the main body of this document).

Department of Environment and Climate Change, NSW (2007) Department of Environment and Climate Change NSW Adaptation Strategy for Climate Change Impacts on Biodiversity. DECC, Sydney.

Department of Environment and Climate Change, NSW (2008) Department of Environment and Climate Change NSW Annual Report 2007–08. DECC, Sydney.

Department of Environment and Climate Change, NSW (2008) South West Slopes Region Pest Management Strategy 2008–2011. NPWS, Hurstville.

Department of Environment and Conservation NSW (2006) NSW State of the Environment 2006. DEC, Sydney.

ESFM Technical Committee (1998) *Criteria and Indicators in the Eden RFA region - A report undertaken for the NSW CRA/RFA Steering Committee. Project Number NE 26/ESFM,* April 1998, Resource and Conservation Division, Department of Urban Affairs and Planning, Sydney.

ESFM Technical Committee (1999) Criteria, Indicators, Targets and Monitoring Processes of Ecologically Sustainable Forest Management for the Upper North East and Lower North East RFA Regions: A Project Undertaken as Part of the NSW Comprehensive Regional Assessments. Project Number NA41/ESFM, Resource and Conservation Division, Department of Urban Affairs and Planning, Sydney.

ESFM Technical Committee (2000) Criteria, Indicators, Targets and Monitoring Processes of Ecologically Sustainable Forest Management for Southern RFA Region: A Project Undertaken as Part of the NSW Comprehensive Regional Assessments. Project Number NA 41/ESFM, Resource and Conservation Division, Department of Urban Affairs and Planning, Sydney.

GHD (2009) NSW Private Native Forest Industry Study. Prepared for the Department of Environment, Climate Change and Water.

Jay, A., Thompson, D., Macgregor-Skinner, J., and Vanclay, J. (2007b) Review of the draft Code of Practice for Private Native Forestry in NSW. A report for Forest and Wood Products Australia.

Nichols, J.D. (2007) 'Evolution and development of a Code for Private Native Forestry in New South Wales, Australia',. *Small-scale Forestry* 6: 127–140.

NSW Inter-agency Biodiversity and Climate Change Impacts and Adaptation Working Group (2007) *NSW Biodiversity and Climate Change Adaptation Framework.* DECC, Sydney.

NSW National Parks and Wildlife Service (2001) *Threat Abatement Plan for Predation by the Red Fox* (Vulpes vulpes). NSW National Parks and Wildlife Service, Hurstville.

Race, D., and Stewart, H. (2007) Private native forest in new landscapes: challenges and opportunities in New South Wales. Small-scale Forestry 6: 189-203.

Thompson, D. (2007) Private native forestry in NSW: Environmentally benign, economically important but silviculturally challenged? *Small-scale Forestry* 6: 157-175.

Thompson, D., Jay, A., Connell, M., Norman, P., and Vanclay, J. (2006) 'Private Native Forestry – Silviculture, Sustainability and Incentives for Vegetation Management', VegFutures Conference, Albury, 19–23 March 2006.

Appendix 1 Individual milestone progress

This Appendix reports on the progress of milestones specified in the NSW Forest Agreements for the UNE, LNE, Eden and Southern regions.

Progress is reported using descriptors shown below ('Definitions of milestones statuses).

Where a milestone has been completed (or implemented or is no longer required) it may not be discussed in future annual reports. Details are given if the milestone was recently completed or implemented, but not if it has been previously reported as such.

For more information refer to the 2007–2008 Annual Report: <u>www.environment.nsw.gov.au/forestagreements/monitoring.htm</u>

Additional information will also be available in the Review of NSW Forest Agreements and Integrated Forestry Operations Approvals, due to be published in 2010: www.environment.nsw.gov.au/forestagreements/reviews.htm

Definitions of milestones statuses

Completed	Indicates that the milestone required the production of a document or plan, and that this document or plan has been produced
Implemented	Indicates that the milestone required a process or system to be put in place, and that this process or system has been put in place
Continuing	Indicates that a product or process is ongoing or annually required
In progress	Indicates that a product or process is still being developed or is in the draft stage
Deferred	Indicates that the action required by the milestone has been postponed
No reporting required	Indicates that an action is no longer required to be reported on or is reported in another way (e.g. in the five-year review or on an 'as needed' basis)

D	ue date	Region	FA section	Milestone	Progress
MANAGING THE FORESTS					
Environmental Management System					
2001	1 April	UNE, LNE, Eden	2.1.1 Att. 3 Att. 4	Preparation of SFNSW EMS – Native Forest Management System.	Complete
					The Forests NSW EMS assists in continuous improvement of environmental management in native and planted forests. The EMS is a comprehensive planning, assessment, implementation, monitoring, auditing and reporting system.
					Initially Forests NSW placed a draft Native Forest Management System on public display in September 2000 with draft Regional ESFM plans. Forests NSW Native Forest Management System (NFMS) was renamed the Native Forest Environmental Management System (NFEMS) to better highlight the intent of the system. Following the public display of the Native Forest Strategic Framework in September 2000 and a gap analysis by an external ISO 14001 certification company, the NFEMS was distributed to all Native Forests regions. Simulated (training) EMS audits followed; audit outcomes were used to focus further development work on continuous improvement of the NFEMS.
					Although the intention was to develop the EMS for Native Forest only, Forests NSW included the planted estate. During 2003–2004, a draft procedures EMS manual was developed, which specifically addressed native forest issues and considered the appropriateness of options for planted forests.
					In 2004–2005, senior management of Forests NSW approved an audit program for native forest regions to assess the workings of its EMSs. The program did not include operational health and safety audits. Auditing in plantation areas was confined to compliance with the EPL and Codes of Practice during this period.
					During 2005–2006, Forest NSW completed its review and implemented recommendations from the internal audits that were made in 2004–2005. The findings of these reports formed the basis for the external verifiers to assess Forests NSW EMS systems.
					Forest NSW finalised a number of corporate systems and management reviews to obtain its external accreditation in ISO 14001 (EMS) in June 2006 for planted and native forests. The ISO 14001 accreditation covers both native and plantation operations.
					It has taken longer than expected to complete the EMS because of the size of the task. A typical EMS addresses potential environmental impacts caused by corporate business activities, usually at a limited number of sites, with few variables between sites. Simply creating a typical EMS framework within the Forests NSW business would not achieve ISO14001, nor forest agreement objectives, owing to the large and diverse nature of Forests NSW as an organisation and its activities. Forests NSW has had to implement an EMS across three operational divisions, including nine management regions and 12 offices, to address activities relevant to forest management planning, harvesting, monitoring and reporting for over 2 million ha of native forest and half a million ha of planted forest estate throughout NSW.
					In December 2006, Forests NSW was certified as compliant with the Australian Forestry Standard (AFS) (AS 4708 (Int)–2003) by NCS International (NCSI). The AFS complements the pre-existing regulatory structure and EMS by providing an independent perspective. Regular external audits carried out by NCSI assess not only Forests NSW management systems and compliance with applicable licences, but also its commitment to sustainable timber supply, efficient resource use, stakeholder involvement, staff training, carbon sequestration, and other ESFM aspects. Regular assessment and guidance by the AFS has helped Forests NSW to continually improve its practices and allowed the organisation to demonstrate it is a responsible forest custodian.

Du	Due date		FA section	Milestone	Progress
2003	30 June	Sthn	2.1.1 Att. 2 & 3 Att. 6(2c)	Complete and implement SFNSW EMS.	Completed
2003	31 December	Sthn	2.1.1	A further part of the EMS will be prepared to cover the planted forest component.	Completed
2004	1 April	UNE, LNE, Eden	2.1.2 Att. 3	Preparation of NPWS Environmental Management Systems.	Continuing An environmental management system for park management is being delivered through the Park Management Program (PMP). The program is intended to cover all areas of DECC on park operations. It will define DECC values and objectives for park management, and integrate park policy, planning, operations, monitoring, evaluation, reporting and feedback. The program provides the tools to make better decisions and to improve coordination across DECC by making it easier for staff to access information to guide their park management decisions and allow adaptive management. Achievements in 2008–2009 included: Branch Visitor Management Plans (BVMP) Regional Operational Plans established across the State. These identify the specific actions for which a region will undertake over the following year with consideration to a three year forward projection. Regional Pest Management Strategies in place. These are publicly available documents identifying key directions and priorities in pest animal and weed management. Returning State of the Parks analyses to park managers to support improved strategic planning and support decision making.
2004	30 April	Sthn	2.1.2 Att. 6(2b)	Development and implementation of EMS by NPWS.	In progress Refer to milestone above.
Ongoing	Ongoing		2.1.2	To facilitate implementation of the EMS, NPWS staff and contractors must continue to receive appropriate competency-based training.	Continuing DECC continues to provide staff training programs. These cover natural and cultural (including Aboriginal) heritage management and operational, technical and safety matters. Programs range from technical training-related to occupational health and safety requirements to statewide capacity-building initiatives directed at particular staff classifications.

Du	Due date		FA section	Milestone	Progress				
PLANS O	PLANS OF MANAGEMENT								
Plans of n	Plans of management for the NPWS estate								
2005	1 January	UNE, LNE, Eden	2.3.2 Att. 8	Preparation of plans of management for dedicated reserves under the <i>National Parks and Wildlife Act 1974</i> .	Continuing Of the 389 reserves in the UNE and LNE regions, 180 have plans of management adopted by the NSW Minister for the Environment. Draft plans have been publicly exhibited for 55 reserves, and draft plans are in preparation for a further 71 reserves. Planning has not yet begun for the remaining 83 reserves. Of the 18 reserves in the Eden region, 13 have plans of management adopted by the NSW Minister for the Environment. A further two draft plans have been publicly exhibited, one draft plan has been finalised and two draft plans are in preparation.				
2006	31 January	Sthn	2.3.2	Preparation of plans of management for dedicated reserves under the <i>National Parks and Wildlife Act</i> 1974.	Continuing Of the 136 reserves in the Southern region, 70 have plans of management adopted by the NSW Minister for the Environment. A further 35 draft plans have been publicly exhibited. Eleven draft plans have been finalised and 12 draft plans are in preparation.				
1999	31 March	UNE, LNE, Eden	2.4.1 Att. 8	Release and adoption of NSW Biodiversity Strategy.	Completed				
Ongoing		Sthn	2.4.1 Att. 6(2d)	Implementation of NSW Biodiversity Strategy.	Implemented				
Regional I	ESFM plans								
2000	1 April	UNE, LNE, Eden	2.2.1	Preparation of Regional ESFM plans, subject to public exhibition and consultation.	Completed				
2002	31 August	Sthn	2.2.1, 4.3 Att. 6(1) & 2(a)	Preparation of Regional ESFM plans.	Completed				
Annually	Annually		2.2.6	Reporting on progress on meeting targets in Regional ESFM plans.	Continuing				
Annually	Annually		2.2.6	Progress in meeting the targets in the Regional ESFM plans must be reported annually through Regional ESFM reports.	Continuing				

D	Due date		FA section	Milestone	Progress
2002	30 June	Sthn	6.16	Formation of a working group to make recommendations on the management and tenure of areas of State forests that are isolated from the productive State forests.	Concluded While no formal agreement or working group has been formed, this milestone is considered concluded. Discussions are occurring between Forests NSW regions and between Forests NSW and DECC and arrangements are being put in place to deal with any management issues, such as fire or feral animal control.
Flora res	erves				
2001	1 April	UNE, LNE, Eden	2.2.2	Preparation of working plans for flora reserves to be incorporated into the Regional ESFM plans.	In progress Forest NSW ESFM plans for the UNE, LNE, Eden and Southern regions provide details of the flora reserves in each region. ESFM Plans also provide information on the status of each flora reserve working plan (i.e. draft or current) at the time of publication. Table 4.1 provides a summary. Current working plans for flora reserves, approved by the Minister for Primary Industries, are publicly available. Remaining working plans, such as those for new flora reserves, will be completed progressively and will be consistent with a model plan. A draft of this model plan has been prepared for consultation.
2002	31 August	Sthn	2.2.2	Complete and make public working plans for land dedicated or set apart as flora reserves (attached to the Regional ESFM plans).	In progress Forests NSW Regional ESFM plans for the South Coast and Tumut sub-regions of the Southern region provide details of the flora reserves in each region. ESFM Plans also provide information on the status of each flora reserve working plan (i.e. draft or current) at the time of publication. Current working plans for flora reserves, approved by the Minister for Primary Industries, are publicly available. Remaining working plans, such as those for new flora reserves, will be completed progressively.
Informalı	reserves				
2001	1 April	UNE, LNE, Eden	2.3.3	Preparation of working plans for informal reserves and areas managed by prescription on State forests to be included in the Regional ESFM plans.	Completed A model plan for informal reserves is under development as an ESFM supplementary plan. Forests NSW has in place the Managing our Forests Sustainably: Forest Management Zoning in NSW State Forests, Operational Circular 99/10 (State forests of NSW (1999)), which provides detail on areas that are managed by prescriptions (i.e. Forest Management Zones (FMZs) 3B and 4). The document outlines management guidelines and activities permissible in each zone. It is referred to in regional ESFM plans, and can be found at: www.dpi.nsw.gov.au/ data/assets/pdf file/0007/268063/managing-our-forests-sustainablyforest-mgt-zoning-in-nsw-state-forests.pdf
2002	31 August	Sthn	2.3.3	Preparation of working plans for informal reserves (FMZ 2 and 3a) and guidelines for areas managed by prescription (FMZ 3b and 4) in consultation with DoP, NPWS and DMR.	Completed Refer to milestone above.

D	ue date	Region	FA section	Milestone	Progress
Larger, m	ore significant e	xclusion area	as of rainforest,	high conservation value old growth forest, and other prescr	iptive exclusions
2001	30 June	UNE, LNE, Eden	2.4.4.5	Directors-General of NPWS, PlanningNSW and CEO SFNSW to agree on the larger, more significant exclusion areas of rainforest, high conservation value old growth and other prescriptive exclusions.	No reporting required Any 'large/significant exclusion areas of rainforest, HCVOG and other prescriptive exclusion areas' are now included in the informal reserve network as part of the Special Management Zones under section 21A of the Forestry Act 1916 and are classified as either FMZ 2 or 3a.
2002	31 December	Sthn	2.4.5.6	The larger, more significant exclusion areas will be those as agreed between the Director-General of NPWS, Chief Executive Officer of SFNSW and the Director-General of DoP.	No reporting required See above milestone
2002	1 January	UNE, LNE, Eden	2.4.4.5	Preparation of management plans for large areas of rainforest, high conservation value old growth and other areas excluded by prescription (attach to Regional ESFM plans and in consultation with NPWS).	No reporting required See above milestone
2002	31 August	Sthn	2.4.5.6	Preparation of guidelines for the management of large areas of rainforest, high conservation value, old growth and other areas excluded by prescription and attached to the Regional ESFM plan.	No reporting required See above milestone
Creation	of special manaç	gement zone	S		
1999	1 October	UNE, LNE, Eden	2.3.1	Minister for Forestry to create informal reserves pursuant to the amended <i>Forestry Act 1916</i> and called 'special management zones'.	Completed The National Park Estate (Reservations) Act 2002 declared special management zones in the UNE region (136 224 ha) and LNE region (126 366 ha), under section 21A of the Forestry Act 1916. The National Park Estate (Reservations) Act 2003 declared special management zones in the UNE region (12 753 ha) and LNE region (8101 ha), under section 21A of the Forestry Act 1916. In the Eden region, the National Park Estate (Reservations) Act 2005 provided for approximately 2620 ha to be dedicated as SMZ under section 21A of the Forestry Act 1916. The Forests NSW CEO approved these SMZs during 2006–2007.

Dι	Due date		FA section	Milestone	Progress
					Completed The National Park Estate (Reservations) Act 2002 declared special management zones in the UNE region (136 224 ha) and LNE region (126 366 ha), under section 21A of the Forestry Act 1916.
2002	31 August	Sthn	2.3.1	Creation of special management zones in State	The National Park Estate (Reservations) Act 2003 declared special management zones in the UNE region (12 753 ha) and LNE region (8101 ha), under section 21A of the Forestry Act 1916.
2002	31 August	Juli	2.0.1	forests.	In the Eden region, the <i>National Park Estate (Reservations) Act 2005</i> provided for approximately 2620 ha to be dedicated as SMZ, while in the Southern region the <i>National Park Estate (Reservation) Act 2005</i> provided for around 7550 ha in the Tumut subregion as SMZ and 13 670 ha in the South Coast subregion to be dedicated as SMZ.
					The <i>National Park Estate (Reservations) Act 2002</i> also provided for miscellaneous amendments to the <i>Forestry Act 1916</i> , including requiring an Act of Parliament to revoke (either wholly or in part) a special management zone declared under section 21A of the <i>Forestry Act 1916</i> .
Forest Ma	ınagement Zoniı	ng			
1000	1 Ostobor	Eden	2.2.2 Att. 5	Mapping of FMZs (as defined in attachment 5 of agreement) and attached to Regional ESFM plans. Zones delineate areas of State forest to be managed as conservation reserves and those managed for timber production.	Completed
1999	1 October				An FMZ map has been attached to the Regional ESFM plan for Eden. Regional ESFM Plans and FMZ maps can be found at: www.dpi.nsw.gov.au/forests/management/esfm
		UNE,		of the agreement) and attached to Regional ESFM	Completed
2000	1 April	LNE			FMZ maps have been attached to Regional ESFM plans for UNE and LNE. Regional ESFM Plans and FMZ maps can be found at: www.dpi.nsw.gov.au/forests/management/esfm
				Dravisian of manned FM7 in all Ctate forests attached	Completed
2002	31 August	Sthn	2.2.2	Provision of mapped FMZ in all State forests attached to the Regional ESFM plans.	FMZ maps have been attached to Regional ESFM plans for the South Coast and Tumut sub-regions of Southern region. Regional ESFM Plans and FMZ maps can be found at: www.dpi.nsw.gov.au/forests/management/esfm
					Implemented
Ongoing		UNE, LNE, Eden	Att. 8	Implement the Forest Management Zoning System.	The FMZ system for State forests was publicly announced in March 1999 with the release of <i>Managing Our Forests Sustainably:</i> Forest Management Zoning in NSW State Forests: www.dpi.nsw.gov.au/data/assets/pdf_file/0007/268063/managing-our-forests-sustainably-forest-mgt-zoning-in-nsw-state-forests.pdf Implementation of this FMZ system continues in accordance with this document.

Du	Due date		FA section	Milestone	Progress				
CAR RES	CAR RESERVE SYSTEM								
Additions	Additions to the NPWS estate								
Ongoing	Ongoing		6.16.2	The NSW Government may attempt to voluntarily acquire leases using approaches coordinated with the NPWS purchase strategy. Funding to be sought for the purchase of leasehold lands.	Completed DECC received a Treasury commitment of \$1.5 million/year for four years (2001/2002–2005/2006) to buy leasehold and freehold lands, as required by the forest agreements for the UNE and LNE regions. During this period around 30 leases totalling over 30 000 ha were bought and over 40 purchased lease areas totalling around 50 000 ha (some of which were bought before 2001/2002) were gazetted. Not all of these leases apply to Forests NSW land and in some cases may be other Crown leases.				
Ongoing	As soon as practical	UNE, LNE, Eden	6.16.2 6.16.1 (E)	Any areas for which leases are purchased must be incorporated by gazettal into the NPWS estate as soon as practicable.	No reporting required DECC received a Treasury commitment of \$1.5 million/year for four years (2001/2002–2005/2006) to buy leasehold and freehold lands as required by the forest agreements for the UNE and LNE regions. During this period around 30 leases totalling over 30 000 ha were bought and over 40 purchased lease areas totalling around 50 000 ha (some of which were bought before 2001/2002) were gazetted. Not all of these leases apply to Forests NSW land and in some cases may be other Crown leases. As at 2008, about 27 500 ha of Crown leases over State forest in the UNE/LNE regions remains for possible transfer to DECC estate, as agreed by DPI (Forests NSW and DPI (Mineral Resources), if the leases become voluntarily available for purchase. These lands will be considered as part of DECC normal acquisition funding and procedures. In the absence of dedicated funding for the Eden and Southern regions, no leases were purchased during the first five years of the NSW FAs for Eden and Southern regions. However, leases will continue to be purchased as part of DECC normal acquisition funding and procedures.				
1999	31 August	UNE, LNE, Eden	6.16.2 6.16.1 (E)	Preparation of procedures for purchasing leases on land.	No reporting required Standard DECC procedures for the purchase of leases apply to all purchases and involve referral to other government agencies, such as DPI and the Department of Lands.				
2001	1 April	Eden	6.16.1	Pursue the voluntary purchase of any leases on State forest tenure that have been revoked.	No reporting required In the absence of dedicated funding for the Eden and Southern regions, purchase of leases have been, and continue to be, made as part of DECC's normal acquisition funding and procedures.				
Aquatic re	serves								
Ongoing	As required	UNE, LNE, Eden	2.3.4	Minister for Fisheries may declare aquatic reserves under the <i>Fisheries Management Act 1994</i> within State forests, national parks, native reserves and other Crown lands and develop management arrangements for these reserves.	Continuing No aquatic reserves were declared under the Fisheries Management Act 1994.				

Du	Due date		FA section	Milestone	Progress				
Ongoing	As required	Sthn	2.3.4	Minister for Fisheries may declare aquatic reserves.	Continuing No aquatic reserves were declared under the Fisheries Management Act 1994.				
Upgrading	pgrading of FMZ areas/mineral and petroleum interests/additional conservation areas								
1999	1 December	UNE, LNE	6.16.2	Identification of areas 'available for formal reservation' refined from the 'areas for further consideration'. Process for identifying these lands was outlined in the PlanningNSW memo dated 4 February 1999, and entitled 'Procedure for dealing with lands for further consideration for reservation'.	No reporting required Identification of areas 'available for formal reservation' refined from the 'areas for further consideration'. Process for identifying these lands was outlined in the PlanningNSW Memo dated 4 February 1999, and entitled 'Procedure for dealing with lands for further consideration for reservation'.				
1999	1	UNE,	6.16.2	SFNSW must pursue upgrading to FMZ 2, and any FMZ 3 areas that would be classed as 'available for	In progress				
1777	December	LNE	0.10.2	formal reservation' but for unresolved mineral issues.	No further progress on this milestone has occurred this year.				
2000	30 June	UNE, LNE	6.16.2	NPWS and SFNSW, in consultation with the Department of Mineral Resources, to complete negotiations on the FMZ category for State forests with mineral and lease interests.	An FMZ assessment (made as part of the NSW Government's Action for the Environment Statement 2001) was completed in 2002; with the agreement of the Department of Mineral Resources it resulted in the transfer of up to 121 000 ha of FMZ 2 and FMZ 3 lands to the formal reserve system through the <i>National Park Estate (Reservations) Act 2002</i> (gazetted in January 2003). The review process is continuing as required and is concentrating on those FMZ 2 and FMZ 3 lands that Forests NSW previously agreed to transfer by Forests NSW. Additional areas affected by the NSW Government's 2002 decision to expand protection of old-growth forest on State forests will also be assessed in future reviews.				
2000	30 June	UNE, LNE	6.16.2 2.3.1	Lands must be zoned by SFNSW as FMZ 2, or FMZ 3 where they are encumbered by leases or have major mineral value precluding FMZ 2, and must be managed accordingly. Any activities on these lands that may diminish the values of the area must only be carried out with the agreement of NPWS and following consultation with leaseholders.	Complete Standard DECC procedures for the purchase of leases apply to all purchases and involve referral to other government agencies, such as DPI and the Department of Lands. Procedures for an approach to purchasing leases have not been developed with NSW Farmers because lessees make voluntary approaches to DECC. Therefore, there are often associated constraints on the information DECC can provide to third parties in such cases, due to confidentiality provisions. As funding allocated to the purchase of 'forest agreement leases' has now been expended, no further reporting will occur and the milestone is considered be completed. Lease purchases will continue but will be considered as part of DECC normal acquisition program.				
Ongoing	Every five years or as required	UNE, LNE	2.3.3	Review of mineral and petroleum objections over FMZ 2 and FMZ 3 lands every five years or as required and land may be added to the dedicated reserve system.	Continuing The review process is continuing as required and is concentrating on those FMZ 2 and FMZ 3 lands previously agreed to by Forests NSW. Discussions between DECC and DPI about another review of Mineral Resources objections over FMZs and upgrading of FMZs in the UNE and LNE regions are planned for 2009.				

Due date		Region	FA section	section Milestone	Progress
Ongoing	Ongoing		2.3.1 6.16.2 6.16.1 (E)	Consult with DMR when upgrading FMZ 3 to FMZ 2 and purchase of leases.	Continuing Consultation occurs as required.
2007	30 April and every five-year review	Sthn	2.3.3	Review of mineral and petroleum objections over FMZ 2 and FMZ 3 lands.	Continuing A review of mineral objections and upgrading of FMZ 2 and FMZ 3 lands in Southern region is yet to occur but is planned to be part of 2009 discussions. These discussions will also consider the FURCON lands that are yet to be transferred.
Crown res	serves	l	·		
1999	30 September	UNE, LNE, Eden	2.3.3	MoU regarding the management of Crown reserves.	Completed The Crown reserves created by the NSW FA process are now obsolete, as all Crown reserves in the UNE, LNE and Eden regions have been converted to State conservation areas (SCAs).
1999	30 September	UNE, LNE, Eden	2.3.3	Formation of a management committee regarding the management of Crown reserves.	No reporting required Refer to milestone above.
2002	30 June	Sthn	2.3.3	Formation of a committee to advise the Manager of the Reserve Trust on the matters specified in the MoU concerning Crown reserves.	No reporting required Refer to milestone above.
Ongoing	Every five years	UNE, LNE, Eden	2.3.3	NPWS and DMR to review Crown reserves every five years, any areas no longer required for mineral interests must be dedicated under the <i>National Parks</i> and <i>Wildlife Act 1974</i> with concurrence of DMR.	No reporting required The Memoranda of Understanding for both Crown reserves and SCAs contain provisions for five-yearly reviews. In the case of SCAs, the review is also a statutory requirement of the <i>National Parks and Wildlife Act 1974</i> (clause 47M), requiring the Minister administering the Act to provide reasons why and SCA could not be reclassified as a national park or nature reserve. The review takes place in consultation with the Minister administering the <i>Mining Act 1992</i> . The NPWS (now DECC) and the Department of Mineral Resources (now part of the Department of Primary Industries) were involved in a review of Crown reserves in 2003 that resulted in the reclassification of most Crown reserves to SCAs (see below). Consequently, a further review of Crown reserves has not occurred, as only two Crown reserves remain and are pending reclassification as SCAs. Therefore this action is considered no longer required and is reported on an 'as needed' basis. The first five-year review of SCAs was completed in 2008. The review found that ten parcels of land—six SCAs and parts of four others—should be reclassified as national park (8) or nature reserve (2).
2007	30 April and each five-year period	Sthn	2.3.3	Undertaking of a review of Crown reserves every five years.	No reporting required See above

Du	Due date		FA section	Milestone	Progress
2002	1 January	Eden	2.3.3	Preparation of plans of management for Crown reserves adjacent to land dedicated or reserved under the National Parks and Wildlife Act 1974.	No reporting required All Crown reserves in Eden have been re-categorised as State Conservation Areas. Plans of management for SCAs are included in the figures reported for the milestones under plans of management for the NPWS estate. Details of current draft or final management plans can be viewed on the DECC website: www.environment.nsw.gov.au/parkmanagement/ParkAndFireManagementPlansByCategory.htm
2005	1 January	UNE, LNE	2.3.3	Preparation of plans of management for Crown reserves adjacent to land dedicated or reserved under the <i>National Parks and Wildlife Act 1974</i> .	No reporting required All Crown reserves in UNE and LNE have been re-categorised as State conservation areas. Plans of management for SCAs are included in the figures reported for the milestones under plans of management for the NPWS estate. Details of current draft or final management plans can be viewed on the DECC website: www.environment.nsw.gov.au/parkmanagement/ParkAndFireManagementPlansByCategory.htm
2006	31 January	Sthn	2.3.3	Preparation of plans of management for Crown reserves.	No reporting required The Crown reserves created by the NSW FA process are now effectively obsolete, as all but two have been converted to SCAs and the conversion of these two to SCAs has been agreed between agencies once road issues are resolved. Details of current draft or final management plans can be viewed on the DECC website: www.environment.nsw.gov.au/parkmanagement/ParkAndFireManagementPlansByCategory.htm
Crown lan	ıd				
2003	1 January	UNE, LNE	6.16.2	NPWS to assess forest conservation values on remaining vacant Crown land in consultation with DLWC, DMR and other relevant stakeholders.	In progress As at 2002–2003, 40 000 ha of high conservation value vacant Crown land had been transferred to DECC estate in UNE/LNE as a result of the assessment. As at the five-year review period, a further 38 000 ha had been referred to the then Department of Land and Water Conservation to consider the various constraints that applied to it, including any licences. After the 9000 ha were reserved in 2005, an additional 1500 ha were reserved in 2007, including Yarrahapinni Wetlands. A further 5300 ha of Crown land identified through the Forest Agreements were identified for reservation in the <i>National Park Estate (Lower Hunter Region Reservations) Act 2006</i> (and were gazetted from 1/7/07). Negotiations between DECC and the Land and Property Management Authority over the remaining areas proposed for reservation are ongoing; however, to date 2400 ha have been agreed for transfer by LPMA. 21 000 ha require further negotiations with the Department of Industry and Investment – Minerals or determination by LPMA of current Aboriginal land claims.

Du	Due date		FA section	Milestone	Progress			
COOPERA	COOPERATIVE APPROACHES FOR THREATENED SPECIES MANAGEMENT							
Assessme	Assessment of species							
1999	30 June	UNE, LNE, Eden	2.4.4.3	Implementation of a process to assess conservation requirements in relation to important new information concerning the biology and ecology of a species and/or effectiveness of licence conditions.	Implemented			
Ongoing	Ongoing		2.4.4.3	Review of particular Threatened Species Licence conditions in light of new information on the distribution, population size or ecology of a threatened flora species.	Implemented			
Ongoing		Sthn	2.4.5.4	New information is to be assessed and, where required Threatened Species Licence is reviewed and IFOA amended.	Implemented			
Ongoing	Ongoing		2.4.5.4	Where new information on the distribution, population size or ecology of threatened flora and fauna suggests that the species allocation to a particular condition of the Threatened Species Licence needs to be reviewed, NPWS and SFNSW will undertake such a review.	Implemented			
Ongoing		UNE, LNE, Eden	2.4.4.2	Details the process to be followed when an important new record of a species in the area is found.	Implemented			
Ongoing	Ongoing		2.4.3 2.4.4.1	Agencies to notify each other of any proposal to nominate for listing or delisting of any species, populations, ecological communities or key threatening processes. The IFOA provides a review process to deal with changes to threatened species schedules.	Implemented			
Ongoing	Ongoing		2.4.4	Notify NPWS/SFNSW of listing and delisting of threatened species, populations, etc., and review IFOA for changes to schedules on Threatened Species Licence.	Implemented			
Ongoing		Sthn	2.4.5.1	Review IFOA for changes to schedules on Threatened Species Licence.	Implemented			

Du	Due date		FA section	Milestone	Progress
1999	1 October	UNE, LNE, Eden	2.4.4.2	Development of a process for the assessment of new records of threatened species, populations and ecological communities not already covered by licences, whereby the conservation requirements of the species are assessed.	Implemented
Ongoing	Ongoing		2.4.5.3	Implement stated process where an important new record was discovered in an area.	Implemented
Ongoing	Ongoing		2.4.5.3	Conservation requirements must be developed and implemented for new records of threatened species, populations and ecological populations and IFOA must be reviewed.	Implemented This is an ongoing requirement.
Ongoing		UNE, LNE, Eden	2.4.4.1	A process must be developed and implemented whereby the conservation requirements of a species new to science are assessed. The IFOA provides a review mechanism.	Implemented
Ongoing		UNE, LNE, Eden	2.4.4.1	Details the process to be followed when a species new to science is found.	Implemented
Ongoing		Sthn	2.4.5.2	Implement stated process when species new to science are found.	Implemented
Ongoing		Sthn	2.4.5.2	Conservation requirements must be developed and implemented for species new to science and IFOA must be reviewed.	Implemented
Ongoing	Ongoing		2.4.3	Cooperation over non-licence components of the Threatened Species Conservation Act 1995, such as nomination of species, populations, ecological communities and key threatening processes, recovery plans, threat abatement plans and critical habitat.	Implemented
Ongoing	Ongoing		2.4.4	Preparation of cooperative approaches for non-licence components of the <i>Threatened Species Conservation Act 1995</i> and <i>Fisheries Management Act 1994</i> , such as nomination of species, populations, ecological communities and key threatening processes, recovery plans, threat abatement plans and critical habitat.	Implemented

D	ue date	Region	FA section	Milestone	Progress
Managen	nent and recove	ry planning			
1999	31 December	UNE, LNE	2.4.3	Refinement of models to identify Hastings River mouse habitat.	A NSW and National Recovery Plan for the Hastings River mouse was finalised and published in April 2005 (see: www.nationalparks.nsw.gov.au/pdfs/recoveryplan_hastingsrivmouse_dec04.pdf). The final recovery plan states: 'A habitat quality model for public lands was derived for the CRA for the UNE and LNE regions of NSW' (S3.2). There are a range of actions within the plan, including: 'Action 2.5: Undertake research that refines the macro and microhabitat models' (S6.2). As noted in the plan, all actions are subject to budgetary constraints. Further refinement at some stage in the future is desirable in accordance with the recovery actions.
Ongoing	Ongoing		2.4.3	Continued implementation of joint management plans, such as Pine Creek Koala Management Plan.	No reporting required It is unlikely that continued implementation of the Pine Creek Koala Management Plan in the remaining portion of Pine Creek State Forest is appropriate. A review of the koala Threatened Species Licence conditions in the UNE IFOA will be reviewed as part of the IFOA review. Cooperation and implementation of management actions routinely occurs in the management of threatened species during processes such as IFOAs and PAS. This milestone is considered to be concluded, as these other processes are implementing management actions.
Pest, wee	ed and feral anir	mal control			
1999	All	UNE, LNE, Eden	6.16.3	Wild dog control using 1080 baiting on lands managed by the <i>National Parks and Wildlife Act 1974</i> where SFNSW has given approval.	Implemented
2005	1 April	UNE, LNE, Eden	2.4.2	Preparation of grazing management plans, predator and feral control plans and threatened flora species management plans.	In progress Grazing management model plans – In progress. Predator and feral control plans – Completed. Specific Threatened flora species management plans – Continuing.
2006	31 July	Sthn	2.4.3	Preparation of grazing management plans and feral and introduced predator control plans.	In progress Refer to milestone above.

D	Due date		FA section	Milestone	Progress
Ongoing	Ongoing		2.12 2.11 (E)	Cooperative programs in addressing noxious weed control, feral animal control and other matters relating to forest health.	Implemented DECC and Forests NSW have long-running cooperative programs with a variety of landholders, land management agencies and interest groups to manage pest animals (e.g. foxes, wild dogs, feral horses, pigs, deer), weeds (e.g. bitou bush, lantana, scotch broom) and forest health (e.g. bell miner associated dieback).
Ongoing	Ongoing		2.12	NPWS and SFNSW must participate in cooperative programs where a broader landscape approach is most effective in addressing noxious weed control, feral animal control or other matters relating to forest health.	Implemented
2007	30 April	Sthn	Att. 6(2m)	Incorporate into Regional ESFM plans and plans of management under the <i>National Parks and Wildlife Act 1974</i> integrated feral animal and weed control programs.	Implemented
PRIVATE	LAND				
Regional	Native Vegetation	on Committee	e		
1999	30 June	Eden	2.8.1	Establishment of Regional Native Vegetation Committee under the forest agreement, to promote conservation of rare or non-existent ecosystems on private land.	Completed
2000	1 January	UNE, LNE	2.9.1	Establishment of a committee under the forest agreement to look at conservation values on private land that are a conservation priority for inclusion in the CAR reserve system, and seek funding.	Completed
2002	30 June	Sthn	2.9	Establishment of a committee to look at conservation issues on private land.	Completed
Regional	vegetation mana	agement plar	ns		
Ongoing	Ongoing		Att. 6(2e) Att. 6(3) point 4	Establishment of regional vegetation management plans under the <i>Native Vegetation Conservation Act</i> 1997 to cover private lands and form a basis for strategic regional planning of private native forestry.	Not applicable The Native Vegetation Act establishes a different regime that does not include regional vegetation management plans. The focus of the native vegetation reforms is on catchment action plans prepared by Catchment Management Authorities (CMAs) and individual property vegetation plans (PVPs); therefore this milestone is considered no longer applicable.

D	ue date	Region	FA section	Milestone	Progress
Identificat	tion of lands of o	conservation	priority		
2000	1 January	UNE, LNE	2.9.1	Identification of forest ecosystems on private land that are a conservation priority for inclusion in the CAR reserve system.	In progress Eighteen REV (rare endangered and vulnerable) forest ecosystems have been nominated for EEC on a priority basis as part of the Private Native Forestry (PNF) code. Seventeen of these have been assessed, and of these: three are already encompassed within existing EEC; three are not eligible for nomination because they do not meet listing criteria, eight have been nominated; three are yet to be nominated. One preliminary determination has been made and three final (or proposed final) determinations have been made.
2002	30 June	Sthn	2.9	Identification of forest ecosystems on private land that are of conservation priority for inclusion in the CAR reserve system.	In progress Priority forest ecosystems for voluntary protection on private land are identified in Attachment 2, Table 1, of the Southern RFA.
Voluntary	conservation m	nechanisms			
Ongoing	Ongoing		2.9.1 2.8.1 (E) Att. 7	Principles applying to land and voluntary mechanisms that may be applied to achieve conservation on private land (e.g. VCAs, property agreements, management contracts).	Completed
Ongoing	Ongoing		2.9 Att. 5	Voluntary conservation of private land, where conservation values either do not occur on public land or are not adequately reserved on public land. According to principles in Attachment 5.	Completed
Private na	ative forestry an	d plantations			
2007	30 April	Sthn	Att. 6(3) point 3	Codes of practice for private plantations and private native forests will be in place within five years. The State will also provide advice regarding marketing and pricing.	Completed – native forest The Private Native Forestry Code of Practice came into effect on 1 August 2007 under the <i>Native Vegetation Act 2003</i> . Completed – plantations This milestone was achieved with the implementation of the Plantations and Reafforestation (Code) Regulation 2001 in December 2001. The <i>Plantations and Reafforestation Act 1999</i> and the code provide certainty for harvesting, which was previously provided under the <i>Timber Plantations</i> (<i>Harvest Guarantee</i>) <i>Act 1995</i> . Plantations certified under the <i>Timber Plantations</i> (<i>Harvest Guarantee</i>) <i>Act 1995</i> are deemed to be authorised under the <i>Plantations and Reafforestation Act 1999</i> . A statutory review of the Act and code began in January 2005. As required, a report to Parliament on the outcomes of the review was filed in December 2005. During 2006 and 2007, inter-agency working groups developed amendments to the Act and code based on the recommendations in the Report. An Industry Reference Group was consulted on the proposed amendments. It is intended to place the proposed amendments on public exhibition, which will provide an opportunity for comment by the broader community. An Amendment Bill will then be introduced into Parliament.

Di	Due date		FA section	Milestone	Progress
Ongoing	Ongoing		Att. 6(3) point 2	As a means of encouraging private forestry development, the State will develop a regulatory framework that enables a more efficient integrated approval process to allow for effective private forestry development.	No reporting required In 2005 the Native Vegetation Regulation commenced. It provides for the policy and regulatory framework for managing timber harvesting on private land. The requirements established under this framework deliver against the aims of forest agreement commitments. Due to this framework being implemented this milestone is no longer applicable.
2001	Code started 14 December	Sthn	Att. 6(3) point 5	NSW will ensure that an integrated code of practice is developed for plantation activities across all tenures under the <i>Plantations and Reafforestation Act 1999</i> . Existing plantations can also continue to obtain certainty for the purposes of harvesting as per the <i>Timber Plantations (Harvest Guarantee) Act 1995</i> and similar provisions included in the Plantations and Reafforestation Act.	Implemented
Ongoing		Sthn	2.2.3	For activities regulated under the <i>Plantations and Reafforestation Act 1999</i> , plans must be prepared as required in the Plantations and Reafforestation (Code) Regulation 2001.	Implemented
Ongoing		Sthn	Att. 6(3) point 4	With appropriate public involvement, and consistent with the <i>Native Vegetation Conservation Act 1997</i> , the regional vegetation management committees will pursue planning policies that provide for appropriate long-term, secure, management provisions for private native forests, including harvesting for commercial wood production.	Implemented The Native Vegetation Act 2003 establishes a different regime that does not include regional vegetation management committees. CMAs have subsumed their role.
Ongoing		Sthn	Att. 6(3)	Improve administrative arrangements and cooperation and coordination by State agencies to facilitate the timber industry using private forest resources.	Continuing No further progress to report.
Ongoing	Ongoing		Att. 6(3) point 1	Arrangements to ensure ESFM on private forests, involving the provision of technical advice, extension services, research and assistance in the estimation of sustainable yield.	Continuing No further progress to report.
Ongoing	Ongoing		Att. 6(4)	Undertake a private forest inventory of southern NSW to determine the basis of yield of wood products from private land is required, with the agreement of forest owner groups.	No reporting required In 2005, the Native Vegetation Regulation commenced. It provides for the policy and regulatory framework for managing timber harvesting on private land. The requirements established under this framework deliver against the aims of forest agreement commitments. Due to this framework being implemented this milestone is no longer applicable.

Du	Due date		FA section	Milestone	Progress
World Her	ritage and wilder	ness			
2000	1 January	UNE, LNE	2.5	Public exhibition of wilderness assessment report for the UNE and LNE regions.	Completed
2002	31 December	Sthn	2.5	NPWS must provide advice to the Minister administering the <i>National Parks and Wildlife Act 1974</i> on the submissions received during public consultation and the areas recommended for wilderness declaration.	Completed
Ongoing	Ongoing		Att. 8	Make subsequent decisions on the declaration and management as wilderness of areas of the CAR reserve system provisionally identified as wilderness during the regional forest assessment.	Completed
					In progress
		ril UNE, LNE		Review of CERRA World Heritage Areas to identify any additional rainforest to be included.	NSW commitment to a tentative list of CERRA additions was announced by the NSW Minister on 29 October 2008.
2001	1 April		' 1 ') /		DECC sent a submission to DEWHA for the Tentative List for the proposed <i>Extensions to the Gondwana Rainforests World Heritage Area</i> on 9 January 2009.
					Further information on Gondwana Rainforests of Australia (previously called 'Central Eastern Rainforest Reserves of Australia World Heritage Area') is available through the Commonwealth Government Department of Environment and Heritage website: www.environment.gov.au/heritage/places/world/gondwana/index.html
					Deferred – UNE/LNE
2002	1 0	UNE,	2.7	Further studies of the dedicated reserve system to identify World Heritage values, including eucalypt-	No further studies have taken place or are planned at present.
2002	1 April	LNE, Eden	2.6 (E)	dominant vegetation and religious beliefs embedded in the landscape.	Deferred – Eden
				ше шизсаре.	No further studies are planned at present.
2004	30 April	Sthn	2.7	Studies of the dedicated reserve system to identify	In progress
2004	30 Арп	JUIII	2.1	World Heritage values.	Australian Alps have been National Heritage listed.
Cultural he	eritage		·	,	
1999	1 October	UNE, LNE,	2.8	Cultural heritage management guidelines for SFNSW	Completed
	1 October	Eden	2.7 (E)	to be attached to the IFOA.	

Di	Due date		FA section	Milestone	Progress
2002	30 June	Sthn	2.8	SFNSW cultural heritage management guidelines should be attached to the IFOA.	Completed
1999	1 April	UNE, LNE, Eden	2.8 2.7 (E)	NPWS to review its cultural heritage guidelines and ensure consistency with the principles contained in CRA project reports prepared by the Cultural Heritage Working Group (2000a and b).	Completed
2001	1 April	UNE, LNE, Eden	2.8 2.7 (E)	Finalisation of SFNSW policy on Indigenous and non- Indigenous cultural heritage.	Completed
2002	31 August	Sthn	2.8	Finalisation of policy on Aboriginal and non-Aboriginal cultural heritage (SFNSW).	Completed
Annually	Annually		2.8 2.7 (E)	Report on cultural heritage performance through annual report, State of the Environment reports that publish against performance indicators and provide access to the outcomes of performance reviews.	Implemented
Ongoing 1999		UNE, LNE, Eden	Att. 8	Manage cultural values, both Aboriginal and non- Aboriginal, according to guidelines.	Implemented
Ongoing		Sthn	2.8	Apply cultural heritage management guidelines when managing cultural heritage.	Implemented
2005	31 December	Sthn	5.1.4.5	All NPWS staff located in the Southern Directorate to be provided with adequate cultural awareness training to improve customer relations with Aboriginal communities.	Implemented
Places of	cultural significa	ince			
Ongoing Sthn	Ongoing		2.8 2.7 (E)	Updating of Section 170 register; sites of State significance will also be listed.	Implemented

Du	Due date		FA section	Milestone	Progress
Places of	Aboriginal cultu	ıral significan	ce		
2001	1 April	UNE, LNE, Eden	2.8 2.7 (E)	NPWS to review Indigenous cultural heritage management processes to provide a landscape-based system.	Implemented
2005	31 August	Sthn	2.8	NPWS to review processes for Aboriginal cultural heritage management.	Implemented
Ongoing		UNE, LNE	5.1.1	NPWS to conduct a preliminary assessment of all new parks to identify priority areas that could be added to Schedule 14 of the <i>National Parks and Wildlife Act 1974</i> .	Part 4A ('Aboriginal Land') of the <i>National Parks and Wildlife Act 1974</i> provides for the return of DECC lands to Aboriginal ownership. These lands are then leased back to the NSW Government for joint management by the Aboriginal owners and DECC as parks. Parks that can be returned to Aboriginal ownership are listed in Schedule 14 of the Act. Seven areas of land are already listed and under the provisions of the Act, further parks can be nominated for addition to the schedule. Further background to lease-back agreements is available through the DECC website at: www.environment.nsw.gov.au/comanagement/Lease-backAgreement.htm To date, there has been no widespread preliminary assessment of parks to see whether they could be added to Schedule 14. However, DECC continues to proceed with the return to Aboriginal ownership of those reserves already listed on Schedule 14 and to respond to further nominations as they occur. Of those parks in FA regions already listed on Schedule 14, lease negotiations for the return of Biamanga (in the Eden region) and Gulaga (in the Southern region) National Parks to their Aboriginal owners have been completed and the leases signed in May 2006. Of those parks in FA regions already listed on Schedule 14, lease negotiations for the return of Biamanga (in the Eden region) and Gulaga (in the Southern region) National Parks to their Aboriginal owners were completed and the leases signed in May 2006. Given that no widespread assessment will occur, this milestone is considered no longer applicable. However, DECC will continue to respond to Schedule 14 nominations as they occur.
2006	31 December	Sthn	5.1.1	Assessment of all parks to determine if any could be added to Schedule 14 of the <i>National Parks and Wildlife Act 1974.</i>	No reporting required See above milestone.
Ongoing	Ongoing		2.8	NPWS must continue to develop its information management system for Indigenous heritage in consultation with Aboriginal communities and other stakeholders (information submitted to the Aboriginal Sites Register).	Implemented
Ongoing	Ongoing		2.8	Preparation of an information management system for Aboriginal heritage, including maintenance of Aboriginal Sites Register.	Implemented

D	ue date	Region	FA section	Milestone	Progress	
2006	31 December	Sthn	5.1.4.3	Creation of a zone to protect Aboriginal cultural heritage, with adequate measures (including buffers) to protect against adverse impacts by forest activities, soil erosion and visitation to sensitive cultural areas.	Implemented – Creation of a zone. Continuing – Land set aside.	
4BORIG	NAL INTEREST	S				
Aborigina	l involvement in	forest mana	gement			
					Continuing	
					Aboriginal communities are involved in park management. For example, draft plans of management for reserve are generally referred to relevant Aboriginal organisations and National Parks and Wildlife Regional Advisory Committees, which include Aboriginal representatives, for comment. DECC also continues to consult with Aboriginal communities on the preparation of threatened species recovery plans.	

SFNSW and NPWS each to prepare a strategy to

ensure Aboriginal communities and stakeholders are

given a greater participatory role in forest

management.

DECC is developing a policy for Aboriginal partnerships in park management, which is expected to be completed by 2011. Together with other initiatives, such as the Aboriginal People, the Environment and Conservation Principles (completed in 2006) and the DECC Aboriginal Community Engagement Framework (completed in 2007), the policy will form a key part of DECC's strategy for providing Aboriginal communities and stakeholders with further opportunities to participate in park management.

DECC constituted the Aboriginal Cultural Heritage Advisory Committee in 2006 under Section 27 of the NPW Act. This committee provides advice to the Minister for Climate Change and the Environment and the Director General of DECC on any matter relating to identification, assessment and management of Aboriginal cultural heritage in NSW.

Further reporting on Aboriginal involvement in reserve and cultural heritage management can be found in DECC's annual reports available at: www.environment.nsw.gov.au/whoweare/reports.htm

Further information on Aboriginal communities' involvement in threatened species recovery plans and management is available at: www.threatenedspecies.environment.nsw.gov.au/tsprofile/pas recovery strategies.aspx (under 'Aboriginal liaison and/or interpretation').

The Bega and Eurobodalla Aboriginal heritage studies are continuing. These studies are overseen by two steering committees, comprised mostly of Aboriginal people.

The UNE, LNE, Eden and Southern ESFM plans include policy statements that commit Forests NSW to ensuring Aboriginal communities are involved in managing State forests, and corporate 'Operational Guidelines for Management of Aboriginal Cultural Heritage on State forests', which include consultative arrangements that Forests NSW regions will use to engage with local Aboriginal communities for forest activities, when communication with the community could be expected, site protection, and a review of how well these consultative arrangements worked over the previous period. The guidelines were developed in consultation with NPWS and the NSW Heritage Office and draw on the Protective Mechanisms for Cultural Heritage report prepared on behalf of the Cultural Heritage Working Group, as part of the NSW Comprehensive Regional Assessments.

UNE.

LNE,

Eden

5.1.3

2000

1 April

[Oue date	Region	FA section	Milestone	Progress
					To achieve this, Forests NSW makes a commitment with Aboriginal people to ensure: appropriate Aboriginal Cultural Heritage Awareness training for Forests NSW staff involvement in any further development of policy concerning the management of Aboriginal values and interests in State forests identification and management of Aboriginal cultural heritage sites, places and resources access to land for cultural purposes which may include hunting and gathering identification of culturally appropriate co-management and commercial joint venture opportunities, and identification of Aboriginal employment opportunities in cultural and natural resource management activities.
2003	30 June	Sthn	5.1.3	Preparation of a strategy to ensure that Aboriginal communities and stakeholders are given a greater participatory role in forest management.	In progress See above milestone
2001	1 April	UNE, LNE, Eden	5.1.3	SFNSW to involve Aboriginal communities in the development and finalisation of its policy in relation to Aboriginal involvement in forest management that will form part of the NFMS.	Completed The Operational Guidelines for Aboriginal Cultural Heritage Management were developed in consultation with Aboriginal communities. These guidelines were finalised in May 2006.
2003	30 June	Sthn	5.1.3	SFNSW must involve Aboriginal communities in the development and finalisation of its policy in relation to Aboriginal involvement in forest management, which will form part of the EMS–NFMS.	Completed Refer to milestone above.
Co-mana	agement and joi	nt venture arra	angements	,	
Ongoing	ı	UNE, LNE, Eden	5.1.1	SFNSW and NPWS must progressively negotiate joint management arrangements and joint ventures with local Aboriginal communities.	DECC engages in numerous joint ventures with Aboriginal communities. These occur across the landscape and all areas of the agency (including the Culture and Heritage Division), although PWG would lead most ventures related specifically to forest management. Joint ventures also occur through DECC engagement with Catchment Management Authorities. Joint management arrangements (see milestone 12.4) are usually complemented by employment and economic development ventures. DECC also runs research and heritage projects in collaboration with Aboriginal community groups. Other examples of statewide ventures include the Aboriginal Discovery Ranger Program, associated Aboriginal Discovery activities and National Aboriginal and Islander Day Observance Committee week events. A few other examples of local joint ventures that have occurred during the five-year review period follow. Further information on joint ventures between DECC and Aboriginal communities, including the Aboriginal Discovery program, can also be found in annual reports available through the DECC website at www.environment.nsw.gov.au/whoweare/reports.htm
					UNE/LNE An Arakwal cultural centre for Byron Bay has been supported and will be developed as external budgetary circumstances allow. There have also been cultural heritage surveys conducted in both the UNE and LNE areas. These initiatives have developed increased community awareness and understanding of the cultural heritage on DECC estate. From these initiatives the Aboriginal community has been able to make recommendations and provide valuable input into planning and developing facilities, interpretation/education and

Du	ie date	Region	FA section	Milestone	Progress
					also developing increased awareness in the broader community of the cultural context of park areas.
					The Pandanus People in South West Rocks engage in restoration projects, such as removing weeds from, and planting trees and shrubs in, Arakoon State Conservation Area and Hat Head National Park.
					Eden
					Nine projects involving Aboriginal communities are in progress or have been completed:
					(i) mapping of Aboriginal Pathways on the Far South Coast
					(ii) Bega Oral History Stage 3, combining historical and oral history into one document
					(iii) Bega Oral History Stage 4, presenting information gathered in Stage 3
					(iv) Eurobodalla Stage 1 Aboriginal History, an annotated bibliography of cultural heritage research
					(v) Eurobodalla Oral History Stage 2 Aboriginal History of Eurobodalla
					(vi) Eurobodalla Oral History Stage 3 Understanding and Managing Aboriginal Cultural Heritage
					(vii) Eurobodalla Oral History Stage 4 Mapping and Access Protocols for Aboriginal Cultural Heritage Information
					(viii) Southern region Catchment Management Authority project, 'Indigenous links to the Potoroo', and
					(ix) DECC, in conjunction with Forests NSW and the Southern region Catchment Management Authority, is implementing the project, 'Indigenous links to the Koala in the Far South Coast region'.
					The Eurobodalla Heritage Study is a joint program between DECC, Eurobodalla Shire Council and Batemans Bay, Bodalla, Cobowra, Merrimans, Mogo and Wagonga Local Aboriginal Land Councils.
		LINE		Examination of any State forest that could be	In progress
2000	1 April	UNE, LNE	5.1.1	considered for co-management and joint venture arrangements.	The NSW Government and the Githabul people entered into an ILUA, which includes 13 State forests in the UNE Region, in February 2007.
		UNE,		Where further analysis indicates the feasibility of	Continuing
Ongoing		LNE, Eden	5.1.1	other ventures, a project plan must be developed for implementation.	No new ventures requiring project plans were initiated during 2008–2009.
					Continuing
		LINE		Ventures likely to generate mutual hancitie to the	Forests NSW
Ongoing		UNE, LNE,	5.1.1	Ventures likely to generate mutual benefits to the Aboriginal, as well as the wider, community must also	No formal venture arrangements were entered into in 2008–2009.
		Eden		be considered.	DECC
					Continuing. See negotiation of 'joint management arrangements and joint ventures with local Aboriginal communities' above.

				Progress
				Continuing
				Leases associated with the return of Gulaga National Park to the Aboriginal owners were signed in May 2006. These lands were leased back to the NSW Government for joint management by the Aboriginal owners and DECC as national parks. Joint management boards have been established the park and the board received governance training before the plan of management was drafted.
ember	Sthn	5.1.1	SFNSW and NPWS must progressively negotiate joint management arrangements and joint ventures with local Aboriginal communities.	Similar joint management of Jervis Bay National Park is possible; however, negotiations are yet to begin. DECC is also involved in negotiations with Gundungurra Tribal Council for an Indigenous land use agreement over parts of DECC estate, including Bangadilly National Park. The Department of Lands is the lead government agency for the latter negotiations.
				A draft MOU is in preparation between Snowy Mountains Region and the Ngarigo traditional owners for the ongoing management of the southern part of Kosciuszko National Park.
				Forests NSW
				No new co-management or joint venture arrangements were considered for 2008–2009.
	Sthn	5.1.1	Annual reporting to RACD on the progress by NPWS and SFNSW on negotiating co-management and joint management arrangements with Aboriginal communities.	Continuing
	3000	5.1.1		See milestone above.
				Continuing
				Forests NSW
				No new venture arrangements were considered in 2008–2009.
			Ventures likely to generate mutual benefits to the	DECC
	Sthn	5.1.1	Aboriginal, as well as the wider, community must also be considered.	During 2006–2007, DECC (Parks and Wildlife Group) Southern Branch continued to participate in the Aboriginal Discovery Ranger Program and run associated Aboriginal Discovery activities and take part in NAIDOC (National Aboriginal and Islander Day Observance Committee) Week events.
				For example, DECC South West Slopes Region held various Discovery and NAIDOC events in Kosciuszko NP during the Easter and Christmas periods and NAIDOC week, and held numerous Discovery events with schools, community groups and local festivals and fairs over the year. Over 840 adults and 2550 children participated in or attended these events.
			Where further analysis indicates the feasibility of	Continuing
	Sthn	5.1.1	other ventures, a project plan must be developed for implementation.	No new ventures requiring project plans were initiated during 2008–2009.
				Continuing
ember	Sthn	5.1.4.1	Where consideration has identified venture, project plans must be developed for their implementation.	No new ventures requiring project plans were initiated during 2008–2009.
ember	Sthr	1	5.1.4.1	implementation. Where consideration has identified venture, project

D	Due date		FA section	Milestone	Progress
2004	31 December	Sthn	5.1.1	SFNSW will examine any State forest that could be considered for co-management or joint venture arrangements.	In progress No progress to report.
Coopera	I tive managemen	I nt arrangemen	ts	<u> </u>	<u> </u>
2006	31 December	Sthn	5.1.4.1	SFNSW and NPWS must progressively negotiate separate cooperative management agreements with local Aboriginal communities that enable Aboriginal people to be involved in the management of State forests and national parks.	In progress Snowy Mountains Region engaged a consultant to meet with traditional owners and provide recommendations on options for comanagement of Kosciuszko National Park. A report has been completed but no outcomes have been announced as yet. In 2008–2009, the Aboriginal Management Committee continued to work toward cooperative involvement of the Aboriginal community in park management issues. A Cultural Heritage Coordinator facilitates community participation in committee matters. Forests NSW regional ESFM plans identify Forests NSW commitment to co-management and joint management arrangements with Aboriginal communities. No new co-management or joint venture arrangements were considered in 2008–2009.
2006	31 December	Sthn	5.1.4.1	Explore opportunities for joint ventures with SFNSW and NPWS that promote recognition, awareness and respect for Aboriginal cultural heritage. Other ventures likely to generate mutual benefits to the Aboriginal community must also be considered.	Continuing An Aboriginal Discovery Ranger position that was created and filled in 2006–2007 continues. An Aboriginal liaison officer (admin grade) was created and filled in 2006–2007 to facilitate Aboriginal working group meetings and community involvement continues. A female Aboriginal interpretive trainee position was recruited in 2007–2008 and continued in 2008–2009. The region organised and participated in two women's, one youth and one family cultural camp. Kosciuszko NP held various Discovery and NAIDOC events during the Easter and Christmas periods and NAIDOC week, and conducted numerous Discovery events with schools, community groups and local festivals and fairs over the year; 1319 adults and 4349 children participated in or attended these events A new Aboriginal Discovery Cultural tour that was developed in 2007–2008 called Wiradjuri Wonders focussing on bush tucker, bush craft and traditional pathways through Nth Kosciuszko NP, continues to attract participants. The region applied for and has received Aboriginal Partnership Funding from the NSW Department of Environment and Climate Change (DECC) to work with the local Aboriginal community to train and mentor Aboriginal people in the delivery of Aboriginal cultural tours and interpretation of traditional knowledge. The funding will be over four years, with the first year's funding allocated to delivering targeted training and work experience. The program includes a number of partners, such as NSW State and local government agencies, community groups and, most importantly, full support of the local Tumut and Brungle Wiradjuri Aboriginal Community. The program started in February 2009 with the selection of 14 participants who are being trained and mentored in the principles and skills development of tour guiding with a focus on Indigenous culture. To date the participants have completed all stages of the Aboriginal Tour Guide Training and Mentoring Program. SWS Region Discovery Program staff hosted six staff from Environment ACT — Tidbinbilla Nature

D	Due date		FA section	Milestone	Progress
2006	31 December	Sthn	5.1.4.5	NPWS should enter into a cooperative management agreement with the relevant Aboriginal communities to develop cooperative management and funding strategies to ensure the effective protection and management of Aboriginal cultural heritage on the NPWS estate, subject to funding.	In progress See milestone 'SFNSW and NPWS must progressively negotiate separate cooperative management agreements with local Aboriginal communities to enable Aboriginal people to be involved in the management of State forests and national parks'.
2006	31 December	Sthn	5.1.4.5	Aboriginal communities consider it a NPWS responsibility to develop and implement a policy in relation to access to parks, nature reserves and other appropriate service estate for traditional purposes. The Aboriginal Management Committee will develop this framework.	In progress A Plan of Management for Kosciuszko National Park was completed in June 2006 in consultation with the Aboriginal Management. The plan includes management objectives, policies and actions that address cultural heritage issues and foster connection to country. As required by the plan, an MoU is being developed in consultation with the Aboriginal community. The details of the MoU are still to be determined but will consider access to the park for traditional purposes.
Access fo	or traditional and	l cultural purp	oses		
2006	31 December	Sthn	5.1.4.3	Areas of State forest to be identified and set aside for Aboriginal education and specific community activities in accordance with Aboriginal traditional practices. Such areas to be determined and agreed upon by the Aboriginal Management Committees.	Complete
2000	1 April	UNE, LNE, Eden	5.1.1	Preparation of a joint strategy that will include how Aboriginal communities can gain access to materials for traditional/cultural purposes (such as art and craft purposes, food sources and medicine, access to firewood).	No reporting required Refer to previous report 2007–2008.
2003	31 December	Sthn	5.1.1	Joint strategy on how Aboriginal communities can gain access to materials for art and craft purposes, food sources and medicine, access to firewood and opportunities for traditional use and cultural activity.	Complete The whole of government Cultural Resource Use Framework is available at: www.environment.nsw.gov.au/resources/cultureheritage/09160cultresusefwork.pdf Information on Two Ways Together is available at: www.daa.nsw.gov.au/policies/policy.html
Employm	ent and training	opportunities			
2000	1 April	UNE, LNE	5.1.2	Preparation of a joint strategy to facilitate an employment and development program for Aboriginal people.	No reporting required DECC's initiatives include an Aboriginal Employment Strategy to facilitate employment and development opportunities for Aboriginal people. In 2006–2007, 7.5% of the DECC workforce identified as Aboriginal. This increased to 8.91% in 2008–2009 (representing a 2.5% increase since 2004–2005), which is above the NSW Government benchmark of 2% Indigenous employment. DECC also employs contract and casual Aboriginal staff for work that includes the <i>Discovery</i> Ranger program, research projects and land management activities (e.g. weed control), among others. Joint management and ventures have also provided additional employment and industry development and economic opportunities.

Di	ue date	Region	FA section	Milestone	Progress
					In 2009, DECC established five more Aboriginal cadetships, making a total of 22. Through the Aboriginal cadetship program, cadets study full-time and have 12 weeks of practical work experience each year to complete their undergraduate degree, with guaranteed employment on successful completion.
					DECC has also entered a partnership arrangement with the Western Institute of TAFE to provide Aboriginal traineeships, which will lead to the nationally recognised qualification of Certificate II in conservation and land management. The traineeships are for 12 months and allow trainees to combine full-time practical work with structured training sessions throughout the year. The 2009 intake comprises 10 new trainee field officer and trainee interpretive assistant positions. DECC's recruitment of trainees complements the Aboriginal cadetship program.
					UNE/LNE
					Aboriginal employment has increased as a result of funding provided to manage additions to the reserve system. As well as seven permanent Aboriginal positions created during 2005–06, and identifying an existing position as an Aboriginal position, further positions have been created following the finalisation of agreements with the Githabul and Worimi peoples. Approximately 12% of staff employed in DECC's Parks and Wildlife Group Northern Branch identify as Aboriginal.
					Eden
					DECC has appointed five Aboriginal staff as a result of funding provided to manage additions to the reserve system. These were: a trainee field officer, two Aboriginal sites officers (one male and one female), one project officer to manage the return of Biamanga and Gulaga National Parks to Aboriginal ownership and a cadet trainee field officer (subsequently appointed as a Ranger).
					No reporting required
					DECC's initiatives include an Aboriginal Employment Strategy to facilitate employment and development opportunities for Aboriginal people. In 2006–2007, 7.5% of the DECC workforce identified as Aboriginal. This increased to 8.91% in 2008–2009 (representing a 2.5% increase since 2004–2005), which is above the NSW Government benchmark of 2% Indigenous employment. DECC also employs contract and casual Aboriginal staff for work that includes the <i>Discovery</i> Ranger program, research projects and land management activities (e.g. weed control), amongst others. Joint management and ventures have also provided additional employment and industry development and economic opportunities.
2003	30 June	Sthn	5.1.2	Preparation of an employment and economic opportunities program with Aboriginal people.	In 2009, DECC established five more Aboriginal cadetships, making a total of 22. Through the Aboriginal cadetship program, cadets study full-time and have 12 weeks of practical work experience each year to complete their undergraduate degree, with guaranteed employment on successful completion.
					Southern
					In the South West Slopes area of Parks and Wildlife Group an Aboriginal Discovery Ranger position that was created and filled in 2006–2007 continues. An Aboriginal liaison officer (administrative grade) that was created and filled in 2006–2007 to facilitate Aboriginal working group meetings and community involvement continues. A female Aboriginal interpretive trainee position that was recruited in 2007–2008 continues.
_					In the Snowy Mountains Region of the Parks and Wildlife Group of DECC, a full-time Aboriginal Education and Liaison officer has been recruited and is running an Aboriginal Cadet ranger program. Two Aboriginal trainee field officers have just been recruited. An

D	ue date	Region	FA section	Milestone	Progress
					Aboriginal cadet ranger has now graduated and an Aboriginal trainee clerical officer started in January 2009. There are three Aboriginal Discovery Rangers.
					An Aboriginal trainee clerical officer was employed in Jan 2009. An Aboriginal Discovery Ranger position that was created and filled in 2006–2007 in South West Slopes continues. An Aboriginal liaison officer (admin grade) position that was created and filled in 2006–2007 to facilitate Aboriginal working group meetings and community involvement continued in 2007–2008. A female Aboriginal interpretive trainee position was recruited in 2007–2008 and continued in 2008–2009.
Ongoing	Ongoing		5.1.2	NPWS to offer permanent employment opportunities for Aboriginal people in operational management as part of the funding package for the management of additions to the reserve system.	Implemented
2005	31 December	Sthn	5.1.4.2	Enterprise development with SFNSW has been identified as a major interest for Aboriginal communities. Some examples are provided in the forest agreement.	In progress The business plan for the Aboriginal Cultural Centre was completed and agreement was reached with Tumut Shire Council on a suitable site for the development in 2007–08. The project has not progressed in the past year due in part to a secondment of the FNSW Aboriginal Co-ordinator based in Tumut and a loss of momentum for the project within the Aboriginal community. FNSW contributed financially, while Tumut Council is now mainly responsible for implementing this project.
2005	31 December	Sthn	5.1.4.4	SFNSW should initiate the specified employment opportunities to enable active Aboriginal participation in the management of forests, subject to funding.	No reporting required Refer to the 'Preparation of an employment and economic opportunities program with Aboriginal people' milestone.
2005	31 December	Sthn	5.1.4.6	Specified employment opportunities in NPWS were identified as a major priority for Aboriginal communities in the Southern region, subject to external funding.	No reporting required Southern – See Milestone 'Preparation of an employment and economic opportunities program with Aboriginal people'.
Aborigina	al Management (Committee for	the Southern re	egion	
2003	31 December	Sthn	5.1.4.1	An Aboriginal Management Committee will be established for both State forests and national parks to represent and manage Aboriginal cultural heritage on State forests and national parks, respectively.	Completed
2003	31 December	Sthn	5.1.4.1	Terms of reference for the committees will be determined and developed by the committee members upon establishment. Terms of reference must include specified aspects.	Completed
2003	31 December	Sthn	5.1.4.1	Development of a plan of management, which will address the management principles, guidelines and objectives of the Aboriginal Management Committee.	Completed

D	Due date		FA section	Milestone	Progress				
2005	31 December	Sthn	5.1.4.5	Create a provision for two Aboriginal representatives to sit on the South West Slopes Regional Advisory Committee.	Completed				
MANAGI	IANAGING FOR OTHER FOREST VALUES AND USES								
Occupation	Occupation permits in State forests								
1999	1 July	UE, LNE, Eden	2.3.3	Formation of Occupation Permit Taskforce. (The taskforce will also consider issues in the Eden region.)	Completed				
					In progress				
2000	1 July	UNE, LNE	2.3.3	Phasing out of occupation permits.	The Occupation Permit Taskforce considered occupation permits in State forest areas zoned FMZ 1 and FMZ 2. Finalisation of exclusion or management arrangements to deal with phasing out of occupation permits in State forest areas zoned FMZ 1 and FMZ 2 was deferred until the completion of the FMZ assessment. Discussions between the agencies are continuing.				
			Sthn 2.3.3	Consideration of the Southern region by the Occupation Permit and Permissive Occupancy Taskforce.	Completed				
2002	31 December	Sthn			A steering group chaired by NPWS with of representatives from DLWC, NSW Farmers, Forests NSW and NPWS met several times over 2001–2002 to oversee the phase-out of occupation permits and permissive occupancies. The phase-out, which affected about 120 people, was completed over 18 months and ended in June 2003.				
Within 18 gazettal o	months of of new	Sthn	2.3.3	Phasing out of occupation permits in State forests that currently exist in areas identified as formal reserves and informal reserves and permissive occupancies on Crown land identified as formal reserves and informal reserves.	Completed				
Roads ar	nd trails								
2000	1 January	UNE, LNE, Eden	2.13.4 2.12.4 (E)	Preparation of an MoU on joint roads and trails maintenance and access arrangements.	No reporting required MOUs for the Eden, Southern and UNE/LNE regions are at various stages of development; however, as cooperation between the two agencies at the local/operational level has been very successful on a case-by-case basis, finalisation of the proposed MOUs is no longer a priority. This milestone is therefore considered no longer applicable.				
2002	31 December	Sthn	2.13.4	MoU on the use of roads and trails maintenance and access arrangements.	No reporting required				
				access arrangements.	See above milestone.				

D	Due date		FA section	Milestone	Progress
Fire man	agement				
2001	1 April	UNE, LNE, Eden	2.10 2.9 (E)	Preparation of a joint arrangement with District Fire Committees for the prevention, detection and suppression of bush fires.	Implemented
Ongoing	Ongoing		2.10	Continuing participation in District Fire Management Committees for the prevention, detection and suppression of bush fires.	Implemented
2007	30 April	Sthn	Att. 6(2I)	Incorporate into Regional ESFM Plans and plans of management under the <i>National Parks and Wildlife Act 1974</i> provisions that address bush and other fires, ensuring ecologically sustainable forest management of forests.	Implemented
Recreation	on and tourism		•		
2001	1 April	UNE, LNE, Eden	2.13.1 2.12.1 (E)	Preparation of joint regional recreation and tourism plans.	No reporting required Joint recreation and tourism plans have not been developed for the UNE/LNE and Southern regions. These are no longer considered necessary as individual agency actions are taking place. DECC has developed a statewide strategy for sustainable visitation (Living Parks), which was completed in 2005 and publicly launched in early 2006. A statewide plan for Forests NSW has been developed. The strategic plan entitled <i>Living</i> , working, playing forests 2005–2009 continues to guide recreational use of State forests.
2003	31 August	Sthn	2.13.1	Preparation of joint regional recreation and tourism plans.	No reporting required See above milestone.
Carbon s	equestration op	portunities			
2004	1 April	UNE	2.13.2	Carrying out a revegetation project that includes carbon sequestration opportunities.	Deferred Legal constraints have been identified that will require legislative change to enable carbon sequestration opportunities on reserves to be realised. DECC continues to monitor the development of the Carbon Pollution Reduction Scheme to identify any possible future opportunities to participate through the ecological restoration of degraded land in the national parks system. DECC's participation in the scheme will require government endorsement, a statewide project to identify and prioritise suitable land in the national parks system and a policy framework. The main aim of revegetating the degraded land in the national parks system will be the improvement of biodiversity, with carbon sequestration being a secondary aim.

Du	Due date		FA section	Milestone	Progress				
Plantation	areas within n	ational parks							
2001	30 June	UNE, LNE	3.3 6.16.1 Att. 11	Supply from logging associated with the rehabilitation of identified hardwood plantations remaining within the new reserve system and completion of harvesting of plantations in national parks.	No reporting required The time limit for this activity has expired. Two areas within national parks were identified where harvesting would have benefited rehabilitation and harvesting/rehabilitation plans were prepared. However, Forests NSW decided not to proceed and was informed by DECC that rehabilitation of those and other plantations would occur as part of normal reserve management operations. NPWS will rehabilitate plantations as part of its ongoing management of the reserves.				
Ongoing	Within six months of harvest	UNE, LNE	6.16.1	Rehabilitation works on plantation areas within national parks must be completed within six months of harvest completion.	No reporting required Refer to milestone above.				
Ongoing		UNE, LNE	6.16.1	Works programs and rehabilitation plans to be jointly prepared and approved. Rehabilitation costs to be funded by sale royalties.	No reporting required Refer to milestone above.				
	MANAGING TIMBER SUPPLY								
Supply ar	rangements								
1999	1 March	UNE, LNE	3.2	Amendment of wood supply agreement with Boral.	Completed				
1999	31 December	UNE, LNE, Eden	Att. 8	Review legislation and policies relevant to the allocation and pricing of hardwood logs from State forests before the end of 1999.	No reporting required This milestone is considered no longer applicable, as Forests NSW is operating under the conditions of the Financial Policy Framework (FPF), and is complying with National Competition Policy principles. Forests NSW also developed a log pricing system that sets log prices consistent with market factors. State Forests of NSW (2000a), The Price System, is available at: www.dpi.nsw.gov.au/ data/assets/pdf_file/0004/268060/forests-nsw-price-system.pdf				
2000	1 April	UNE, LNE	3.2	Wood supply agreement arrangements for processing thinnings.	Completed				
2000	1 April	Eden	3.2	Amendment of wood supply agreement with Harris Daishowa Australia.	Completed				
2000	31 December	UNE, LNE	3.2	Additional volumes supplied under a transitional 'top- up' arrangement over two years to assist industry adjustments to terminate by 31 December 2000.	Completed				

Di	Due date		FA section	Milestone	Progress
Ongoing	Ongoing		3.4	Consultation on timber supply arrangements must occur through the development of plans of operation.	Continuing Consultation with industry is accepted practice as part of developing an annual plan of operations.
1999	30 June	UNE, LNE	6.16.2	The development of a process (before any purchases) of selecting land for purchase by SFNSW for timber supply must consider substantially unmet CAR conservation targets. A process for this and the key targets must be developed by SFNSW, including consultation with NPWS and PlanningNSW by 30 June 1999. This is not to hinder the overall purpose of the Private Property Supplementation Program to supplement the SFNSW timber supply.	In progress Forests NSW and PWG have discussed developing a process for considering unmet CAR conservation targets when Forests NSW purchases land to supplement timber supply. Pending a further outcome, when purchasing new lands, Forests NSW is using an internal process that considers unmet CAR conservation targets. No recent progress.
2002	30 June	Sthn	3.3.3	The process (before purchase) of selecting land for purchase by SFNSW for timber supply must address criteria to be agreed between SFNSW and NPWS. These criteria will consider: the key substantially unmet CAR conservation targets; whether there is any need for access through reserves; issues of reserve design; and proximity to national parks/reserves.	In progress No progress to report.
Resource	availability and	sustainable	yield		
Ongoing			3.5	Results of resource inventory and annual monitoring must be used to review performance in achieving the implementation of sustainable yield of timber products in State forests.	In progress No progress to report.
Ongoing	Within next five years	UNE, LNE	3.5 Att. 8	Refinement of resource availability by improving the inventory such as additional plot measurements (funding provided at \$500 000 pa for five years).	In progress Forests NSW implemented a Forest Inventory Policy, which is designed to account for harvesting activity and maintain the currency of its strategic resource data. Continuous replacement of FRAMES plots is part of this policy. Forests NSW will continue to review the utility of these and other tools for informing future management decisions. As part of remeasurement, Permanent Growth Plots (PGPs) have been converted to a new plot size (0.2 ha). All new PGPs will be established at the new plot size. The larger plot size will result in a better capture of variability and improve mortality and recruitment modelling. When data become available, the current models will be reviewed and if necessary updated and incorporated in FRAMES.

D	ue date	Region	FA section	Milestone	Progress	
Ongoing		Eden	3.5 Att. 8	Refinement of resource availability by improving the inventory, such as additional plot measurements.	In progress No further progress (refer to 2007–2008 report for further information).	
2007	30 April	Sthn	3.5 Att. 6(6e)	Refinement of resource availability on native forests by additional inventory plot measurements to improve volume estimates at a regional level.	In progress Refer to 2007–2008 report for details of the FRAMES strategic inventory update program.	
Ongoing		Sthn	3.5	The results of resource inventory and annual monitoring of actual and predicted timber volumes must be used to review the performance in achieving the implementation of sustainable yield of timber products.	Continuing The results of resource inventory and annual monitoring of actual and predicted timber volumes have been incorporated into FRAMES modelling and review of sustainable yield of timber products.	
FRAMES	improvement a	nd review				
Ongoing		UNE, LNE, Eden	3.5	Inventory system used in FRAMES must be supplemented by progressive enhancement of modifier models, such as harvesting area exclusions and FRAMES parameters such as tree protection and tree availability modifier models.	 Continuing The NSW Auditor Generals Performance Audit Report 'Sustaining Native Forest Operations' was published during the reporting period. The implementation across the organisation of the recommendations will contribute to meeting this milestone. These include: Forests NSW will continue to update and integrate its event management system for Native Forests. Many of the components are already in place with the geographic information system (GIS) and recent upgrades to its sales database. The event management system will involve greater integration of these systems with inventory data and more routine mapping of harvested areas assisted by GPS technology. The system will continue to evolve but FNSW proposes to report on the upgraded system by December 2010. Forests NSW intends to summarise the results of net harvest area reductions due to flora and fauna protocols for each region. This will be based on harvest plans prepared over a relevant time period (i.e. under current protocols) and will need to be updated from time to time to reflect changing practices and protocols. Forests NSW is reviewing yield projections for all regions to make a discounted cash flow valuation of the growing stock. The valuation result is published in Forests NSW Annual Report 2008–09 Social, Environmental and Economic Report to Parliament. 	
2006	31 December	Sthn	Att. 6(7)	Establishment of an ongoing FRAMES development program to include the listed elements.	In progress	
2006	31 December	Sthn	3.5 Att. 6(7)	Enhancement of modifier models in FRAMES, including the refinement of harvesting area exclusions and FRAMES parameters (such as the tree defect and tree availability modifier models), using locally specific data to replace RFA regional average modifier models.	In progress Technical review is complete. Documentation will be completed for independent audit by December 2010.	

D	Due date		FA section	Milestone	Progress
Ongoing	Ongoing		3.5	SFNSW consulting with NPWS and PlanningNSW on the terms and conduct of the FRAMES assessment.	Continuing No formal consultation has taken place this year.
2002	2002 30 September		3.5 Att. 6(7)	SFNSW will consult with NPWS, EPA and DoP on the terms and conduct of the FRAMES review/development program.	In progress No formal consultation has taken place this year.
2007	1 March	UNE, LNE	3.2 3.5	Review of supply levels at year 8, after inventory is reviewed, to determine a supply level for years 9–20, with value adding criteria applied at year 5.	Complete
FRAMES	monitoring and	processes			
2004	1 April	UNE, LNE	3.5	SFNSW, NPWS and PlanningNSW will consult on appropriate spatial scales for reporting actual yields against FRAMES estimates.	In progress Formal consultation in relation to this milestone is yet to take place.
Ongoing		Eden, Sthn	3.5	SFNSW, NPWS and PlanningNSW will consult on appropriate spatial scales to reporting actual yields against FRAMES estimates.	Continuing Formal consultation in relation to this milestone is yet to take place.
Annually		UNE, LNE, Eden	3.5	Reporting on actual versus predicted volume at the scale determined by SFNSW, PlanningNSW and NPWS. To be included in the annual report to Parliament.	Continuing Actual harvested volumes by broad product category are compared each year in this FA report against IFOA supply commitments, which are based on an operational implementation of predicted volumes. Forests NSW will also compare harvest results against FRAMES yield estimates over five-year periods as a means of testing the accuracy of estimates. The results will be published in 2011 after the standing inventory has been reconciled. A web page illustrating the wood supply expected from native forests in a range of log grades covering the log quality spectrum is in preparation, and will be published online by December 2010.
Annually	Annually		3.5 Att. 6(6d)	Information on actual yields against FRAMES estimates at the agreed scale to be provided to DoP and included in the annual report to the NSW Parliament (at the determined scale).	Continuing Refer to milestone above.
Annually	Annually		3.5	Monitoring of FRAMES performance to include comparison of actual and predicted volume each 12-month period at the RFA region level. To be included in the annual report to Parliament.	Continuing Refer to milestone above.

Due date	Region	FA section	Milestone	Progress
Annually	Eden	3.5	Monitoring of FRAMES performance to include comparison of actual and predicted volume for the multi-aged forest resource each 12-month period. To be included in the annual report to Parliament.	Continuing Refer to milestone above.
Annually	Sthn	3.5 Att. 6(6f)	Monitoring and review of FRAMES performance to include comparison of actual versus predicted volumes for each financial year.	Continuing Refer to milestone above.
Annually	UNE, LNE, Eden	3.5	Monitoring of FRAMES performance will include an assessment of the progressive 20-year supply. To be included in the annual report to Parliament.	Continuing Noting an organisational shift from Spectrum and StandSim to Woodstock for yield scheduling in Eden, the outputs from REDEN (Regrowth in Eden) – an inventory-plot management and yield simulation tool – have been formatted so they can be incorporated into the Woodstock package. The initial analysis from REDEN and Woodstock focused on short- to medium-term timber availability issues, notably the current 20-year planning horizon, corresponding with the RFA and Wood Supply Agreement (WSA) periods. After the preliminary results were refined and evaluated, the system was then expanded to incorporate longer-term modelling of the resource, bringing it in line with other FRAMES models to consider a full 200-year strategic planning horizon. This work is still in progress and is focusing on sensitivity analysis of the outputs. The NSW Auditor Generals Performance Audit Report 'Sustaining Native Forest Operations' was published during the reporting period. Implementing the recommendations in the report across the organisation will contribute to meeting this milestone. These include: • Forests NSW will continue to update and integrate its event management system for Native Forests. Many of the components are already in place with the GIS and recent upgrades to its sales database. The event management system will involve greater integration of these systems with inventory data and more routine mapping of harvested areas helped by GPS technology. The system will continue to evolve but FNSW proposes to report on the upgraded system by December 2010. • Forests NSW intends to summarise the results of net harvest area reductions due to flora and fauna protocols for each region. This will be based on harvest plans prepared over a relevant time period (i.e. under current protocols) and will need to be updated from time to time to reflect changing practices and protocols • Forests NSW is reviewing yield projections for all regions to make a discounted cash flow valuation of the growing stock. The valuation result i
Annually	Sthn	3.5	Monitoring and review of FRAMES performance to include assessment of progressive 20-year supply.	Continuing Refer to milestone above.

D	Due date		FA section	Milestone	Progress
2006	31 December	Sthn	Att. 6(8) point 2	Commission and publish an independent review of the enhanced systems and process, models, information base, and assumptions that contribute to the FRAMES system applying to both the South Coast and Tumut subregions of the Southern region.	In 2002, Professor Vanclay of Southern Cross University made an independent review of the FRAMES system and processes on the North Coast, and reported its findings in <i>Review of Projected Timber Yields for the NSW North Coast</i> (2002). Because FRAMES is a statewide system used by all regions, an independent review of enhanced FRAMES has not been commissioned in Southern Region. It is noted in attachment 6 (6c) of the Southern FA that site-specific silvicultural regimes occur the South Coast and Tumut subregions, and that the FRAMES models will reflect these site-specific silvicultural regimes. A review of sustainable yield and associated appropriate FRAMES models specific to the Southern region will occur and be subject to an independent assessment (see milestone below).
2007	30 April and each five-year review	Sthn	Att. 6(8) point 2	Review sustainable yield every five years by using enhanced FRAMES systems and information bases. The results will inform the annual volume that may be harvested from the Southern region (or sub-region), being mindful of achieving long-term sustainable yield and optimising sustainable-use objectives consistent with this agreement.	In progress A review of sustainable yield and associated appropriate FRAMES models specific to the Southern region has occurred and will be subject to an independent assessment by December 2011.
2007	30 April and each five-year review	Sthn	Att. 6(8) point 3	Complete and publish independent audits of sustainable yield in time for each subsequent five-year review.	In progress Will occur by December 2011.
2007	30 April	Sthn	Att. 6(6c) point 2	The FRAMES models will reflect the site-specific silvicultural regimes applied in the Southern Region.	In progress A review of sustainable yield and associated appropriate FRAMES models specific to the Southern region has occurred and will be subject to an independent assessment.
Production	on of timber prod	lucts			
Annually	Annually		3.5	A report on the annual production of timber products other than the production of quota sawlogs.	Complete Information on production of all timber and non-timber products is reported in this report, and in other annual NSW Forest Agreements implementation reports.
Annually		Sthn	3.5 Att. 6(6d)	Report to DoP, NPWS and EPA on the annual production of products other than production of quota sawlogs for each financial year.	Complete See above milestone.

Du	Due date		FA section	Milestone	Progress			
Timber su	Timber supply arrangements and management and charcoal production							
2002	30 September	Sthn	3.3.2	SFNSW must make a baseline analysis of tree species mix, size, quality and quantity for each compartment within State forest (post-forest agreement), using existing data contained in harvesting records and other sources (i.e. sales data on sawlogs and higher value products). The results of this analysis must be provided to NPWS and DoP.	No reporting required Milestone no longer required.			
Annually		Sthn	3.3.2	Each year, SFNSW must monitor and report, as part of the forest agreement annual report process, the amount of residual timber (tonnage) harvested from each compartment, and the amount of species, size, quality and quantity of trees harvested in each compartment from sales data on sawlogs and higher value products and compare this to the baseline data.	No reporting required Milestone no longer required.			
Annually		Sthn	3.3.2	If monitoring each year indicates a change in these parameters (i.e. amount of species, size, quality and quantity of trees harvested), SFNSW must consult DoP and NPWS to determine if remedial action is required, and SFNSW must implement appropriate actions agreed between the three agencies.	No reporting required Milestone no longer required.			
Annually	Annually		3.3.2	Each year SFNSW must monitor and report, as part of the forest agreement annual reporting process, the total quantity (tonnes) of fluxwood (if this is sourced from either as part of the 200 000 tonnes of residue timber or thinnings) and the total quantity (tonnes) of thinnings.	No reporting required Milestone no longer required.			
Silvicultur	al practices							
1999	1 December	UNE, LNE	2.2.4	Preparation of eco field guides.	Completed			
2002	31 August	Sthn	2.2.4	Prepare and publish eco field guides for the Southern region.	Completed – South Coast sub-region It is not considered necessary to prepare a field guide for Tumut sub-region as it will use the South Coast guide and other available resources as appropriate The eco field guide for the South Coast Sub-region, Field Guide to Flora, Fauna and Heritage Features of Forest Management on the South Coast of NSW, was printed in late 2005. The Tumut sub-region eco field guide is in preparation.			

Du	Due date		FA section	Milestone	Progress
2000	1 April	UNE, LNE, Eden	2.2.4 Att. 6	Preparation of SFNSW Forest Practices Code: Part 5 – Wildlife Management in Native Forests.	No reporting required Would duplicate the IFOA's all encompassing conditions, including TSL, FL and the Forests NSW Silviculture Manual. A separate Wildlife Management Code of Forest Practice would not have any additional benefits for forest management; hence this milestone is deemed no longer applicable.
2002	30 June	Sthn	2.2.4 Att. 4	SFNSW Forest Practices Code: Part 5 – Wildlife Management in Native Forests.	No reporting required See milestone above.
2001 Ongoing (Sthn)	1 April	UNE, LNE, Eden Sthn	2.2.8 Att. 6(2c) (S)	Native forests silvicultural regimes must be implemented in State forests.	Implemented
2001	1 April	UNE, LNE, Eden	2.2.8	Preparation of arrangements for silvicultural practices, including establishment of demonstration areas (UNE, LNE regions only), audit compliance, reporting and consultation.	In progress Silvicultural practices may be subject to auditing in accordance with Circular 2003/01 Monitoring and Measuring Compliance of Operations. Demonstration areas have been set up in UNE and LNE.
2003	30 September	Sthn	2.2.8 Att. 2(o) 4.2	Preparation of arrangements for silvicultural practices, including demonstration areas (for silvicultural practices and suite of silvicultural regimes), auditing, report area harvested and silvicultural types and consult on ecosystem management.	In progress Silvicultural practices may be subject to auditing in accordance with Circular 2003/01 Monitoring and Measuring Compliance of Operations. No formal silvicultural demonstration areas have been set up in the Southern region.
Ongoing	Ongoing		2.2.5	SFNSW to employ internal audit system to ensure consistent application of standards across Crown timber lands.	Implemented Circular 2003/01 Monitoring and Measuring Compliance of Operations continued to define Forests NSW supervision, monitoring and audit requirements for forest operational activities within the regions and divisions. Forests NSW internal audit system consists of a four-tiered approach (refer to Chapter 3 of this report for details and results). In addition, Forests NSW was successfully externally audited against ISO 14001:2004 and AS 4708 (Int) – 2007 standards.
Ongoing	Ongoing		2.2.5	SFNSW to employ an internal audit system to ensure consistent application of standards and monitor compliance with IFOA.	Continuing Refer to milestone above.
Ongoing	Ongoing		2.2.5	The results of this monitoring and auditing should be reported using a mechanism determined by DoP, NPWS, SFNSW, NSW Fisheries and EPA.	Continuing Public reporting of Forests NSW compliance with IFOA conditions, including Forests NSW internal compliance results, is contained within this report (refer to Chapter 3). Forests NSW Annual Report 2008–2009. Social Environmental and Economic Reporting. Forests NSW, Pennant Hills NSW contains details of compliance at a statewide level.

Due date		Region	FA section	Milestone	Progress
Ongoing	Ongoing		2.2.3	Harvesting plans to be prepared for all logging operations and forest products conducted under a timber licence.	Completed
Ongoing	Ongoing		2.2.3	For activities regulated under Part 4 of the Forestry and National Park Estate Act, harvesting plans must be prepared for all logging operations conducted under a timber licence.	Completed
Ongoing		UNE, LNE, 2.2.7 Eden		Notification by SFNSW on the location and nature of forestry operations to be done at least bi-monthly to PlanningNSW, NPWS, EPA and NSW Fisheries, as outlined in IFOA arrangements.	Implemented
Ongoing		Sthn	2.2.6	Notification of the location and nature of forestry operations to NPWS, EPA, NSWF and DoP, as outlined in IFOA arrangements.	Implemented
Ongoing	No less than two months before commence ment of forest agreement	UNE LNE Eden	2.2.7	Liaison by SFNSW with DUAP, NPWS, and EPA for proposed forestry operations and activities not originally covered by forest agreement or IFOA. SFNSW must carry out an appropriate assessment of the impacts resulting from any proposed changes, and each agency must consider the environmental consequences of any proposed changes in terms of their regulatory responsibility.	Continuing This process was not required during 2008–2009. This milestone is considered to be ongoing, as liaison will occur when relevant situations arise.
Ongoing	Two months before activities begin	Sthn	2.2.7	Liaise with DoP, NPWS and EPA on proposed forestry activities not covered by forest agreement and integrated forestry operations approval. Impacts from the proposed forestry activities must be assessed.	Continuing Refer to milestone above.
2002	31 December	Sthn	Att. 6(2n)	Establish a process, including public reporting, for regular audits of compliance and reviews of codes of practice, eco field guides and regional prescriptions.	Implemented
2007	30 April and each five-year review	Sthn	Att. 6(2n)	Undertaking audits of compliance at first and subsequent five-yearly reviews.	In progress

Dı	ue date	Region	FA section	Milestone	Progress				
	IMPLEMENTATION, REVIEW AND COMMUNITY AWARENESS								
STAFF TI	STAFF TRAINING, EMPLOYMENT AND INDUSTRY INITIATIVES								
Staff training									
Ongoing		UNE, LNE, Eden	2.1.1 3.6 (E)	SFNSW field staff and contractors must receive appropriate competency-based training. In Eden, establish timber industry training and accreditation program to assist workers in developing recognised competencies in soil and water, flora and fauna, Indigenous and non-Indigenous cultural heritage, log grading and log merchandising requirements.	No reporting required Forests NSW staff and contractors are continuing to receive appropriate competency-based training; the records of such training are maintained on the corporate Complete Human Resource Information System (CHRIS) database. Records of contractor competencies are maintained on the Forests NSW Contractors and Operators Licensing and Permits system.				
Ongoing		Sthn	2.1.1 Att. 6(2k)	Field staff and contractors of SFNSW must continue to receive appropriate competency-based training, including training in biodiversity management, soil and water management, log grading, silviculture, harvest planning and cultural heritage.	No reporting required Refer to milestone above.				
Ongoing	Ongoing		2.1.2	NPWS field staff and contractors must receive appropriate competency-based training.	Implemented DECC continues to provide staff training programs. These cover natural and cultural heritage management (including Aboriginal) and operational, technical and safety matters. Programs range from technical training related to occupational health and safety requirements to statewide capacity building initiatives targeted at particular staff classifications. Further information on DECC staff training is reported in DECC annual reports available through the DECC website at: www.environment.nsw.gov.au/whoweare/reports.htm This milestone is considered concluded since competency-based training for field staff and forest operators in forest values routinely occurs in DECC. While the implementation of this milestone will continue, there are other means for reporting on the progress to occur (such as the DECC annual report), so it will not be reported in future annual NSW FA implementation reports or reviews.				
2005	31 December	Sthn	5.1.4.5	All NPWS staff located in the Southern Directorate be provided with adequate cultural awareness training to improve customer relations with Aboriginal communities.	Implemented Staff in DECC (Parks and Wildlife Group) Southern Branch have attended new Aboriginal cultural awareness training courses as available.				

Du	ue date	Region	FA section	Milestone	Progress			
Employme	Employment and industry initiatives							
Ongoing	Subject to funding	UNE, LNE, Eden Sthn	3.6 Att. 10 Att. 8 (S)	Employ a range of initiatives to facilitate employment, subject to funding.	Implemented			
Industry in	nitiatives							
2004	1 April	UNE, LNE, Eden	2.9.2 2.8.2 (E)	Private property supplementation program, involving the purchase of timber rights or private property to assist in supply arrangements to industry, must apply controls in legislation.	In progress In 2008–2009, timber supplementation through the purchase of timber rights from private property occurred. All logging operations were authorised under the <i>Native Vegetation Act 2003</i> . No private property supplementation through the purchase of land occurred.			
Ongoing		Sthn	3.3.3	SFNSW will undertake a private property supplementation program (such as purchase of timber rights or private property), and when any private land is purchased and dedicated as State forest, harvesting and road operations must be subject to forest agreement and conditions of the IFOA.	Continuing In 2008–2009, timber supplementation through the purchase of timber rights from private property occurred. As only timber rights were purchased, logging operations were authorised under the <i>Native Vegetation Act 2003</i> . No private land was purchased.			
Ongoing	Subject to funding	UNE, LNE, Eden	3.6	Extension of FISAP to fund various initiatives in the UNE, LNE and Eden regions.	Completed			
2006	30 June	Sthn	3.6	FISAP applies in the Southern region and will be available to fund initiatives until 20 June 2006.	Completed FISAP payments under this initiative concluded in 2006–2007.			
COMMUN	IITY PARTICIPA	ATION, EDU	CATION AND A	WARENESS				
Complaint	t handling							
2000	1 January	UNE, LNE, Eden	6.15	Devise and implement a coordinated complaint handling and response system.	Implemented A coordinated complaint handling protocol was developed and implemented in 2001.			
2002	30 June	Sthn	6.15	Devise and implement a coordinated complaint handing and response system for the IFOA.	Implemented Refer to milestone above.			

Du	Due date		FA section	Milestone	Progress
Ongoing	When making an amendment	Sthn	6.2	Public participation is required when making a forest agreement or when an amendment or revocation occurs.	Continuing No amendments to the Southern Forest Agreement occurred during 2008–2009.
Communi	ty awareness a				
Ongoing		UNE, LNE, Eden, Sthn	Att. 8 Att. 6(2g) (S)	Providing ongoing formal participation to raise awareness and understanding of ESFM and how it can be achieved in New South Wales forests.	Forests are only one element of a much broader landscape managed by DECC; hence ESFM is indirectly addressed as part of the broader conservation awareness and understanding promoted by the agency, rather than being a specific component. DECC's public and educational programs include guided walks and tag-along 4WD tours; ranger talks and on-site inspections; developing the Sustainable Schools Program in NSW; training, planning and control programs for pest species; and the Discovery program, which focuses on providing community education opportunities for the general public and interested groups on natural and cultural heritage. As a result of the finalisation of the regional ESFM plans, Forests NSW has continued to participate in, and provide awareness to, the community about ESFM practices. At a strategic level, Forests NSW promotes its land management practices through the <i>Bush Telegraph</i> , produced quarterly, and the SEEing report, produced annually. Both can be obtained from the Forests NSW website or through local DPI offices. Forests NSW public and educational programs include ranger talks, education visits; developing the Sustainable Schools Program in NSW, and inviting NSW science teachers to view Forests NSW operations as a way of promoting ESFM management practices. Forests NSW also annually attended community meetings that relate to ESFM. They included catchment management, community bushfire management, community/school/education, conservation/environmental, cultural management, flora and fauna management, forestry practices, industry/stakeholder meetings, introduced predators/ feral animals, recreation/tourism and regional planning. Forests NSW staff attendance helps to raise public awareness and understanding of ESFM practices. While the implementation of this milestone will continue, there are other means for reporting on the progress to occur (such as DECC annual reports and Forests NSW Seeing or annual reports); therefore this milestone is considered complete.
Ongoing		Sthn	Att. 6(2j)	Developing and implementing public education programs to deal with ecologically sustainable management issues, including management requirements for conservation and codes of forest practice governing activities in both public and private forests.	Complete See above milestone.
Ongoing		UNE, LNE, Eden	Att. 8	Continuing to develop the public consultation and public reporting mechanisms through the introduction of new partnerships (for example the International Model Forest Network).	Continuing No progress to report.

Du	e date	Region	FA section	Milestone	Progress
Ongoing		UNE, LNE, Eden, Sthn	Att. 8 Att. 6(2i) (S)	Improving cooperation and coordination between government agencies so as to achieve integrated management for conservation, wood production and other values in both public and private forests.	Continuing No progress to report.
Ongoing		Sthn	Att. 6(2f)	Improving the coordination and effective use of resources allocated to research for ESFM in New South Wales.	Completed Science and research activities across NSW government agencies are coordinated by the recently appointed Chief Scientist and Scientific Engineer in the Office of Science and Medical Research (OSMR).
INFORMIN	IG THE PUBLI	С			
Access to	information	ı			
1999	As soon as possible	UNE, LNE, Eden	1.6	Granting of an IFOA on, or as soon as possible after, the making of the agreement.	Completed
2002	ASAP	Sthn	1.6.1 Att. 6(1) & (2a)	Granting of an IFOA for the Southern region.	Completed
1999	Within seven days of signing	UNE, LNE, Eden	6.10	Furnishing of the Agreement (and IFOA) to the Presiding Officer of each House of Parliament; and to be laid before Parliament within 15 sitting days of receipt.	Completed
2002	Within seven days of signing	Sthn	6.10 6.1	A copy of the forest agreement, including any amendment or termination of the agreement, must be furnished to the Presiding Officer, so it can be laid before that House within 15 sitting days of that House after it is received by the Presiding Officer.	Completed
Ongoing	When making or amending	Sthn	6.2	Public participation is required when making a forest agreement or when an amendment or revocation occurs.	Implemented Public consultation occurred during the making of the forest agreements. No amendments to the agreements have been made to date.
1999	1 April	UNE, LNE, Eden	6.11	Public notice in a newspaper circulating throughout the State, and also in a newspaper circulating in the region, about the Agreement and IFOA.	Completed
2002	Within seven days of signing	Sthn	6.11	Public notice in a newspaper circulating throughout the State, and also in a newspaper circulating in the region, about the making of the forest agreement and IFOA or amendment.	Completed

D	Due date		FA section	Milestone	Progress
1999	1 December	UNE, LNE, Eden	2.11.3 2.10.3 (E)	Determining a method to provide all research reports to the public.	Completed
1999	1 April	UNE, LNE, Eden	6.11	Copies of documents to be made available for public inspection at the head office and other regional offices of PlanningNSW.	Completed
2002	Within seven days after signing	Sthn	6.11	Copies of documents to be made available for public inspection at the head office and other regional offices of the Department of Planning.	Completed
1999	1 May	UNE, LNE, Eden	6.11	Copies of documents made available on the Internet by means of the website of the Department of Planning.	Completed The NSW forest agreements and IFOAs were made available on the RACAC website now www.environment.nsw.gov.au/forestagreements/index.htm) in March 1999 and April 2000 respectively. The site also has links to the Commonwealth Government's RFA website (www.daff.gov.au/rfa), which contains project reports carried out as part of the CRA/RFAs for the UNE, LNE and Eden regions.
2002	As soon as practicable after documents made public	Sthn	6.11	Copies of documents made available on the Internet by means of the website of the Department of Planning.	Completed The NSW forest agreement and IFOA were made available on the RACAC website now www.environment.nsw.gov.au/forestagreements/index.htm) in 2003. The site also has links to the Commonwealth Government's RFA website (www.daff.gov.au/rfa), which contains project reports carried out as part of the CRA/RFAs for the Southern region.
2002	30 June	Sthn	2.11.3	All project reports relevant to the regional forest assessment must be made public.	Completed All CRA/RFA project reports have been published and are publicly available via the Commonwealth Government's RFA website www.daff.gov.au/rfa .
2002	Within six months of signing	Sthn	Att. 6(5)	Publish all FRAMES CRA reports for Southern.	Completed All FRAMES CRA reports for the Southern region have been completed and are publicly available.
Additiona	I reporting mech	nanisms			
2000	1 April	UNE, LNE, Eden	4.2	Additional reporting and consultative mechanisms for NPWS (e.g. State of the Parks report, NPWS Advisory Council, District Advisory Committee).	Completed
2002	31 August	Sthn	4.2	Additional reporting and consultative mechanisms for NPWS, such as the State of the Parks report.	Completed

Di	Due date		FA section	Milestone	Progress
2000	1 April	UNE, LNE, Eden	4.3	Additional reporting mechanisms for SFNSW (e.g. plan of operations, regional ESFM plans).	Completed
2002	31 August	Sthn	4.3 Att. 2p Att. 6(7c)	Additional reporting and consultative mechanisms for SFNSW, such as plan of operations, NFMS, and any committee established to implement forest management at the landscape level. Document basis for silvicultural practices and publish Native Forest Silvicultural Manual.	Completed
Annually		UNE, LNE, Eden Sthn	2.2.6	SFNSW reporting at statewide level through Environmental and Social Values Report.	Completed
2000	1 April	UNE, LNE, Eden	4.5	Additional reporting mechanisms, such as committees, by other agencies.	Implemented DECC State of the Parks reporting is occurring, as is corporate level annual reporting. NPW Regional Advisory Committees continue to provide advice to the National Parks and Wildlife Advisory Council and DECC on a range of natural and cultural heritage conservation matters on- and off-park. Membership of these committees includes Aboriginal communities, women, local government and farmer groups. DPI Limited information about plantation authorisations under the <i>Plantations and Realforestation Act 1999</i> is contained in DPI annual reports. The <i>Plantations and Realforestation Act 1999</i> requires a public register to be kept of all plantation authorisations. The public register contains information on location, catchment management authority regions, LGAs, date of authorisation, authorised plantation area, area of native vegetation authorised to be cleared, and area of native vegetation that must be retained. A Profile of Plantation Authorisations is also available from the DPI website. Forests NSW Forests NSW has regional/corporate reporting and consultative mechanisms for considering forest management, including the annual plan of operations (supplied to regulators), public exhibited documents, like the ESFM Plans, and regional plans that have incorporated public comments. The Research Division's annual report and Forests NSW financial report are produced each financial year, see: www.dpi.nsw.gov.au/aboutus/resources/corporate-publications

Du	Due date		FA section	Milestone	Progress
					Forests NSW is represented on a range of international, national, state and local groups related to forests and forest management, including the National Forestry and Forests Products Committee and its associated subcommittees, the National and International Montreal Process Working Group that sets the benchmark for sustainability reporting, the Australasian Fire Authorities Council, NSW Bushfires Coordinating Committee and Greening Australia (among others). Forests NSW has published a Native Forests Silvicultural Manual that complements its field guides and training programs. The manual documents the basis for Forests NSW silvicultural practices and contains the silvicultural specifications and guidelines required by the forest agreements and IFOAs. Although the Coastal and Tableland areas north of Sydney are divided into two regions for the purposes of the IFOAs, the specifications for silvicultural purposes are identical. For reporting on sustainability, Forests NSW produces an annual sustainability report (Seeing Report) that informs performance on sustainability for both planted and native forests, see: www.dpi.nsw.gov.au/aboutus/resources/corporate-publications . The Seeing Report for the last 10 years is evidence of this commitment and is produced as part of an integrated set of documents. The set includes the Forests NSW annual report and a facts and figures booklet. The report is recognised nationally and internationally for its openness and transparency and that it is externally verified.
Ongoing	Ongoing		2.1.1 3.6 (E)	SFNSW field staff and contractors must receive appropriate competency-based training. In Eden, establish timber industry training and accreditation program to assist workers in developing recognised competencies in soil and water, flora and fauna, Indigenous and non-Indigenous cultural heritage, log grading and log merchandising requirements.	No reporting required Forests NSW staff and contractors are continuing to receive appropriate competency-based training; the records of such training are maintained on the corporate Complete Human Resource Information System (CHRIS) database. Records of contractor competencies are maintained on the Forests NSW Contractors and Operators Licensing and Permits system.
Ongoing	Ongoing		2.1.1 Att. 6(2k)	Field staff and contractors of SFNSW must continue to receive appropriate competency-based training, including training in biodiversity management, soil and water management, log grading, silviculture, harvest planning and cultural heritage.	No reporting required Refer to milestone above.

Due date		Region	FA section	Milestone	Progress
Ongoing		UNE, LNE, Eden	2.1.2	NPWS field staff and contractors must receive appropriate competency-based training.	Implemented DECC continues to provide staff training programs. These cover natural and cultural heritage management (including Aboriginal) and operational, technical and safety matters. Programs range from technical training related to occupational health and safety requirements to statewide capacity building initiatives targeted at particular staff classifications. Further information on DECC staff training is reported in the DECC annual reports available through the DECC website at: www.environment.nsw.gov.au/whoweare/reports.htm This milestone is considered concluded since competency-based training for field staff and forest operators in forest values routinely occurs in DECC. While the implementation of this milestone will continue, there are other means for reporting on the progress to occur (such as the DECC annual report), so it will not be reported in future annual NSW FA implementation reports or reviews.
2005	31 December	Sthn	5.1.4.5	All NPWS staff located in the Southern Directorate be provided with adequate cultural awareness training to improve customer relations with Aboriginal communities.	Implemented Staff in DECC (Parks and Wildlife Group) Southern Branch have attended new Aboriginal cultural awareness training courses as available.
Employme	ent and industry	initiatives	•		
Ongoing	Subject to funding	UNE, LNE, Eden Sthn	3.6 Att. 10 Att. 8 (S)	Employ a range of initiatives to facilitate employment, subject to funding.	Implemented
Industry ir	nitiatives				
2004	1 April	UNE, LNE, Eden	2.9.2 2.8.2 (E)	Private property supplementation program, involving the purchase of timber rights or private property to assist in supply arrangements to industry, must apply controls in legislation.	In progress In 2008–2009, timber supplementation through the purchase of timber rights from private property occurred. All logging operations were authorised under the <i>Native Vegetation Act 2003</i> . No private property supplementation through the purchase of land occurred.
Ongoing		Sthn	3.3.3	SFNSW will undertake a private property supplementation program (such as purchase of timber rights or private property), and when any private land is purchased and dedicated as State forest, harvesting and road operations must be subject to forest agreement and conditions of the IFOA.	Continuing In 2008–2009, timber supplementation through the purchase of timber rights from private property occurred. As only timber rights were purchased, logging operations were authorised under the <i>Native Vegetation Act 2003</i> . No private land was purchased.
Ongoing	Subject to funding	UNE, LNE, Eden	3.6	Extension of FISAP to fund various initiatives in the UNE, LNE and Eden regions.	Completed

Due date		Region	FA section	Milestone	Progress
2006 30	30 June	Sthn	3.6	FISAP applies in the Southern region and will be available to fund initiatives until 20 June 2006.	Completed FISAP payments under this initiative concluded in 2006–2007.
COMMUNITY	Y PARTICIPA	ATION, EDU	CATION AND A	WARENESS	
Complaint ha	andling				
2000 1	1 January	UNE, LNE, Eden	6.15	Devise and implement a coordinated complaint handling and response system.	Implemented A coordinated complaint handling protocol was developed and implemented in 2001.
2002 30	30 June	Sthn	6.15	Devise and implement a coordinated complaint handing and response system for the IFOA.	Implemented Refer to milestone above.
Ongoing m	When making an amendment	Sthn	6.2	Public participation is required when making a forest agreement or when an amendment or revocation occurs.	Continuing No amendments to the Southern Forest Agreement occurred during 2008–2009.
Community a	awareness and	nd education			
Ongoing		UNE, LNE, Eden, Sthn	Att. 8 Att. 6(2g) (S)	Providing ongoing formal participation to raise awareness and understanding of ESFM and how it can be achieved in New South Wales forests.	Forests are only one element of a much broader landscape managed by DECC; hence ESFM is indirectly addressed as part of the broader conservation awareness and understanding promoted by the agency, rather than being a specific component. DECC's public and educational programs include guided walks and tag-along 4WD tours; ranger talks and on-site inspections; developing the Sustainable Schools Program in NSW; training, planning and control programs for pest species; and the Discovery program, which focuses on providing community education opportunities for the general public and interested groups on natural and cultural heritage. As a result of the finalisation of the regional ESFM plans, Forests NSW has continued to participate in, and provide awareness to, the community about ESFM practices. At a strategic level, Forests NSW promotes its land management practices through the <i>Bush Telegraph</i> , produced quarterly, and the SEEing report, produced annually. Both can be obtained from the Forests NSW website or through local DPI offices. Forests NSW public and educational programs include ranger talks, education visits; developing the Sustainable Schools Program in NSW, and inviting NSW science teachers to view Forests NSW operations as a way of promoting ESFM management practices. Forests NSW also annually attended community meetings that relate to ESFM. They included catchment management, community bushfire management, community/school/education, conservation/environmental, cultural management, flora and fauna management forestry practices, industry/stakeholder meetings, introduced predators/ feral animals, recreation/tourism and regional planning. Forests NSW staff attendance helps to raise public awareness and understanding of ESFM practices.
Ongoing		LNE, Eden,	Att. 6(2g)	awareness and understanding of ESFM and how it	broader conservation awareness and understanding promoted by the agency, rather than being a specific compor and educational programs include guided walks and tag-along 4WD tours; ranger talks and on-site inspections; de Sustainable Schools Program in NSW; training, planning and control programs for pest species; and the Discovery focuses on providing community education opportunities for the general public and interested groups on natural are As a result of the finalisation of the regional ESFM plans, Forests NSW has continued to participate in, and provide community about ESFM practices. At a strategic level, Forests NSW promotes its land management practices through the <i>Bush Telegraph</i> , produced SEEing report, produced annually. Both can be obtained from the Forests NSW website or through local DPI office NSW, and inviting NSW science teachers to view Forests NSW operations as a way of promoting ESFM manager Forests NSW also annually attended community meetings that relate to ESFM. They included catchment manager bushfire management, community/school/education, conservation/environmental, cultural management, flora and forestry practices, industry/stakeholder meetings, introduced predators/ feral animals, recreation/tourism and regic

D	Due date		FA section	Milestone	Progress
Ongoing	Ongoing		Att. 6(2j)	Developing and implementing public education programs to deal with ecologically sustainable management issues, including management requirements for conservation and codes of forest practice governing activities in both public and private forests.	Complete See above milestone.
Ongoing	Ongoing		Att. 8	Continuing to develop the public consultation and public reporting mechanisms through the introduction of new partnerships (for example the International Model Forest Network).	Continuing No progress to report.
Ongoing	Ongoing		Att. 8 Att. 6(2i) (S)	Improving cooperation and coordination between government agencies so as to achieve integrated management for conservation, wood production and other values in both public and private forests.	Continuing No progress to report.
Ongoing	Ongoing		Att. 6(2f)	Improving the coordination and effective use of resources allocated to research for ESFM in New South Wales.	Completed Science and research activities across NSW government agencies are coordinated by the recently appointed Chief Scientist and Scientific Engineer in the Office of Science and Medical Research (OSMR).
	NG THE PUBLI	С			
1999	As soon as possible	UNE, LNE, Eden	1.6	Granting of an IFOA on, or as soon as possible after, the making of the agreement.	Completed
2002	ASAP	Sthn	1.6.1 Att. 6(1) & (2a)	Granting of an IFOA for the Southern region.	Completed
1999	Within seven days of signing	UNE, LNE, Eden	6.10	Furnishing of the Agreement (and IFOA) to the Presiding Officer of each House of Parliament; and to be laid before Parliament within 15 sitting days of receipt.	Completed
2002	Within seven days of signing	Sthn	6.10 6.1	A copy of the forest agreement, including any amendment or termination of the agreement, must be furnished to the Presiding Officer, so it can be laid before that House within 15 sitting days of that House after it is received by the Presiding Officer.	Completed

Du	Due date		FA section	Milestone	Progress
Ongoing	When making or amending	Sthn	6.2	Public participation is required when making a forest agreement or when an amendment or revocation occurs.	Implemented Public consultation occurred during the making of the forest agreements. No amendments to the agreements have been made to date.
1999	1 April	UNE, LNE, Eden	6.11	Public notice in a newspaper circulating throughout the State, and also in a newspaper circulating in the region, about the Agreement and IFOA.	Completed
2002	Within seven days of signing	Sthn	6.11	Public notice in a newspaper circulating throughout the State, and also in a newspaper circulating in the region, about the making of the forest agreement and IFOA or amendment.	Completed
1999	1 December	UNE, LNE, Eden	2.11.3 2.10.3 (E)	Determining a method to provide all research reports to the public.	Completed
1999	1 April	UNE, LNE, Eden	6.11	Copies of documents to be made available for public inspection at the head office and other regional offices of PlanningNSW.	Completed
2002	Within seven days after signing	Sthn	6.11	Copies of documents to be made available for public inspection at the head office and other regional offices of the Department of Planning.	Completed
1999	1 May	UNE, LNE, Eden	6.11	Copies of documents made available on the Internet by means of the website of the Department of Planning.	Completed The NSW forest agreements and IFOAs were made available on the RACAC website (now www.environment.nsw.gov.au/forestagreements/index.htm) in March 1999 and April 2000 respectively. The site also has links to the Commonwealth Government's RFA website (www.daff.gov.au/rfa), which contains project reports carried out as part of the CRA/RFAs for the UNE, LNE and Eden regions.
2002	As soon as practicable after documents made public	Sthn	6.11	Copies of documents made available on the Internet by means of the website of the Department of Planning.	Completed The NSW forest agreement and IFOA were made available on the RACAC website (now www.environment.nsw.gov.au/forestagreements/index.htm) in 2003. The site also has links to the Commonwealth Government's RFA website (www.daff.gov.au/rfa), which contains project reports carried out as part of the CRA/RFAs for the Southern region.
2002	30 June	Sthn	2.11.3	All project reports relevant to the regional forest assessment must be made public.	Completed All CRA/RFA project reports have been published and are publicly available via the Commonwealth Government's RFA website www.daff.gov.au/rfa .

D	ue date	Region	FA section	Milestone	Progress	
2002	Within six months of	Sthn	Att. 6(5)	Publish all FRAMES CRA reports for Southern.	Completed	
	signing	0	7 5(0)	All FRAMES CRA reports for the Southern region have been completed and are publicly available.		
Additiona	I reporting mech	nanisms				
2000	1 April	UNE, LNE, Eden	4.2	Additional reporting and consultative mechanisms for NPWS (e.g. State of the Parks report, NPWS Advisory Council, District Advisory Committee).	Completed	
2002	31 August	Sthn	4.2	Additional reporting and consultative mechanisms for NPWS, such as the State of the Parks report.	Completed	
2000	1 April	UNE, LNE, Eden	4.3	Additional reporting mechanisms for SFNSW (e.g. plan of operations, regional ESFM plans).	Completed	
2002	31 August	Sthn	4.3 Att. 2p Att. 6(7c)	Additional reporting and consultative mechanisms for SFNSW, such as plan of operations, NFMS, and any committee established to implement forest management at the landscape level. Document basis for silvicultural practices and publish Native Forest Silvicultural Manual.	Completed	
Annually		UNE, LNE, Eden Sthn	2.2.6	SFNSW reporting at statewide level through Environmental and Social Values Report.	Completed	
					Implemented	
					DECC	
2000	1 April	UNE, LNE,		Additional reporting mechanisms, such as committees, by other agencies.	State of the Parks reporting is occurring, as is corporate level annual reporting. NPW Regional Advisory Committees continue to provide advice to the National Parks and Wildlife Advisory Council and DECC on a range of natural and cultural heritage conservation matters both on- and off-park. Membership of these committees includes Aboriginal communities, women, local government and farmer groups.	
		Eden			DPI	
					Limited information about plantation authorisations under the <i>Plantations and Reafforestation Act 1999</i> is contained in DPI annual reports.	
					The Plantations and Reafforestation Act 1999 requires a public register to be kept of all plantation authorisations. The public register contains information on location, catchment management authority regions, LGAs, date of authorisation, authorised plantation area,	

Due date	Region	FA section	Milestone	Progress
				area of native vegetation authorised to be cleared, and area of native vegetation that must be retained. The Register can be viewed on the Departmental website. www.dpi.nsw.gov.au/agriculture/resources/private-forestry
				A Profile of Plantation Authorisations is also available from the Departmental website.
				Forests NSW
			Forests NSW has regional/corporate reporting and consultative mechanisms for considering forest management, including the annual plan of operations (supplied to regulators), public exhibited documents, like the ESFM Plans, and regional plans that have incorporated public comments. The Research Division's annual report and Forests NSW financial report is produced each financial year, see: www.dpi.nsw.gov.au/aboutus/resources/corporate-publications	
				Forests NSW is represented on a range of international, national, state and local groups related to forests and forest management, including the National Forestry and Forests Products Committee and its associated subcommittees, the National and International Montreal Process Working Group that sets the benchmark for sustainability reporting, the Australasian Fire Authorities Council, NSW Bushfires Coordinating Committee and Greening Australia (among others).
documents the basis for Forests NSW silvicultural practices and contains the silvicultural specificatio		Forests NSW has published a Native Forests Silvicultural Manual that complements its field guides and training programs. The manual documents the basis for Forests NSW silvicultural practices and contains the silvicultural specifications and guidelines required by the forest agreements and IFOAs. Although the Coastal and Tableland areas north of Sydney are divided into two regions for the purposes of the IFOAs, the specifications for silvicultural purposes are identical.		
				For reporting on sustainability, Forests NSW produces an annual sustainability report (Seeing Report) that informs performance on sustainability for both planted and native forests, see: www.dpi.nsw.gov.au/aboutus/resources/corporate-publications .
				The Seeing Report for the last 10 years is evidence of this commitment and is produced as part of an integrated set of documents. The set includes the Forests NSW annual report and a facts and figures booklet. The report is recognised nationally and internationally for its openness and transparency and that it is externally verified.
SFM CRITERIA AND	O INDICATORS	1		
lonitoring				
				Continuing
				DECC continues to monitor and report annually on its progress towards achieving ESFM through the criteria and indicators.
	LINE	2.11.2		Forests NSW has a dedicated officer who helps administer the collection of data through an internal system, known as SEEDS. The
ngoing	UNE, LNE,	2.10.2 (E)	Monitoring of ESFM criteria and indicators.	data collected and entered into SEEDS are used to monitor and report on the ESFM criteria and indicators, as well as being used to
J9	Eden, Sthn	Att. 7 (S)	and maladian	help Forests NSW to report in its SEEing report, State of the Environment report and other federal government reports. Forests NSW continues to modify the system to allow for better ways to collect, enter and present its data for the various reports that it produces.
		All. 1 (3)		Criteria and indicators were under review during the reporting period as part of the Forests Agreement review. Forests NSW has proceeded to incorporate many of the data items into the SEEDS database system to allow for reporting against these revised criteria and indicators from 2009—2010 onwards, while selected additional data will be available from 2008–2009.

	Due date	Region	FA section	Milestone	Progress		
Reporti	Reporting						
Annuall	ly	UNE, LNE, Eden Sthn	2.11.2 2.10.2 (E) Att. 9	Reporting on indicators to contribute to annual report to Parliament.	Continuing Reporting of the ESFM criteria and indicators has been incorporated into the NSW forest agreement reporting process for the UNE, LNE and Eden regions since 1999–2000, and from 2002–2003 for the Southern region. See Chapter 2 for information on the results of monitoring.		
Trial an	nd assessment						
2000	1 April	UNE, LNE, Eden	2.11.2 2.10.2 (E)	Preparation of evaluation framework for the criteria and indicators, to provide basis for five-year review.	Completed		
2002	30 September	Sthn	2.11.2	Preparation of an evaluation framework for the criteria and indicators.	Completed		
2004	1 April	UNE, LNE, Eden	2.11.2 2.10.2 (E)	Trial and assessment of indicators to ensure they are practicable, measurable, cost-effective and capable of being implemented at the regional level.	In progress The ESFM criteria and indicators will be assessed as part of the first review of forest agreements and IFOAs which commenced in June 2008.		
2007	30 April	Sthn	2.11.2	Review of indicators.	In progress Refer to milestone above.		
Data ma	anagement						
1999	1 October	UNE, LNE, Eden	6.13	Lodgement of all archival copies of data.	Completed		
2002	30 June	Sthn	6.13	Lodgement of all archival copies of data.	Completed		
2000	1 April	UNE, LNE, Eden	6.13	Data management agreement.	Completed		
2002	30 June	Sthn	6.13 Att. 6(2h)	Preparation of data management agreement.	Completed		

D	ue date	Region	FA section	Milestone	Progress
Ongoing	Ongoing		Att. 8 Att. 6(2h)	Developing and implementing an information system to facilitate the sharing of data for use by all agencies, including local government, involved in the management of forested land.	Completed
Research	l				
1999	1 December	UNE, LNE, Eden	2.11.3 2.10.3 (E)	For research projects that are in areas formerly on State forests and are now in national parks and nature reserves, SFNSW to provide NPWS with details of affected studies, location of sites and access requirements.	Completed
2002	30 June	Sthn	2.11.3	Continuing projects in former State forest areas to be documented and details provided to NPWS on affected studies, location of sites and access requirements.	Completed
2000	1 January	UNE, LNE, Eden	2.11.3 2.10.3 (E)	Preparation of strategy to outline all monitoring and research to be undertaken.	No reporting required While significant joint research occurs (e.g. on pests and weeds, threatened species and the Australian Research Committee project), a strategy has not been prepared. This milestone is considered no longer applicable, as research and science is being delivered by a range of government and 'cross agency' initiatives.
2003	30 June	Sthn	2.11.3 Att. 7	A strategy for important research and monitoring (including ESFM indicators) must be prepared jointly by SFNSW and NPWS.	No reporting required While significant joint research occurs (e.g. on pests and weeds, threatened species and the Australian Research Committee project), a strategy has not been prepared. This milestone is considered no longer applicable, as research and science are being delivered by a range of government and 'cross agency' initiatives.
Ongoing		Sthn	Att. 6(2f)	Improving the coordination and effective use of resources allocated to research for ESFM in New South Wales.	No reporting required Ongoing improvements do not need to be reported on an ongoing basis.
2004	1 March	UNE, LNE, Eden	2.11.3 2.10.3 (E)	Preparation of a compendium of forest research.	In progress Forests NSW publishes an annual report on its forest research activities, which includes a compilation of all publications and conference papers, published throughout the year. Forests NSW Annual Reports on research are available at: www.dpi.nsw.gov.au/research/forestry Forests NSW is a supporting member of the Cooperative Research Centre (CRC) for Forestry. The CRC for Forestry mission is to support a sustainable and vibrant Australian forestry industry through research, education, communication and collaboration. Other research relevant to NSW is provided through national organisations, including the CSIRO, Forest and Wood Products Australia, and the Joint Venture Agroforestry Program. It is available at: www.crcforestry.com.au/

D	Due date		FA section	Milestone	Progress	
2007	30 April	Sthn	2.11.3	A compendium of New South Wales forest research must be prepared.	In progress Refer to milestone above.	
Ongoing Eden 3.1 An operational research trial within the Eden region is proposed to be conducted by SFNSW and EPA associated with selective harvesting from some filter strips. Deferred Operational research trial not implemented duri		proposed to be conducted by SFNSW and EPA associated with selective harvesting from some filter	Deferred Operational research trial not implemented during 2008–2009.			
2010	31 December	Sthn	Att. 6(6a)	Continue to develop a suite of computational tools to help manage NSW forests at operational scales for a range of values, including wood yield, growth stage, water quality and quantity, natural and cultural heritage and wildlife habitat.	Continuing The spatial forest event management system GeoMaster (NZ Forest Research) has been implemented for native forest operations.	
2010	31 December	Sthn	Att. 6 (6b)	Develop, by the end of 2010, a model to predict recruitment and maintenance of habitat trees over time.	Continuing No further work on this model has occurred during 2008–2009.	
2007	30 April	Sthn	Att. 6 (6c)	Determine, based on review, field-based sampling and principles of sustainability to determine the range of silvicultural regimes and prescriptions that can be appropriately applied to each stratum of forest type.	In progress No progress to report.	
REPORT	ING AND REVI	EW				
Reporting	g on the forest a	greements				
Annually		UNE, LNE, Eden	6.9	Preparation of an annual report on the forest agreement, which will include a discussion on the achievement of milestones for ESFM and compliance with any IFOA.	Continuing This year (2008–2009) is the ninth year progress reports have been prepared for the NSW forest agreements and IFOAs for the UNE, LNE and Eden regions. Progress reporting is provided for each financial year for: the achievement of milestones in the forest agreements; monitoring data collected for the ESFM criteria and indicators; and compliance with the IFOAs.	
Annually		Sthn	6.9	The Minister administering the <i>Environmental Planning and Assessment Act 1979</i> must prepare an annual report on this agreement, which will include ESFM and compliance with any IFOA for the region.	Continuing This year (2008–2009) is the seventh year an annual report covering the implementation of the forest agreements for the Southern region has been prepared. Progress reporting is provided for: the achievement of milestones in the forest agreement; monitoring data collected for the ESFM criteria; and indicators and compliance with the IFOA.	

Du	ie date	Region	FA section	Milestone	Progress
Annually	As soon as practical after it is prepared	UNE, LNE, Eden, Sthn	6.9	Each annual report on the agreements is to be tabled in each House of Parliament by the Minister for Urban Affairs and Planning as soon as practical after its is prepared.	Continuing 1999–2000 Forest Agreement Annual Report – UNE, LNE and Eden regions – tabled. 2000–2001 Forest Agreement Annual Report – UNE, LNE and Eden regions – tabled. Forest Agreement Implementation Report 2001–2002 – UNE, LNE and Eden regions – tabled Forest Agreement Implementation Report 2002–2003 – UNE, LNE, Eden and Southern regions – tabled Forest Agreement Implementation Report 2003–2004 – UNE, LNE, Eden and Southern regions – tabled). Forest Agreement Implementation Report 2004–2005 – UNE, LNE, Eden and Southern regions – tabled). Forest Agreement Implementation Report 2005–2006 – UNE, LNE, Eden and Southern regions – tabled). Forest Agreement Implementation Report 2006–2007 – UNE, LNE, Eden and Southern regions – tabled Forest Agreement Implementation Report 2007–2008 – UNE, LNE, Eden and Southern regions – to be tabled. Forest Agreement Implementation Report 2008–2009 – UNE, LNE, Eden and Southern regions – The current report.
Review		•			
Ongoing	Every five- year review	UNE, LNE, Eden	6.8	Ministers to review the performance of the forest agreements and IFOAs, including their effectiveness and efficiency in meeting Government's goals and policies.	Continuing The first review of NSW Forest Agreements and IFOAs commenced in June 2008. The terms of reference for the review have been finalised and a draft review report is currently being prepared.
2007	30 April 2007 and every five years	Sthn	6.8	Every five years after the agreement is signed, a review of the performance of the agreement must be undertaken by the Ministers to assess the effectiveness and efficiency of the agreement (and approval) in meeting the NSW Government's goals and policies.	Continuing Refer to milestone above.
Ongoing	Every five- year review	UNE, LNE, Eden	6.8	Parties to ensure the public are given an opportunity to participate in the review (public notification and inspection).	No reporting required The public will be given an opportunity to participate in the review in accordance with the requirement of the Forestry and National Park Estate Act 1998.
2005	31 December and every five years	Sthn	6.8	The public is to be given an opportunity to participate in the review of the agreement.	No reporting required Refer to milestone above.
Ongoing	12 months after each five-year review	UNE, LNE, Eden	6.8	Report on the outcome of the Ministers' performance review to be tabled in each House of Parliament 12 months after the review.	No reporting required Not required until 12 months after the review is complete.

D	ue date	Region	FA section	Milestone	Progress
2007	31 July and every five years	Sthn	6.8	A report on the outcome of each review must be tabled in each House of Parliament within 12 months after the end of the relevant reporting period.	No reporting required Refer to milestone above.

Notes: (E) Reference in Eden Region Forest Agreement; (S) Reference in Southern Region Forest Agreement

Appendix 2: Threatened flora and fauna species and populations recorded in the new additions within UNE and LNE

	Flora	
Scientific Name	Common Name	Legal Status
Acronychia littoralis	Scented acronychia	E
Angophora inopina	Charmhaven apple	V
Callistemon linearifolius	Netted bottle brush	V
Cryptostylis hunteriana	Leafless tongue orchid	V
Diuris praecox	Rough double tail	V
Eucalyptus camfieldii	Heart-leaved stringybark	V
Eucalyptus glaucina	Slaty red gum	V
Eucalyptus parramattensis subsp. decadens	Eucalyptus parramattensis subsp. decadens	V
Eucalyptus parramattensis subsp. parramattensis – endangered population	Eucalyptus parramattensis subsp. parramattensis population in the Wyong and Lake Macquarie LGAs	EP
Grevillea parviflora subsp. parviflora	Small-flower grevillea	V
Grevillea quadricauda	Four-tailed grevillea	V
Melaleuca biconvexa	Biconvex paperbark	V
Rulingia prostrata	Dwarf kerrawang	E
Rutidosis heterogama	Heath wrinklewort	V
Tetratheca juncea	Black-eyed Susan	V

Kev:

V: Species or subspecies listed as Vulnerable under Schedule 2 of the NSW TSC Act.

E: Species or subspecies listed as Endangered under Schedule 1 of the NSW TSC Act.

EP: Population listed as Endangered under Schedule 1 of the NSW TSC Act.

	Fauna	
Scientific Name	Common Name	Legal Status
Callocephalon fimbriatum	Gang-gang cockatoo	V
Calyptorhynchus lathami	Glossy black-cockatoo	V
Chalinolobus dwyeri	Large-eared pied bat	V
Chalinolobus nigrogriseus	Hoary wattled bat	V
Chalinolobus picatus	Little pied bat	V
Climacteris picumnus	Brown treecreeper	V
Crinia tinnula	Wallum froglet	V
Dasyurus maculatus	Spotted-tailed quoll	V
<i>Dromaius novaehollandiae</i> - endangered population	Emu population in the NSW North Coast Bioregion and Port Stephens LGA	EP
Ephippiorhynchus asiaticus	Black-necked stork	Е
Falsistrellus tasmaniensis	Eastern false pipistrelle	V
Hoplocephalus stephensii	Stephens' banded snake	V
Lathamus discolor	Swift parrot	E
Lophoictinia isura	Square-tailed kite	V
Melithreptus gularis gularis	Black-chinned honeyeater (eastern subspecies)	V
Miniopterus australis	Little bentwing-bat	V
Miniopterus schreibersii oceanensis	Eastern bentwing-bat	V
Mormopterus Species 6	Hairy-nosed freetail bat	E
Mormopterus beccarii	Beccari's freetail-bat	V
Mormopterus norfolkensis	Eastern freetail-bat	V
Myotis adversus	Large-footed myotis	V
Neophema pulchella	Turquoise parrot	V
Ninox connivens	Barking owl	V
Ninox strenua	Powerful owl	V
Nyctophilus timoriensis	Eastern long-eared bat	V
Pandion haliaetus	Osprey	V
Petaurus australis	Yellow-bellied glider	V
Petaurus norfolcensis	Squirrel glider	V
Pezoporus wallicus wallicus	Eastern Ground parrot	V
Phascogale tapoatafa	Brush-tailed Phascogale	V
Phascolarctos cinereus	Koala	V
Pomatostomus temporalis temporalis	Grey-crowned babbler (eastern subspecies)	V
Pteropus poliocephalus	Grey-headed flying fox	V
Ptilinopus magnificus	Wompoo fruit-dove	V

Fauna				
Scientific Name	Common Name	Legal Status		
Pyrrholaemus saggitatus	Speckled warbler	V		
Saccolaimus flaviventris	Yellow-bellied sheathtail-bat	V		
Scoteanax rueppellii	Greater broad-nosed bat	V		
Stagonopleura guttata	Diamond firetail	V		
Tyto novaehollandiae	Masked owl	V		
Tyto tenebricosa	Sooty owl	V		
Xanthomyza phrygia	Regent honeyeater	E		

Key:
V: Species or subspecies listed as Vulnerable under Schedule 2 of the NSW TSC Act.
E: Species or subspecies listed as Endangered under Schedule 1 of the NSW TSC Act.
EP: Population listed as Endangered under Schedule 1 of the NSW TSC Act.

Appendix 3 PWG responsibilities and major policies (2008–09)

Name of institutions	Responsibilities for forests (and tenure)	Major non-legislative policies relevant to PWG
State/ Territory		
PWGDECC NSW	Responsible for the management of lands reserved as a	Access to Inholdings Policy (Feb 03)
	range of reserve categories under the NPW Act so as to:	Adaptive Reuse Leases Policy (Feb 03)
	conserve nature;	Beekeeping Policy (Jul 02)
	conserve objects, places and features of cultural value;	Boundary Fencing Policy (Nov 04)
	foster public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation;	Conservation Management Plan Policy and Guidelines (Jul 02)
	Each reserve category is managed in accordance with a	Cultural Heritage Conservation Policy (2001)
	range of principles specific to the reserve category, and these include variously:	Cultural Heritage Community Consultation Policy (2001)
	conservation of biodiversity and the maintenance of ecological function;	Cultural Heritage Information Policy (2001)
	protection of geological and geomorphological features and	Cultural Heritage Strategic Policy (Dec 06)
	natural phenomena and the maintenance of natural landscapes;	Cycling Policy (Jun 03)
	protection of the ecological integrity of ecosystems for present and future generations;	Discovery Programs Policy (Sep 03)
		Filming and Photography Policy (Jul 02)
	conservation of places, objects, features and landscapes of cultural value;	Fire—Aircraft Operations Policy (FMM 4.4)
	promotion of public appreciation and understanding of a reserve's natural and cultural heritage values;	Fire—Bans and Closures Policy (FMM 4.13)
	provision for sustainable visitor use and enjoyment of a reserve and its values (including opportunities for outdoor	Fire—Briefing, Debriefing and Incident Analysis Policy (FMM 4.16)
	recreation, and including adaptive reuse of buildings or structures) that is compatible with the reserve's values;	Fire—Burning Operations Policy (FMM 4.8)
	for lands reserved as Aboriginal areas, provision for the use of the reserve by Aboriginal people for cultural use;	Fire—Bush-Urban Interface Fire Management Policy (FMM 3.10)
	provision for appropriate research and monitoring.	Fire Communications Equipment Policy (FMM 3.2)
		Fire Communications Planning Policy (FMM 3.3)
		Fire—Community Relations and Public Affairs Policy (FMM 6.4)
		Fire Control Lines Policy (FMM 3.9)
		Fire—Coordinated Fire Management Policy (FMM 4.2)
		Fire—Dangerous Goods Policy (FMM 6.5)

Fire Detection Policy (FMM 2.3) Fire—Earthmoving Equipment Policy (FMM Fire—Environmental Impact Assessment Policy (FMM 2.5) Fire Equipment Standards Policy (FMM 3.7) Fire—Fauna Rescue Policy (FMM 5.2) Fire—Finance and Insurance Policy (FMM Fire—Fireground Maps and Marking Policy (FMM 4.17) Fire—Fire Investigation Policy (FMM 5.3) Fire—Fuel Management Policy (FMM 2.4) Fire—Learning and Development Policy (FMM 3.11) Fire Management Planning Policy (FMM Fire—National Medal Policy (FMM 6.6) Fire—Natural Area Fire Management Policy (FMM 4.6) Fire—Out-of-Area Firefighting Support Policy (FMM 4.5) Fire—Personal Firefighting Equipment Policy (FMM 3.8) Fire—Personal Health and Fitness Policy (FMM 3.12) Fire Policy Development Policy (FMM 1.2) Fire—Post Fire Rehabilitation Policy (FMM 5.1) Fire—Prescribed Burn Planning Policy (FMM 4.7) Fire Preparedness Policy (FMM 3.1) Fire—Protection of Cultural Heritage Policy (FMM 4.11) Fire—Protection of Natural Heritage Policy (FMM 4.12) Fire—Protection of NPWS Facilities Policy (FMM 4.10) Fire—Remote Area Fire Team Deployment Policy (FMM 4.14) Fire—Reporting and Documentation Policy

Fire—Research Policy (FMM 2.6)

(FMM 4.15)

Fire—Roads and Trails Policy (FMM 2.2)

Fire—Safety and Welfare Policy (FMM 6.3)

Fire—Smoke Management Policy (FMM

3.4)
Fire Suppression Chemicals Policy (FMM 4.9)
Fire—Visitor Safety Policy (FMM 3.6)

Fire—Weather Information Policy (FMM 3.5)

Fire—Working Conditions Policy (FMM 6.2)

Firearms Manual

Firewood Policy (Jul 02)

Hang Gliding and Paragliding Policy (Nov 04)

Leases for Permanent Residential Accommodation Policy (Feb 05)

Management of Native Birds that Show Aggression to People Policy and Guideline (Sep 03)

Management of Possums Causing Disturbance to Residential or Commercial Property Policy (Nov 05)

Memoranda of Understanding Policy (Jul 02)

Military Training Activities Policy (May 08)

Mitigation of Commercial Crop Damage by Flying Foxes Policy and Guideline (Jun 05)

Moveable Heritage Policy (2002)

Neighbour Relations Policy (Jul 02)

Orienteering, Rogaining and Geocaching Policy (Sep 02)

Pets Policy (Aug 02)

Park Names Policy (Oct 02)

Recreational Horse Riding Policy (May 06)

Rehabilitation of Fauna Policy (Jul 02)

Repatriation of Aboriginal Cultural Material Policy (2002)

Revocation of Land Policy (Jul 02)

Threatened Species Information Disclosure Policy (Feb 2005)

Threatened Species Recovery Plan Preparation Policy and Procedure Statement (May 2001)

Trade of Fauna Policy (Jul 02)

Translocation of Threatened Fauna in NSW Policy (Oct 2001)

Vehicle Access Policy (Jul 02)

Visitor Safety Policy (Jul 02)