



NSW Forest Agreements and Integrated Forestry Operations Approvals Implementation Report 2012–2013

**Upper North East, Lower North East, Eden, Southern,
Riverina Red Gum, South Western Cypress, and
Brigalow–Nandewar regions**

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Overview

This is the fourteenth annual report on the implementation of the NSW Forest Agreements and integrated forestry operations approvals (IFOAs), prepared under Section 69H of the *Forestry Act 2012*¹ and the NSW IFOAs.

This publication reports on ecologically sustainable forest management (ESFM), compliance with environmental conditions, and achievement of important milestones and undertakings in NSW coastal forest regions (eastern NSW IFOAs). It also compiles information about timber harvesting, compliance, and the achievement of milestones and undertakings for the Riverina Red Gum, Brigalow–Nandewar, and South Western Cypress regions (western NSW IFOAs).

NSW Forest Agreements and IFOAs provide a strategic and operational framework to manage public forests in NSW, with the overall objective of achieving forest conservation and ESFM.

Implementation of the agreements and approvals is a cooperative undertaking between:

- NSW Environment Protection Authority (EPA)
- Office of Environment and Heritage (OEH), including the National Parks and Wildlife Service (NPWS)
- Forestry Corporation of NSW (formerly Forests NSW)
- Fisheries NSW (now a division within the Department of Primary Industries).

What is reported

This report provides a snapshot of progress on the implementation of the NSW Forest Agreements and IFOAs for the period 1 July 2012 to 30 June 2013.

Chapter 1 provides a summary of results of monitoring important ESFM criteria and indicators for forestry areas in NSW coastal regions (and timber supply in coastal and western IFOA regions).

Chapter 2 outlines compliance with IFOAs.

Chapter 3 provides information on progress of key milestones and undertakings contained within the Forest Agreements and IFOAs.

Streamlined reporting format to link with other reporting

To avoid duplication, this annual report has been streamlined to link with other published reports, including:

- 2012–2013 agency annual reports which report a number of statewide highlights (including but not restricted to forest regions) – the [Premier and Cabinet Annual Report 2012–2013](#) (Department of Premier and Cabinet 2013) which contains Office of Environment and Heritage performance highlights, [Environment Protection Authority Annual Report 2012–13 \(EPA 2013b\)](#), and the [Forestry Corporation Annual Report 2012–13 \(FCNSW 2013b\)](#).
- The [Forestry Corporation Sustainability Supplement 2012–13](#) (FCNSW 2013c) complements the Forestry Corporation Annual Report. The Sustainability Supplement provides reporting based on international Montreal Process Criteria and Indicators (published in 1998 and reviewed in 2008). The Montreal Criteria and Indicators underpin Forestry Corporation’s Forest Management System and Australian Forestry Standard certification.

¹ Formerly section 21 of the *Forestry and National Park Estate Act 1998*

- The OEH [State of the Parks program](#) is based around a triennial online survey that asks park managers to provide current information about each of their parks. The information collected helps park managers monitor the condition of protected areas, identify pressures on them, and evaluate how effectively the areas are being managed. The program is also a major information source for a large number of reporting requirements. The latest online survey was undertaken in 2013.
- The [Five and Ten Year Review of NSW Forest Agreements and IFOAs](#) (DECCW 2010) assessed the implementation of the provisions of the agreements, and whether integrated forestry operations approvals were effective in achieving their purpose. The 2010 review identified milestones that would continue to be reported, and identified other milestones and undertakings that were complete or delivered through alternative mechanisms and did not need to be reported further. As a result of the review the EPA made comprehensive amendments to the coastal IFOAs, which commenced on 1 March 2013.
- Australian Government [State of the Forests reporting](#) – While the current annual report updates progress on selected sustainable forest management indicators, more comprehensive reporting against ESFM criteria and indicators occurs at five-yearly intervals as part of the State of the Forests report. Among other things, the Australia-wide report provides information on public, private and leasehold forests; native forests and plantations; forests managed for conservation and forests managed for wood production; and forests important for Australia's indigenous people. The most recent [State of the Forests 2013 Report](#) (published in March 2014) covers the period 2006–2011.

What regions are reported

This report updates compliance, achievement of ESFM and achievement of milestones in the four eastern NSW forestry regions; and compliance, timber harvesting and achievement of milestones in the three western IFOA regions.

The forestry regions, mapped below, are:

- The Upper North East (UNE), Lower North East (LNE), Eden and Southern regions with corresponding Forest Agreements and IFOAs
- Brigalow–Nandewar region, including the area under a Community Conservation Area Agreement (CCA Agreement)
- Riverina Red Gum region
- South Western Cypress region.

Remaking of the coastal IFOAs

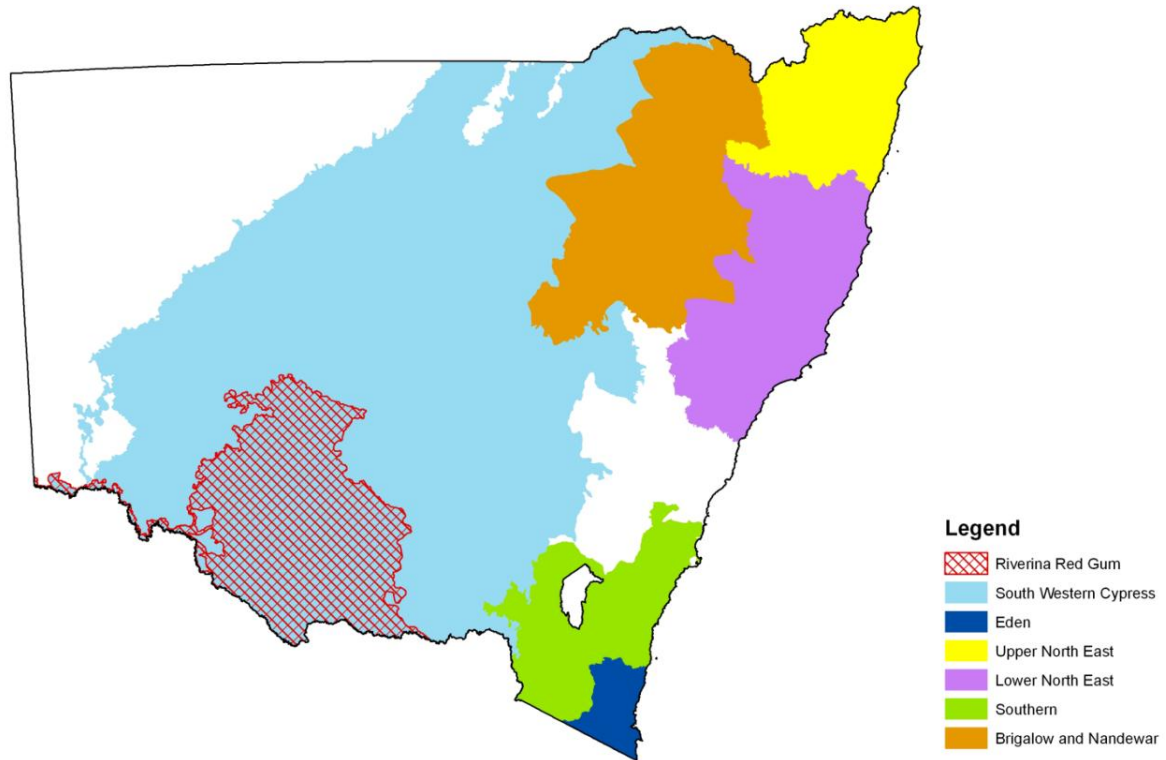
The current coastal IFOAs contain over 2000 conditions over 350 pages. Rather than being 'integrated' approvals, they consist of four separate licences, comprising general operating conditions, an Environment Protection Licence (EPL), a Threatened Species Licence (TSL) and a Fisheries Threatened Species Licence (FL). In contrast, the later Western IFOAs better integrate the conditions of the various licences.

The NSW Government is currently remaking the IFOAs for the Eden, Southern, Upper and Lower North East coastal regions of NSW and expects to finalise new IFOAs for these areas in 2014.

The NSW Government is committed to delivering a single new IFOA for coastal NSW. The objectives of the coastal IFOAs remake are to reduce the costs of implementation and

compliance and to improve the clarity and enforceability of IFOA conditions. The NSW Government has committed to delivering these objectives with no net change to wood supply and with maintenance of environmental values.

Integrated Forestry Operations Approval Regions



Note: The four coastal regions have Forest Agreements and IFOAs in place. The three inland regions have IFOAs in place but not Forest Agreements. Also note that the Riverina Red Gum region overlaps with the South Western Cypress region but they have separate IFOAs in place for their operations.

NSW Forest Agreements and IFOAs (coastal regions)

Forest Agreement/IFOA	Signed	In place until
Eden region Forest Agreement	4 March 1999	4 March 2019
LNE region Forest Agreement	5 March 1999	4 March 2019
UNE region Forest Agreement	5 March 1999	4 March 2019
Southern region Forest Agreement	3 May 2002	3 May 2022
IFOA for the Eden region	21 December 1999	31 December 2018
IFOA for the LNE region	21 December 1999	31 December 2018
IFOA for the UNE region	21 December 1999	31 December 2018
IFOA for the Southern region	3 May 2002	31 December 2020

IFOAs established for western forest regions

Agreement/IFOA	Commenced	In place until
Brigalow and Nandewar Community Conservation Area Agreement (CCA Agreement)	11 June 2009	10 June 2016
Brigalow–Nandewar IFOA	23 October 2010	31 December 2025
Riverina Red Gum IFOA	1 January 2011	31 December 2030
South Western Cypress IFOA	1 July 2011	31 December 2025

Contributing agencies

As of 1 January 2013 the former Forests NSW became a state owned corporation and was renamed the Forestry Corporation of NSW (referred to in this report as Forestry Corporation, and as FCNSW in the Appendices).

Other agencies contributing to this report include the NSW Environment Protection Authority (EPA), the Office of Environment and Heritage (OEH) including the National Parks and Wildlife Service (NPWS), Department of Primary Industries (DPI), and NSW Fisheries which is also part of DPI.

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1 2012–2013 snapshot of ecologically sustainable forest management

1.1 Introduction

Monitoring of indicators is an integral component of ecologically sustainable forest management (ESFM). ESFM criteria and indicators were established in the NSW Forest Agreements (for coastal regions) to track changes in key social, economic and environmental values over time.

ESFM is defined in the NSW Forest Agreements as the guiding philosophy of forest conservation and management, and is based on the recognition that forests hold social, economic and environmental values in society. ESFM performance indicators reflect these key values.

The Forestry Act 2012 (69H) requires ESFM reporting annually on each Forest Agreement (in place only for coastal regions). The current annual report provides information on a snapshot of ESFM criteria and indicators for coastal regions including mandatory timber harvesting volumes and wood products and other selected ESFM indicators that often change annually, such as threatened species monitoring.

Comprehensive reporting against ESFM criteria and indicators occurs every five years as part of Australian Government [State of the Forests reporting](#).

Forest Agreements are not in place for the western regions but delivery of timber commitments under western IFOAs is reported. A range of other ESFM indicators may also be reported for western regions, especially as part of the Australian [State of the Forests reporting](#).

1.2 Biodiversity

Additions to the national parks estate

OEH reports on new reserves and additions statewide in the Office of Environment and Heritage performance highlights (contained in the [Premier and Cabinet Annual Report 2012–2013](#); Department of Premier and Cabinet 2013).

Native vegetation clearing

The *NSW Annual Report on Native Vegetation* provides OEH's summary of actions by private and public land managers to conserve and manage native vegetation including monitoring vegetation change, compliance and enforcement, and private native forestry.

At the time of writing, the most recent [NSW Annual Report on Native Vegetation](#) was 2010.

Forest dwelling species – monitoring and survey

Parks managed by OEH

The second year of the broad-scale fauna monitoring program known as WildCount was successfully planned and implemented by NPWS in 2012–2013. Remote motion sensitive cameras were deployed at a total of 201 sites across eastern NSW, 197 of which were on park. In 2013 four Voluntary Conservation Agreement properties had WildCount sites established on them; two in the Southern region, one in the LNE region and one in the UNE region. In the 2013 field season 110 species were recorded by cameras: 43 mammals, 58 birds, 5 reptiles, and 4 amphibians. Data collected permitted occupancy

modelling to continue for 16 species to assist in understanding species distribution trends over time. It is anticipated that future reporting will include information on these species distribution trends as most of these species occur within the Forest Agreement and IFOA regions.

Across the Southern region NPWS established 49 WildCount sites in 31 parks (some parks had more than one site located within them). Fifty-four species were recorded including three threatened species.

Across the UNE and LNE regions NPWS established 39 WildCount sites in 32 parks. Thirty-nine species were recorded including six threatened species.

Across the Eden region NPWS established nine WildCount sites in four parks. Sixteen species were recorded including two threatened species.

In addition to the primary objective of broad-scale monitoring for widespread and common species, a volunteer program was trialled in 2013 with 20 participants from across NSW. The volunteers assisted WildCount team leaders in the field and at the Hurstville office undertaking various tasks, primarily over the WildCount field season which runs for three months.

NPWS has approved a third year of the WildCount survey for implementation in 2014. The 2014 survey will build on 2012 and 2013 surveys and will continue to incorporate opportunities for the public to be involved.

Long-term monitoring sites in southern parks

Several long-term monitoring projects run by research institutions and NPWS continued in the Southern region in 2012–2013:

- **Broad-headed snake – population ecology and biology studies**

The University of Sydney and University of Technology have conducted capture-mark-recapture studies of broad-headed snake for over 20 years at Yalwal section of Morton National Park and adjacent Crown lands. Over these years a number of peer-reviewed scientific papers and research degrees have produced significant findings that have informed recovery plans for this species and population. The population is largely threatened by significant human-sourced threats. Continued monitoring of this population and collaboration with researchers is informing NPWS and NSW Trade and Investment (Crown Lands) about conservation and management of the population.

- **Small mammal monitoring project**

NPWS has an ongoing small mammal monitoring project focused on long-nosed potoroo at Barren Grounds Nature Reserve and Budderoo National Park. Parts of Budderoo NP were added to the reserve system as a result of the Southern Forest Agreement. A healthy population of potoroo has been identified and reserve management is taking this population into account in its pest and fire management decisions. Monitoring of this population is expected to continue.

- **Comprehensive reserve-scale fauna survey**

In 2012–2013 NPWS staff undertook a reserve-wide fauna survey in Bimberamala Nature Reserve, established under the Eden Forest Agreement. The survey increased the number of fauna species detected in the park by about 30 per cent, and identified several rare or threatened species including greater glider and golden-tipped bat within a landscape essentially dominated by production forests.

Case study: Forestry Corporation – Australia’s largest colony of eastern horseshoe bats in Ourimbah State Forest

Fifteen years of monitoring data has confirmed Australia’s largest known roost of eastern horseshoe bats is continuing to thrive in the Ourimbah State Forest, in the LNE region.

Dr Brad Law, forest scientist at the NSW Department of Primary Industries, instigated the monitoring program after local forestry staff discovered the colony. Dr Law said his 15th annual population survey in December 2013 found the population is around the same size it was when first surveyed.



Image: Eastern horseshoe bats, Dr Brad Law

When the colony was found, harvesting plans in the area were modified to ensure a large exclusion zone was placed around the roost and an annual monitoring program was developed. While the population has fluctuated over the past 15 years, possibly because of the severe drought of the 2000s, the 2013 survey found the number of bats to be almost identical to when the project began – showing the population is sustaining itself in the forest.

Ourimbah State Forest is a working forest managed for timber production and a wide variety of recreational pursuits, and this data adds to the bank of evidence showing these activities can be managed sustainably while promoting forest biodiversity.

Forest growth stages

Figure 1 shows predicted volumes for all Forestry Corporation’s main timber products for native forests and hardwood plantations over the current century. During the 2010–2013 period the actual volume harvested was lower than the predicted maximum, mainly due to the global economic crisis slowing uptake by industry. This, combined with major weather events that constrained supply to customers, contributed to ten per cent less timber harvested over the period than anticipated. The next round of forest modelling will incorporate this difference to enable Forestry Corporation to refine both forest management and market predictions. The drop in volumes from the 2062–2065 period is a result of this model only accounting for the current hardwood plantation crops, rather than subsequent rotations.

The case study below provides an overview of forest growth modelling by Forestry Corporation.

Because the areas of forest growth stage categories do not change significantly over short periods, growth stages are not reported annually in the current report. Refer to the 2009–2010 and the 2013 Australian Government [State of the Forests 2013 report](#) for additional growth stage information.

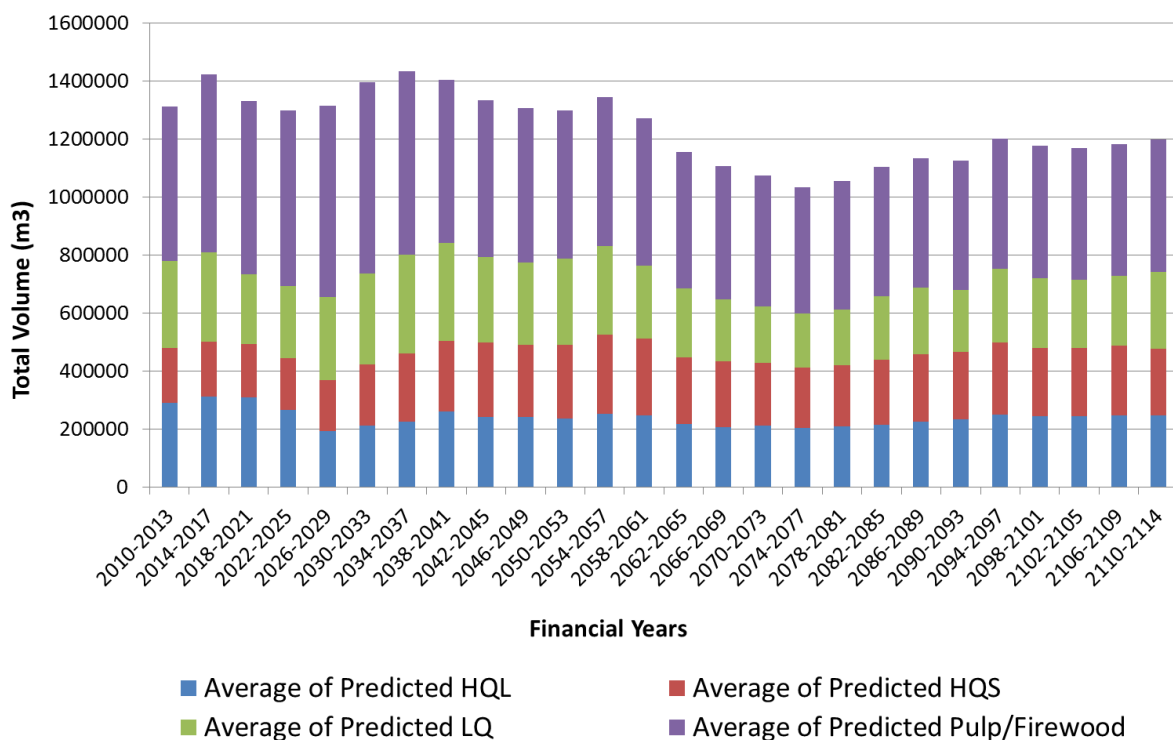


Figure 1: Predicted Forestry Corporation harvested timber volumes by quality class, 2010–2114

Source: Forestry Corporation

1.3 Maintaining the productive capacity of forests

Land available for timber production

Forestry Corporation uses a land classification system called Forest Management Zoning (FMZ). The FMZ system is detailed in [Managing Our Forests Sustainably: Forest Management Zoning in NSW State Forests](#) (SFNSW 1999). The FMZs are mapped and are appended to Forestry Corporation ESFM Plans².

² ESFM plans can be found at: www.forestrycorporation.com.au/management/sustainable-forest-management/esfm

Table 1 shows the area of state forest in each IFOA region, as well as 166,721 hectares of state forests which are not within the IFOA regions (for example, Goulburn sub-region and some small and disjunct forest areas in NSW).

The table includes native forests (1,815,180 hectares) and plantation forests (386,149 hectares) totalling 2,201,329 hectares of land managed by the Forestry Corporation.

Note that 238 hectares of state forests were revoked in 2012–2013. The largest revocation was just over 200 hectares, which was a compulsory acquisition by Nambucca Shire Council for the purpose of building a dam. Other revocations included a small number of redundant buildings and lots for sale, along with compulsory acquisitions.

Another small decrease in tenure area reported since the previous report (<100 hectares) reflects minor corrections in the GIS data.

Table 1: Total areas (hectares) of state forests by IFOA or Forest Agreement region and operational division

	Hardwood Forests Division	Softwood Plantations Division	Total state forest in IFOA region
Southern	268,391	153,949	422,340
Brigalow–Nandewar	276,090	1,600	277,690
Eden	164,196	42,736	206,932
Lower North East	481,897	15,445	497,342
Riverina Red Gum	36,775		36,775
South Western Cypress	152,845		152,845
Upper North East	417,127	23,557	440,684
Total for reportable areas	1,797,321	237,287	2,034,608
Goulburn sub-region		44,666	44,666
Other state forests	17,859	104,196	122,055
Total state forests area	1,815,180	386,149	2,201,329

Figure 2 shows the total number of hectares of each FMZ category across all NSW IFOA regions. Land for conservation purposes is classified as FMZ 1, 2 or 3A. Modified harvesting is permitted in FMZ 3B areas, while FMZ 4 areas are native forest areas available for timber production³. Zones 5, 6, 7 and 8 correlate with hardwood plantations, softwood plantations, non-forestry use zones (i.e. infrastructure, such as power lines and transmission towers), and land for further assessment, respectively.

³ For reporting purposes, in 2012–2013 the FMZs within the Softwood Plantations Division were allocated to the most relevant categories rather than being grouped under FMZ 6 softwood planted forest. This has resulted in increases to the areas not available for harvesting in some FMZs. The estimate for harvestable areas is derived by excluding all identified non-harvestable areas from the total forest estate. For coastal regions, additional areas are removed from the harvestable area based on models developed from studying the difference between mapped exclusions and actual exclusions identified in harvesting operations. For the planted forests estate, net stocked area, clearfell and potential plantable areas are all categorised as harvestable. The bulk of non-harvestable area is made up of retained vegetation, usually native forest.

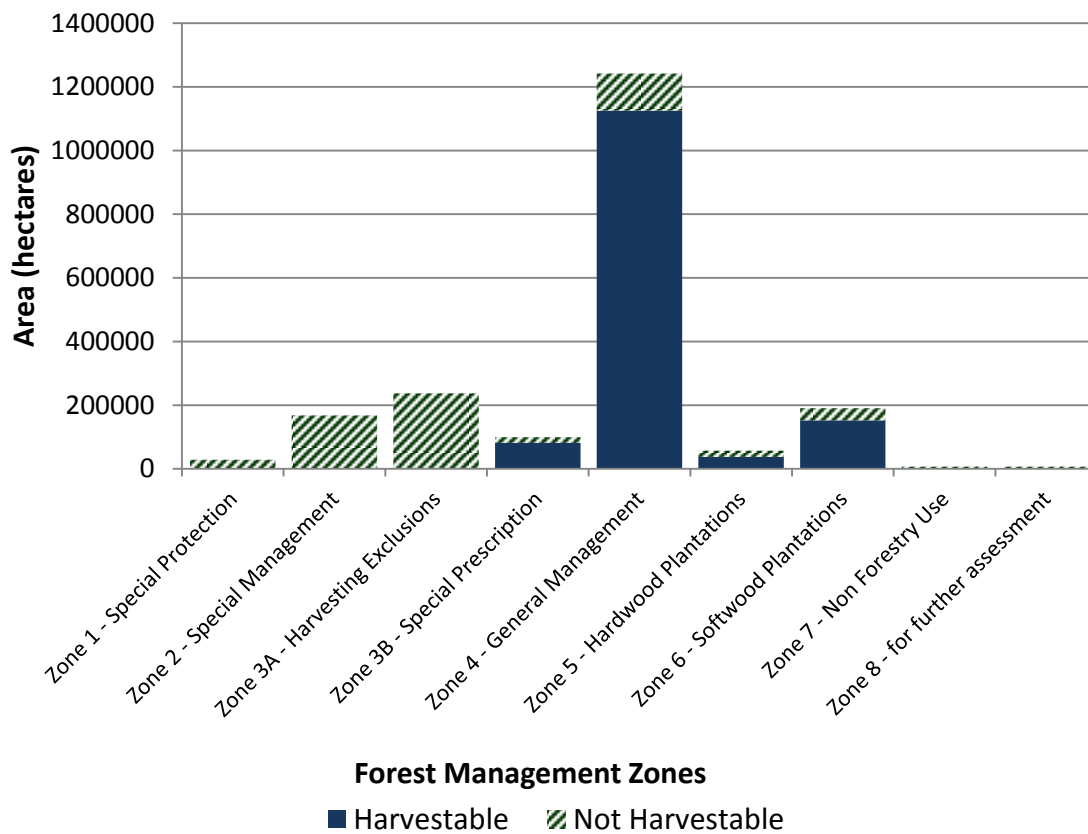


Figure 2: Respective areas of Forest Management Zones in all NSW IFOA regions (western and coastal) and proportions that can and cannot be harvested

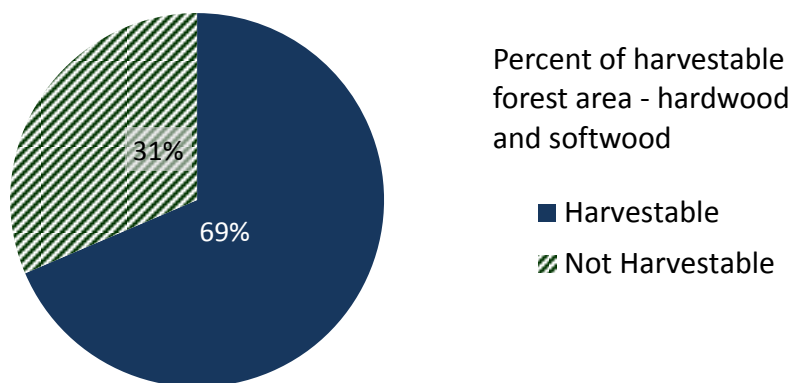


Figure 3: Proportion of total Forest Management Zones in all NSW IFOA regions (western and coastal) that can and cannot be harvested

Note: The estimate for harvestable areas is derived by excluding all identified non-harvestable areas held on the corporate geo-database. For coastal regions, a further percentage is then removed from the harvestable area based on the net harvest modifier models. These modifiers have been developed from intensive harvesting studies that determined the relationship between mapped exclusions and actual exclusions identified in harvesting operations.

Case study: Modelling hardwood forest growth

Forestry Corporation manages state forests sustainably to ensure that timber supply and the environment more broadly are maintained over the long term. The modelling system used is called the Forest Resource and Management Evaluation System (FRAMES), a toolkit that helps to manage hardwood timber production and harvest in a sustainable manner.

The system incorporates complex mathematics, scientific research, and thousands of field measurements, to predict the long-term availability of timber, and plan harvesting operations. An aim of the work is to maintain a full range of growth stages from regeneration to maturity throughout the state forest estate. Large areas retained on state forests in reserves or otherwise excluded from harvesting help to ensure that the full range of environmental features and growth stages can develop and are maintained into perpetuity. FRAMES models are used to predict the volume of timber that can be harvested each year, taking into consideration appropriate silvicultural and conservation prescriptions.

The central component of these wood flow calculations is a bank of growth models that describe how fast our forests are growing. These models have been developed using data from approximately two thousand native forest permanent growth plots where features such as tree sizes, species and quality have been recorded, along with local site characteristics such as slope, aspect and site productivity. This measurement program, which started in the 1970s, includes over 60,000 individual trees, which have been repeatedly measured every five years to inform predictions about how fast trees grow in various locations and under various management regimes.

Figure 1 shows predicted volumes for all of Forestry Corporation's main timber products but excludes products derived from subsequent hardwood plantation rotations due to the valuation methodology used.

State forest estate – volumes and quantities specified in IFOAs

The coastal and western IFOAs specify the types, volumes and quantities of native forest timber products that Forestry Corporation is permitted to harvest. Actual versus specified volumes (or tonnage) harvested are reported here.

For most products, the IFOAs permit annual variations to the specified volumes to accommodate changes in environmental and economic circumstances.

Timber harvested in coastal IFOA areas

Actual volumes and quantities harvested versus volumes and quantities specified in IFOAs

Figure 4 depicts actual volumes and quantities harvested in each IFOA region as a percentage of the volumes and quantities specified in IFOAs. The UNE, LNE and Southern lines are based on extraction of high quality large sawlogs and large veneer logs. For consistency with earlier reports, these exclude poles, piles and girders (which are also specified in the IFOAs).

In the **UNE region** during 2012–2013, 54,013 m³ of high quality large sawlogs and large veneer logs were harvested from Forestry Corporation native and hardwood plantation forests. This represents 49.6 per cent of the permitted volume (109,000 m³ per year, as specified in the UNE IFOA) and is less than the amount harvested in the previous year. Additionally, Forestry Corporation supplied 8794 m³ of poles, piles and girders.

For the **LNE region**, high quality large sawlogs and large veneer logs harvested from the region during 2012–2013 totalled 101,937 m³, representing 63.7 per cent of the committed volume of 160,000 m³ per annum, as specified in the LNE IFOA. This is a slight increase on the amount harvested in the previous year. Additionally, Forestry Corporation supplied 33,824 m³ of poles, piles and girders.

High quality log volumes harvested in the **Eden region** in 2012–2013 totalled 18,874 m³, which represented 82.1 per cent of the committed volume (23,000 m³ in accordance with the Eden IFOA). This is a small increase on the amount harvested in the previous year. No piles, poles or girders were extracted in the Eden region.

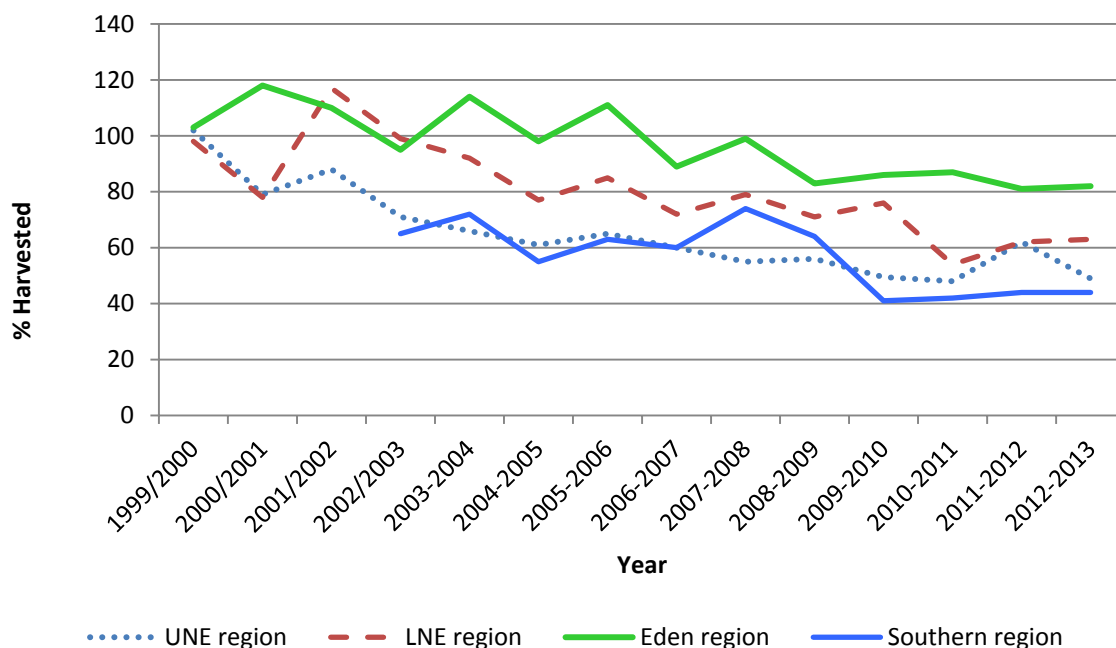


Figure 4: Log volumes harvested as a percentage of volumes specified in IFOAs – all coastal regions

Source: Forestry Corporation data

* All quota sawlogs harvested from native forest.

** Timber harvesting in Southern region under the terms of NSW Forest Agreements and IFOA began in 2002. South Coast sub-region and Tumut sub-region figures have been combined. Separately, the percentages of committed volumes are 82.1% in the South Coast sub-region and only 5% in Tumut sub-region.

In 2012–2013, 203,806 tonnes (t) of pulp grade timber were harvested in Eden region, or 59.1 per cent of the specified volume of 345,000 t per year. Percentages of pulp grade timber sold from Eden region since 1999–2000 are shown in Figure 5. The decrease in pulp production reflects competitive pressures from timber imports, specification changes and some market weaknesses during the reporting period.

The Eden IFOA prohibits forest operations (excluding thinning) from being undertaken for the sole purpose of producing pulp grade timber, so fluctuations in other timber markets also impact the pulp market.

High quality large logs harvested in Southern region totalled 42,560 m³. This represents 44.1 per cent of the permitted volume, based on a permitted volume of 96,500 m³ per year (48,500 m³ from the South Coast sub-region and 48,000 m³ from the Tumut sub-region). The quantities of high quality large logs reported by sub-region, are South Coast sub-region: 37,080 m³ (76.5 per cent of committed volume) plus 278 m³ of poles, piles and

girders; and Tumut sub-region: 5480 m³ (11.4 per cent of committed volume). This is slightly more than the amount harvested last year.

Volumes and quantities not specified in the FAs and IFOAs

Timber produced from softwood plantations and certain timber products from hardwood plantations and native forest operations, such as low quality sawlogs, firewood and landscape timbers, are not specified in IFOAs.

In 2012–2013, around 380,000 m³ of non-specified logs were harvested from Forestry Corporation native forests and hardwood plantations across all coastal Forest Agreement and IFOA regions. Additionally, around 180,000 t of non-specified pulp grade timber was produced across all coastal regions (see Table 2 for further detail).

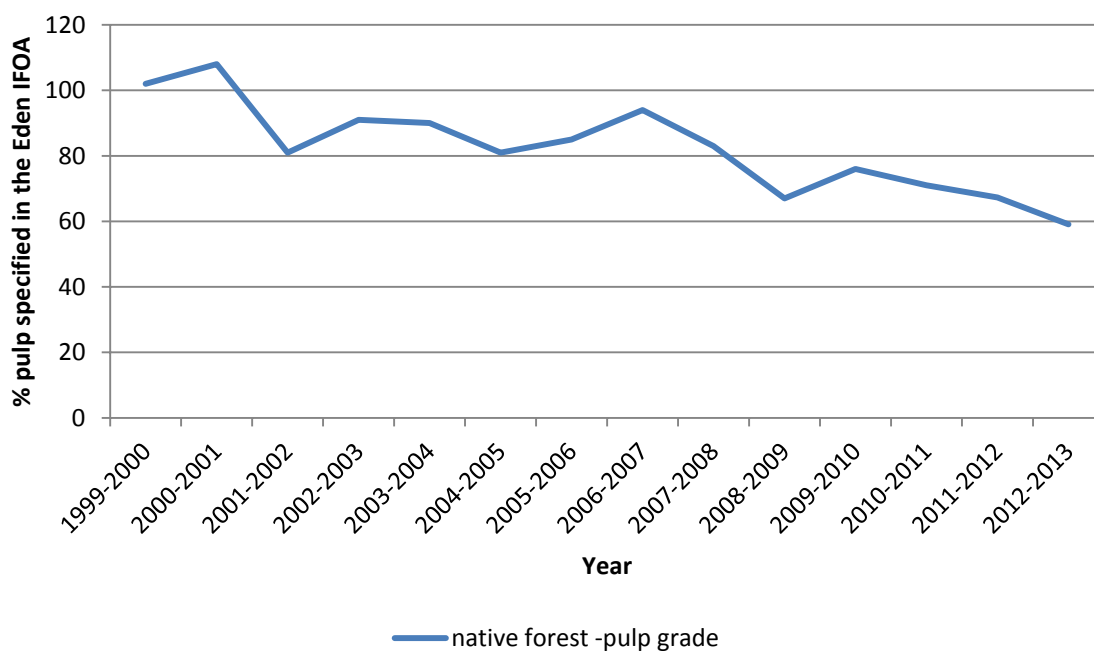


Figure 5: Pulp grade timber harvested as a percentage of volume specified in the IFOA – Eden region only

Source: Forestry Corporation data

Table 2: Quantities of native forest and hardwood plantation timber products – coastal regions (2012–2013)

Log type	Unit	Southern region		Eden region	LNE region		UNE region	
		South Coast sub-region	Tumut sub-region	Native forest	Native forest	Hardwood plantation	Native forest	Hardwood plantation
Large veneer*	m ³	289	0	0	3,420	1,429	4,987	312
High quality large sawlogs*	m ³	36,791	5,480	18,874	86,154	10,934	46,995	1,718
Small veneer	m ³	1	0	0	1,583	1,694	1,960	80
High quality small sawlogs	m ³	6,125	153	1,256	21,042	5,962	20,182	961
Low quality sawlogs	m ³	24,782	754	3,120	103,173	41,696	44,983	2,622
Large poles/piles and girders**	m ³	278	0	0	8,345	3,245	4,183	41
Small poles/piles and girders	m ³	778	0	0	14,721	7,513	4,538	33
Fencing/ landscape/ sleepers (sawn)	m ³	20,996	0	233	16,682	2,180	6,118	24
Sub-total	m ³	90,040	6,387	23,483	255,120	74,653	133,946	5,791
Pulp grade and chipwood***	t	79,935	1,954	203,806	74,453	22,039	0	0

* Veneer and high quality large sawlogs harvested from Forestry Corporation native forests and hardwood plantations comprise quota log volumes. The IFOAs specify quantities of these products.

** Poles, piles and girders that meet quota specifications have been reported separately in this report. For comparison with previous reports, Figure 4 (percentage of quantities specified in IFOAs) does not include poles, piles and girders; however, the IFOAs do specify these quantities.

*** In Eden, pulp grade timber figures form part of the quota requirements under the Eden Forest Agreement and IFOA. Pulp timber in other regions is reported as non-quota.

Source: Forestry Corporation data. Note that amounts reported are derived from an operational database and a small number of minor reconciliations may have been undertaken since the end of the reported period.

Forestry operations in western IFOA areas

Burning operations in western forests

The IFOAs for the South Western Cypress, Brigalow–Nandewar, and Riverina Red Gum regions require burning operations to be reported annually.

For 2012–2013, Forestry Corporation carried out hazard reduction burning over 6498 hectares of Pilliga East State Forest, in the Brigalow–Nandewar region.

No burning operations were carried out in the South Western Cypress or Riverina Red Gum regions.

Information about grazing in western forests

The Forestry Corporation is required to report annually on the total area within state forests in the South Western Cypress, Brigalow–Nandewar, and Riverina Red Gum regions over which grazing of domestic stock was authorised by Forestry Corporation (whether under new or existing grazing permits or forest leases).

The information for 2012–2013 is presented in Table 3.

Table 3: Information about grazing operations in western IFOA regions 2012–2013

IFOA area	Activity	Area (ha)
Brigalow–Nandewar	Grazing	7,420
South Western Cypress	Grazing	39,305
Riverina Red Gum	Grazing	8,957

Timber volumes harvested in western forests

Under western IFOAs, an annual report is to specify the nature of forest products operations authorised under the *Forestry Act 2012* and, where information is available, the quantity of each forest product authorised to be taken under the Act in that year.

This information is presented below and summarised in Table 4.

Riverina Red Gum region

The Riverina Red Gum IFOA identifies average yearly allocations and sets 20-year limits for high quality large logs and residue logs, but does not set maximum annual limits. The IFOA sets maximum allocations of early thinning.

Figure 6 compares the volume (m³) of high quality large sawlogs and low quality sawlogs and tonnes (t) of early thinning obtained from the Riverina Red Gum Region over 2012–2013 and the previous year

During 2012–2013, 4379 m³ of high quality large sawlogs (including large veneer logs) were harvested from native forests in the Riverina Red Gum region. The IFOA does not restrict harvesting above the average volume as long as the 20-year limit of 90,253 m³ is not exceeded over the life of the IFOA (an annual average volume of 4413 m³).

A total 4867 m³ of low quality sawlogs were obtained in the Riverina Red Gum region in the reporting period. No upper limit is specified in the Riverina Red Gum IFOA. Low quality sawlogs can be a by-product of high quality large sawlog operations or early thinning operations.

During 2012–2013, 19,936 t of residue was harvested from operations associated with the production of high quality sawlogs. A further 10,205 t of residue grade log was harvested from western lands lease areas during the 2012–2013 period.

The Riverina Red Gum IFOA permits early thinning operations to be carried out in Riverina state forests for the purpose of producing red gum residue. Maximum amounts are set in the IFOA for each year from 2009 to 2013. Under this product category 30,077 t of residue grade logs was harvested during the reporting period. While this exceeded the permitted maximum allocation of 20,000 t for 2012–2013 specified in Clause 5(4) of the IFOA, the agencies had agreed that in order to manage the impact of adverse forest conditions such as flooding, the cap would apply effectively as a three-year quota. Over the three-year period 2010-2011 to 2012-2013, FCNSW was permitted to harvest a total of 75,000 t under the early thinnings program, of which it reported harvesting 67,594 t.

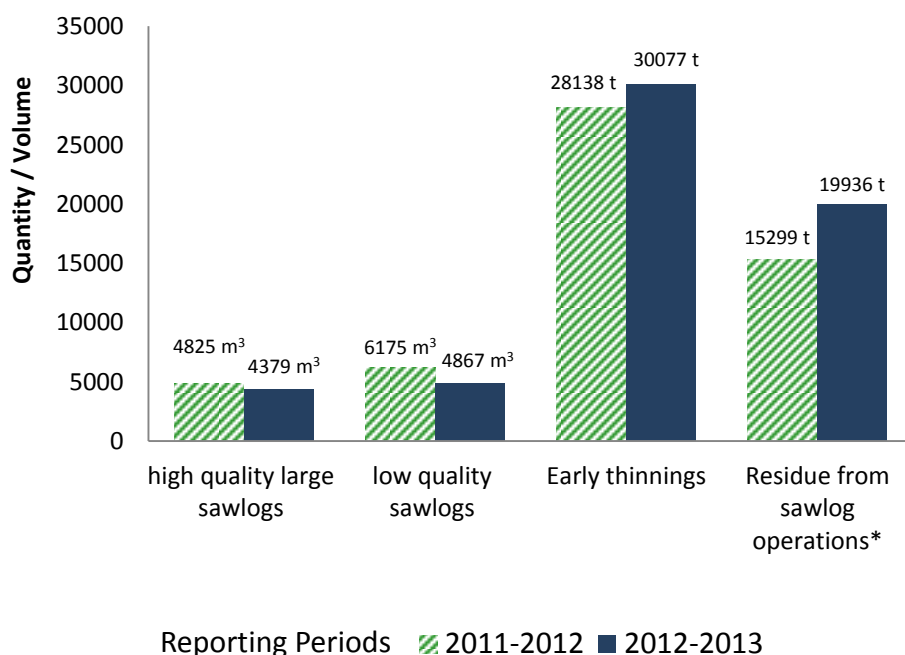


Figure 6: Volume (m³) of high quality large sawlogs and low quality sawlogs, and quantity of early thinning (t) obtained from the Riverina Red Gum Region over 2012–2013 and the previous year

* Figures do not include residue from western lands lease areas.

Brigalow–Nandewar region

The Brigalow–Nandewar IFOA identifies average yearly allocations and specifies maximum annual limits for white cypress logs, western ironbark logs, and firewood. The IFOA specifies maximum annual limits for small quantities of other logs and products (clause 5(2)(c)(d)). The IFOA also allows the harvesting of products of trees, shrubs and other vegetation (other than timber) that are of economic value, such as broombush.

Figure 7 compares the volumes of cypress sawlogs and ironbark sawlogs, and quantity of firewood and fencing obtained from the Brigalow and Nandewar region over 2012–2013 and the previous year.

In 2012–2013, 27,525 m³ of cypress logs were harvested in the Brigalow–Nandewar IFOA region representing 63% of the annual average permitted volume⁴ (average of 44,000 m³ over the IFOA). During 2012–2013, 659 m³ of ironbark sawlog and fencing timber was harvested, which was below the specified annual limit of 2050 m³.

In 2012–2013, 3614 t of firewood was harvested under the conditions of the Brigalow–Nandewar IFOA which was 37% of the 9800 t average yearly allocation.

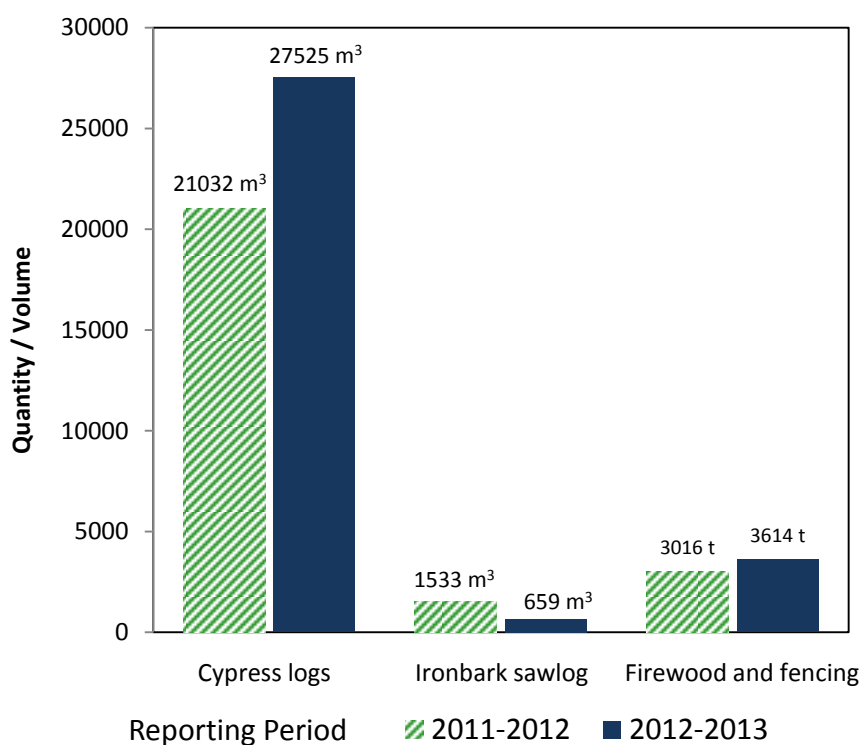


Figure 7: Volumes (m³) of cypress sawlogs and ironbark sawlogs, and quantity of firewood and fencing (t) obtained from the Brigalow and Nandewar region over 2012–2013 and the previous year

South Western Cypress region

The South Western Cypress IFOA identifies average yearly allocations and specifies maximum annual limits for white cypress logs. For timber products other than logs and residual timber (such as craft wood and vine posts) the IFOA specifies maximum annual limits. Logging operations are permitted for the purpose of producing up to 6000 t of residue timber in any one financial year from early thinning white cypress or bull oak trees (*Allocasuarina luehmannii*) carried out in accordance with the IFOA. No forestry operations are permitted for the purpose of producing firewood in areas already covered by the Riverina Red Gum IFOA (but firewood permits may be issued to individuals).

⁴ Amendment 3 to the Brigalow and Nandewar IFOA (proposed to commence 1 July 2013) will reduce the volume of cypress logs that can be produced in the approval to an average annual allocation of 41,000 m³. The amendment is to address the difference between supply areas for wood supply agreement holders and the boundaries between the Brigalow–Nandewar and South Western Cypress IFOA regions. The equivalent volume of logs is being added to the South Western Cypress region so there is no overall change in the total volume of timber between both regions.

Figure 8 compares the quantities of cypress sawlogs, timber products other than logs and residue, and residue timber from early thinning obtained from the South Western Cypress region over 2012–2013 and the previous year.

During 2012–2013, 21,487 m³ of cypress logs were harvested from south of the Mitchell Highway. A further 2432 m³ was harvested from north of the Mitchell Highway. This was a total of 23,919 m³ of cypress logs harvested. Under the IFOA the volume of cypress logs may exceed the average limit (22,390 m³) by up to 40% in any one financial year. No sawlog harvesting was undertaken on NSW western lands leases during the period.

Logging operations for the purposes of producing timber products other than logs and residue recorded 2408 m³ harvested. This exceeded the maximum permitted (1500 m³).

A total of 3052 t of residue timber from early thinning was harvested which was below the specified limit of 6000 t.

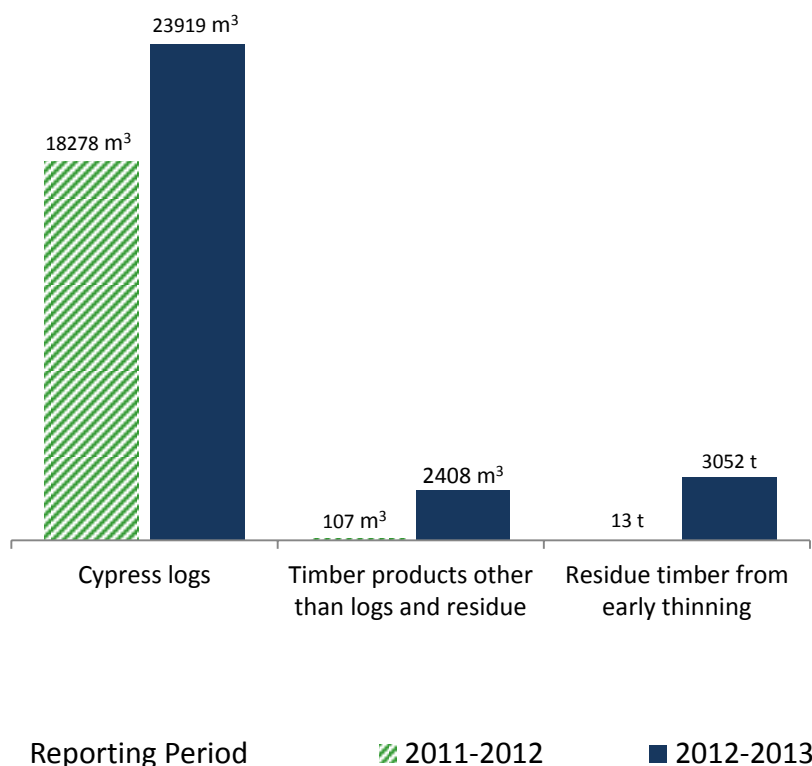


Figure 8: Volume (m³) of cypress sawlogs, timber products other than logs and residue (m³) and residue timber from early thinning (t) obtained from the South Western Cypress region over 2012–2013 and the previous year

Note that the quantities of timber products and residue were minor over the previous period 2011/2012 (and do not display in the figure)

A summary of timber products obtained from state forests and western lands leases covered by the three Western IFOAs is presented in Table 4.

Table 4: Products harvested from western IFOA regions in 2012–2013

Product	Volume (m ³) or quantity (t)		Estimated harvest area (ha)
Riverina Red Gum			
High quality saw log	4,379 m ³		853
Low quality sawlog	4,867 m ³		
Residue	19,936 t		
Early thinning	30,077 t		504
Residue (western lands leases)	10,205 t		401
Brigalow–Nandewar			
Cypress log	27,525 m ³		8,984
Ironbark log	659 m ³		
Timber products (including ironbark and cypress fencing)	125 m ³		
Firewood (not including permits under the <i>Forestry Act 1916</i> (<i>Forestry Act 2013</i> as of January 2013))	3,614 t		
Firewood permits issued – see IFOA cl. 82	Number	Quantity	na
	476	680 t	
Didgeridoo	0		0
Broombush	167 t		153
South-Western Cypress			
Cypress log	23,919 m ³		2,367
Cypress log (western lands leases)	0		
Residue	3,052 t		
Timber products (other than logs and residue timber, such as craftwood and vine posts, from white cypress trees)	2,408 m ³		
Firewood permits issued – see IFOA cl. 82	Number	Quantity	na
	148	121 t	
Didgeridoo	0		0

Management of private native forestry

Private native forestry (PNF) is the management of native forest on privately owned land for the purpose of obtaining forest products on a sustainable basis. There is an estimated 8.5 million hectares of native forests on private land across NSW, of which around half a million hectares is currently allowed to be logged under approval. Approximately five million hectares would be considered as suitable for PNF operations although most of this is not used for this purpose.

The EPA regulates private native forestry (PNF) under the *Native Vegetation Act 2003* and the PNF Code of Practice. The PNF Code is designed to ensure that forest operations improve or maintain environmental outcomes and encourage sustainable management of native forests on private land. Approval through a PNF property vegetation plan (PVP) is required to carry out forestry operations on private land. This is a legally binding agreement between a landholder and OEHL. PNF PVPs are valid for up to 15 years, giving landowners the security they need to make long-term forest management decisions.

Private native forestry approvals

Forestry operations within approved areas may occur on a cyclical basis at any time during the term of the PNF PVP approval. Only a small percentage of the total approved area will have active forestry operations occurring in the reporting period.

Between 1 August 2007 and 30 June 2013, 2637 PVPs have been approved for PNF, covering 512,564 hectares of private forest (Table 5). In the twelve months of 2012–2013, 61,188 hectares were approved, under 353 new PNF PVPs. Within this area all rainforest, old growth forest, wetlands, heathlands and many other environmentally important areas have been protected.

Table 5: Area of PNF PVPs approved between August 2007 and June 2013

Forest type	Area of PNF PVPs (ha)*						Total
	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	
Northern NSW	63,845	92,390	54,727	58,490	58,730	43,200	371,382
Southern NSW	4,425	4,943	3,804	5,830	3,093	4,243	26,338
River Red Gum	18,394	37,367	4,506	11,860	4,664	10,047	86,838
Cypress and Western Hardwood	3,029	8,184	3,906	3,511	5,678	3,698	28,006
Totals	89,693	142,884	66,943	79,691	72,165	61,188	512,564

* These figures include areas of PNF PVPs which have expired.

Additional private native forestry trends are reported in the OEHL [NSW Annual Report on Native Vegetation](#).

Industry & Investment NSW – reporting on plantations

Plantations authorised under the PR Act – annual volumes removed

Plantations approved under the *Plantations and Reafforestation Act 1999* (PR Act) in coastal IFOA areas since 2001 are listed in Table 6. In western regions in 2012–2013, 1000 hectares of plantation were authorised in the Central West, zero hectares in the Far West of NSW and zero hectares in Barwon region.

Table 6: Area (hectares) of plantations approved under the PR Act (Includes State forests and private plantations)

Year	North Coast	Hunter	South Coast
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
2009–2010	1,833	538	36
2010–2011	1,098	193	173
2011–2012	1,998	1	18
2012–2013	3364	0	2266

Overall figures for timber volumes and other products supplied from plantations are not routinely collected.

Plantations established by Forestry Corporation – native and softwood

No new hardwood plantations (first rotation) were established on previously cleared land by Forestry Corporation during the 2012 planting season. Forestry Corporation does not clear native forests to establish plantations.

Fifty hectares of new softwood plantations (first rotation) were planted during the 2012 planting season.

1.4 Maintaining ecosystem health and vitality

Forest health surveys are conducted annually in Forestry Corporation hardwood and softwood plantations, and cover most of the plantation estate managed by Forestry Corporation.

Surveys in state forest native forest are less systematic, and cover only a small proportion of the estate. In the past year NSW Department of Primary Industries (DPI) Forest Health have conducted surveys of native forest to detect the newly established exotic disease myrtle rust (*Puccinia psidii*), concentrating on stands with the rainforest tree *Rhodamnia rubescens* or regenerating eucalypts. Surveys for myrtle rust are also carried out routinely by Forestry Corporation ecologists during flora surveys (and pre-harvest surveys). Myrtle rust is severely impacting several key species in NSW native forests, including *Rhodamnia rubescens* and *Rhodomyrtus psidioides*. Surveys of second rotation *Eucalyptus* plantations were also surveyed by NSW DPI for myrtle rust and the root rot disease *Phytophthora cinnamomi*. *Phytophthora* root rot caused mortality in a small number of *E. pilularis* plantations; myrtle rust was found in only a few plantations, causing minimal damage.

Case study: Population Management Plan for the yellow-bellied glider in the Bago Plateau



The yellow-bellied glider on the Bago Plateau has recently been determined to be an endangered population. To preserve the glider populations, a [Population Management Plan](#) (FCNSW 2013) was developed, taking into account understanding of its ecology and the threats posed by forestry activities, together with an assessment of the adequacy of historic and modified harvesting prescriptions.

The aim of the Population Management Plan finalised by Forestry Corporation during 2012–2013 is to address these issues and provide a framework for the management of the yellow-bellied glider within the Bago and Maragle state forests of the Southern region. An adaptive management approach will be implemented under the plan involving close monitoring of the population in a variety of habitats, including disturbed and

undisturbed areas, and adapting practices appropriately to mitigate potential threats to the population.

The plan will facilitate the development of modified management prescriptions and monitoring of harvesting designed to protect the habitat features, such as old nest trees. Modified prescriptions are applied to mapped areas of yellow-bellied glider habitat even if individual gliders are not identified in targeted pre-harvest surveys. The plan will also aim to guide future management and research into the population across its entire range to give it the best chance of long-term recovery.

Photo: Yellow-bellied glider in the Bago Plateau feeding on tree sap, R Sigley, FCNSW.

NSW Invasive Species Plan

As reported previously, the [NSW Invasive Species Plan](#) (DPI 2008) provides the framework for the coordinated management of pest animals and weeds across various land tenures and will guide invasive species management in NSW to 2015.

Actions identified in the plan have been developed specifically to align with the reporting requirements for the [NSW Natural Resources Monitoring, Evaluation and Reporting Strategy](#) (NSW Natural Resources and Environment CEO Cluster Group 2006).

Pest management on the OEH estate

Regional pest management strategies

OEH has finalised its regional pest management strategies to provide a strategic approach to weed and pest animal management on land it manages under the *National Parks and Wildlife Act 1974*.

OEH received 115 written submissions after the public exhibition period which ran from December 2012 and February 2013. OEH considered the submissions and the final strategies are now being prepared for publication. The NPWS Asset Maintenance System and the Pests Geodatabase will be used for statewide reporting on the pest programs.

OEH continued to implement the [2010 NSW Fox Threat Abatement Plan](#), which establishes priorities for fox control to conserve biodiversity in NSW. A majority of the Fox Threat Abatement site plans were completed, with fox control sustained at the vast majority of priority sites. Monitoring of target threatened species, native fauna and foxes also continued. These priority sites are located across all the Forest Agreement regions, mostly on NPWS reserves but also on some other tenures including Crown land and state forests.

OEH spent \$34 million on pest and weed control in 2012–2013. More than 100,000 pest animals were removed from parks and reserves over the last two years.

Case Study: Controlling honey locust weed at Barool and Nymboida National Park (UNE)

Honey locust (*Gleditsia triacanthos*) has been identified as an emerging weed threat along the Mann and Severn rivers near Glen Innes in northern NSW. NPWS activities aim to control the spread of the weed, to improve the overall habitat of threatened plants and animals that inhabit the area, and allow regeneration of native plants displaced by honey locust. The Glen Innes area provides headwaters for both eastern and western flowing waters and control here restricts the weed spreading downstream.



Photo: Trainee Lewis Chapman-Burgess with honey locust pods, photo by Mark Crisp, NPWS

Northern Tablelands Region Project Manager, Nerida Holznagel, led a hugely successful team to dramatically reduce potential seed bank stores of honey locust along a 45 km stretch of the Mann River. Following treatment approximately 98% of mature honey locust trees had died along this stretch of the river.

Strong collaboration and support from neighbours and securing the support of Northern Rivers CMA funding has been very effective in controlling the plant off-park, thereby reducing the opportunity for the weed to create a stronghold in the localised area.

The project team will be monitoring and maintaining control of remaining seedlings and plants over the next three to five years to ensure that no new seed banks are established.

Pest management on Forestry Corporation estate

For details of expenditure on pest animal control on State forests during 2012–2013 under the statewide *Wild Dog Management Strategy* (DPI 2012) and other initiatives see the [Forestry Corporation Sustainability Supplement 2012–2013](#) (FCNSW 2013c) published on the corporation's website.

Each region has a pest animal management plan which provides the context and strategic direction for pest animal management. Regions also develop, implement and monitor an annual schedule of pest animal management for State forests.

Pest management plans consider local management issues and are consistent with the concepts of:

- [Australian Pest Animal Research Program](#) (APARP)
- [NSW Biodiversity Strategy](#) including the *Threatened Species Conservation Act 1995*
- Rural Land Protection Board strategies (superseded by the [NSW Biosecurity Strategy 2013–2021](#) in May 2013).

The NSW Biosecurity Strategy was developed by DPI and aims to expand on the previous 2007 NSW DPI Biosecurity Strategy to address not only primary industries, but the broader biosecurity spectrum in terms of biodiversity and the natural environment, infrastructure and service industries as well as lifestyle, recreation, sport and social amenity.

Case study: Tackling the wild dog problem

Local farmers and landholders welcomed a new statewide [Wild Dog Management Strategy](#) during 2012–13. Farmers and state agencies incur around \$50 million every year in wild dog management costs. The Wild Dog Management Strategy details the roles and responsibilities of government agencies, industry and the community, and lists planning, surveillance, reporting and control actions to more effectively manage wild dogs (DPI 2012).

The strategy was produced with input from the NSW Department of Primary Industries, Forestry Corporation of NSW, National Parks and Wildlife Service, Livestock Health and Pest Authorities, NSW Farmers' Association and individual farmers.

Forestry Corporation's Tumbarumba-based Feral Animal Control officer, Mark Goldspink, operates in the Southern IFOA area and is well known for his work aimed at reducing stock losses through wild dog control. Mr Goldspink uses soft-jawed traps and baits, part of the Forestry Corporation's integrated pest animal management program in the region, and guard animals and surveillance cameras in the forests to monitor wild dog movements. He uses his own dogs to track scents of wild dogs, and responds to reports by local farmers, log truck drivers and other forest users.

The statewide plan involves working with the community and encouraging farmers and the general public to stay alert in the battle against wild dogs and report any sightings and predation to the Forestry Corporation or the Livestock Health and Pest Authority as quickly as possible so they can be managed with minimal impact.

1.5 Soil and water resources

Native forestry operations in state forests are authorised under IFOAs that list specific conditions for protecting the environment. Environment Protection Licences (EPLs) issued under the *Protection of the Environment Operations Act 1997* (POEO Act) aim to ensure that practical measures are taken to protect local waters from diffuse source pollution that may arise from forestry activities. Fisheries Licences (FLs), issued under section 220ZW of the *Fisheries Management Act 1994*, also contain measures for protecting aquatic values.

As discussed in the overview to this report, the NSW Government is currently remaking the IFOAs for the Eden, Southern, Upper and Lower North East coastal regions of NSW and will be proposing changes to the environmental regulatory framework for forestry operations conducted on public land. It is proposed that the current Environment Protection Licences (EPLs) will be replaced with streamlined planning, operational, and reporting conditions. These will be supported by supplementary material, including enforceable protocols and other best-practice guidance material.

1.6 Maintenance of forest contribution towards global carbon cycle

Total standing volume of carbon dioxide (CO₂) and other carbon indicators are charted in the [Forestry Corporation Sustainability Supplement 2012–2013 \(FCNSW 2013c\)](#). Specifically the supplement reports against *Indicator 15a: Carbon sequestration in softwood planted forests* and *Indicator 15b: Carbon balance in hardwood forests*.

1.7 Socio-economic benefits

Employment

Parks

For NPWS, there were a total of 1697 (paid full time equivalent) positions as at June 2013 in NSW, as well as a number of dependent businesses including ecotourism ventures and beekeeping.

Forest industry

The [Forestry Corporation Annual Report](#) (FCNSW 2013b) notes that, as at 30 June 2013, Forestry Corporation employed a total of 672 staff. This figure comprised 366 employees primarily involved in management, administration and technical roles and 306 employees primarily engaged in timber marking, mechanical trades, road construction and maintenance, tree planting and pruning, nursery work, forest conservation and fire protection.

The total number of staff was less than the previous year (788 staff).

The last available [Forests NSW Facts and Figures](#) publication (Forests NSW 2011) reported that the number of people employed in forestry and forest product industries was 12,744 in NSW.

Revenue

Forestry Corporation

Hardwood Forests Division had lower harvest volumes against last year. This was mainly in the pulp residue market in coastal regions, which was heavily impacted by the strong Australian dollar putting pressure on woodchip exports. The Forestry Corporation

Hardwood Forests Division reported an \$11 million decline in revenue ([Forestry Corporation Annual Report 2012–2013: FCNSW 2013b](#)); however, the division was able to control costs resulting in an Earnings Before Interest and Tax loss (before overheads) of \$4 million. Major wet weather events took a toll on Forestry Corporation roads in the UNE region, resulting in above budget maintenance and repair costs.

Parks

For additional information about parks revenue see Office of Environment and Heritage performance highlights (contained in the [Premier and Cabinet Annual Report 2012–2013](#); Department of Premier and Cabinet 2013).

Case study: Far ranging employment in the forestry industry

With more than two million hectares of forest throughout the state, Forestry Corporation has long been an important employer, particularly in regional areas. But the real economic impact of forestry extends far beyond direct employment to the jobs created in the many harvesting and timber processing operations.

According to the Australian Bureau of Statistics, more than 47,000 people were employed in forestry and forest product industries at the time of the 2011 Census, with over 14,000 of these jobs in NSW (ABS 2012).



Many regional economies have grown in line with local forests and plantations, as the variety of industries that rely on forest products, from specialist machinery and equipment suppliers, to haulage and transport firms, through to sawmilling and manufacturing businesses have proliferated.

Photo: Staff at the Weathertex facility which sources hardwood material from state forests to produce a range of high quality sustainable weatherboard cladding and panels, photo courtesy of Weathertex.

One example of a business built on the back of the forest industry is weatherboard producer Weathertex, which has employed more than 100 local people in its Raymond Terrace factory in the LNE Region for almost 50 years. Weathertex turns waste products from the local state forests and sawmills into high quality sustainable weatherboard cladding and panels.

Weathertex has designed a process that can take hardwood timber woodchips not suitable for traditional processing and convert them into fine fibres that are bonded with a natural wax to produce durable cladding that is resistant to white ants and termites.

With many of the big players in Australia's housing construction industry among its customers, and an expanding export market, Weathertex's innovative use of waste products from forestry-related industry is a success story for the region, sustaining local jobs and contributing to the local economy.

Major new contracts

Forestry Corporation

A timber residue tender process for commercial firewood resulted in the sale of 22,000 t under contract across the coastal forestry areas.

Forestry Corporation negotiated the cessation of the Walcha Wood Supply Agreement with Boral to the benefit of both parties in LNE region. This followed the conclusion of a recent arbitration case relating to fulfilment of Wood Supply Agreement obligations with Boral.

Parks

For additional information see Office of Environment and Heritage performance highlights (contained in the [Premier and Cabinet Annual Report 2012–2013](#); Department of Premier and Cabinet 2013).

Investment in the forest sector and other initiatives

NSW Forest Agreements created long-term certainty of timber resources for the ongoing development of a sustainable value-adding timber industry and direct and indirect employment opportunities. The attached case study provides an example of a key investment initiative in 2012–2013.

Case study: New sawmill a boost for Bombala

Local jobs, shorter haulage distances and long-term certainty for the timber industry are some of the benefits from Dongwha Timbers' new \$74 million state-of-the-art sawmill, which opened in Bombala in May 2013.

Forestry Corporation manages 37,000 hectares of pine plantations in this part of the Southern region, and is the sole supplier of sawlogs to the new Bombala mill.

The new sawmill will be supplied by the Bombala plantations, which were established in 1927 to support economic activity and contribute to the timber needs of the state.

Dongwha Timbers is a world-renowned company and their sophisticated sawmilling technology at Bombala continues to be managed by local staff.

Recreation, tourism and visitor experiences

State forests (and western lands lease)

State forests continue to gain popularity and recognition as world class recreation and tourism destinations. In 2012, Forestry Corporation won the ecotourism and adventure tourism categories at the Hunter and Central Coast Tourism Awards (LNE) and the best new tourism development at the North Coast Tourism Awards (UNE).

More than 125 recreation areas were provided for free public use across all state forests with almost all within the areas reported in this report. The number of visitors to the Forest Sky Pier in Orara East State Forest in UNE doubled, with close to 100,000 visiting the new facility.

Forestry Corporation continued to work with groups to stage organised recreational events in state forests that balance the needs of forest users, environmental and timber harvesting activities. By the end of the reporting period plans were well developed for the World Rally Championships to be held at Coffs Harbour (UNE) in September 2013.

Case studies: State forest tourism award winners

Natural picnic areas, walking tracks, visitor facilities and spectacular lookouts helped Forestry Corporation win a number of tourism awards in 2012–2013.

Strickland State Forest in the Lower North East region had already won the Gold Ecotourism award at the Hunter and Central Coast Awards for Excellence in Tourism three years running, and in 2013 was placed in the Hunter and Central Coast Tourism Hall of Fame. Strickland State Forest in the LNE FA area has been a working forest since the 1880s and is home to some of the oldest native and exotic tree plantings in Australia. A network of walking tracks weaves through an array of diverse habitats from dry heath woodland to lush rainforest and attracts walkers and picnickers.

Also during 2012–2013 the state forests of the Watagan Mountains claimed the Hunter and Central Coast Regional Tourism Gold Award and the NSW Tourism Silver Award for Adventure Tourism. This group of forests – Awaba, Heaton, Olney, Ourimbah, Watagan and Wyong state forests – offer free camping and picnic areas and allow visitors to take part in a variety of adventure sports including walking, horseback riding, four-wheel driving and tree top activities.

The awards highlighted the diverse range of tourism experiences state forests offer as well as the successful nature of the partnerships between Forestry Corporation and tourism operators including TreeTop Adventure Park to offer visitors more when visiting state forests.

The list below summarises all state forest tourism awards in 2012–2013:

NSW Tourism Awards

- Silver: for Adventure Tourism, state forests of the Watagans

Hunter and Central Coast Regional Tourism Awards

- Gold: for Adventure Tourism, state forests of the Watagans
- Gold: for Ecotourism, Strickland State Forest

North Coast Regional Tourism Awards

- Gold: for Destination Marketing, 'Experience a Forest Playground'
- Bronze: for Tourist Attraction, Sealy Lookout, Orara East State Forest

Parks

Regional tourism

OEH promoted tourism in national parks through targeted regional marketing campaigns and by delivering high quality visitor experiences. Case studies of tourism award winners on parks are provided below.

Delivering horse riding experiences in national parks

OEH released its [Strategic Directions for Horse Riding in NSW National Parks](#) (OEH 2012b) in November 2012, adding to the diverse range of recreational opportunities in national parks. OEH is working with local horse riders to implement the strategy. The strategy identified eight priority regions in NSW for new horse riding opportunities, some of which are in the Forest Agreement regions. For example: Central Coast Hunter (LNE); Lower North Coast (LNE); Northern Tablelands (UNE and LNE); Northern Rivers (UNE); Southern Ranges (Southern); and the Far South Coast (Southern).

Sustainable mountain biking in national parks

OEH continues to work towards delivering safe and appropriate mountain biking opportunities for visitors to NSW national parks, using the [Strategy for Sustainable Mountain Biking in NSW National Parks](#) as a guide.

The agency opened a network of mountain biking tracks, including: a shared-use trail in Livingstone National Park (Southern region); and new sections of a shared mountain bike and walking track in Kosciuszko National Park (Southern region).

In October 2012 OEH hosted the Two Wheeled Treks program and a range of community cycling events in national parks around the state.

Case studies: Parks tourism award winners

The contribution of national parks to regional tourism was recognised with Cape Byron State Conservation Area (in the UNE region) being a recipient of a Gold Award at the 2012 NSW Tourism Awards. The award recognised the outstanding contribution of the area to tourism in the region. Cape Byron State Conservation Area also went on to win Silver at the 2012 National Tourism Awards.

One of OEH's newest visitor experiences, the Green Gully Track in Oxley Wild Rivers National Park, was recognised with a Silver Award in the New Tourism Development category, a celebration of the very special nature of this five-night gorge trek, including accommodation in restored stockmen's huts.

New eco-tourism venture on the Light to Light walk

In September 2012, the Hon Robyn Parker, Minister for the Environment, announced a collaborative new eco-tourism venture between NPWS and Auswide Services, which will offer supported tours along the popular Light to Light walk south of Eden. The new venture will open up new camping, bushwalking, and sea kayaking opportunities with specialist guides providing expert advice and assistance.

Guided walks between Ben Boyd Tower and Green Cape Lighthouse are a productive and sustainable use of the landscape that will boost the local economy. Auswide Services has a track record of creating local job opportunities and empowering Aboriginal and non-aboriginal Australians.

The new initiative builds on the state's multi-billion dollar eco-tourism industry by making parks more accessible to visitors through a diverse range of recreational opportunities including horse riding and mountain biking.

Cultural, social and spiritual needs and values

Achievements relating to joint management and ventures with Aboriginal people can be found under Milestones 12 and 13 in Appendix 1.

1.8 Legal, institutional and economic frameworks

Legislation

Reforms to forestry legislation

On 1 January 2013, the former *Forestry Act 1916* and the *Forestry Regulation 2009* were repealed and replaced by the *Forestry Act 2012* and *Forestry Regulation 2012*. The Forestry Corporation was constituted under the *Forestry Act 2012*.

The *Forestry Act 2012* also replaced the former *Timber Marketing Act 1977*, *Timber Marketing Regulation 2010* and *Forestry and National Park Estate Act 1998*.

Reforming Aboriginal heritage legislation

The modernisation process of Aboriginal heritage legislation continued during 2012–2013. Following public engagement workshops in 2012, the Aboriginal Culture and Heritage Reform working party submitted draft recommendations for managing Aboriginal culture and heritage to the government in late 2012. OEH produced a response to these recommendations for government consideration. See [Reforming the Aboriginal cultural heritage system in NSW: A NSW Government model in response to the Aboriginal Culture and Heritage Reform Working Party's recommendations and public consultation](#) (OEH 2013). Further community consultation on a proposed approach to reforming Aboriginal cultural heritage legislation is planned for later in 2013.

Native Vegetation Regulation 2013

In June 2012, the NSW Government released the proposed Native Vegetation Regulation and PNF Code for public comment. A discussion paper about how the identification and protection of koala habitat can be improved under the PNF framework was also released by the EPA.

A series of information sessions were held across NSW to provide the community with information about the proposed changes.

Environmental Management Systems (EMS)

Refer to Appendix 1 for reporting on Milestone 1 – Environmental Management Systems.

Plans of management and ESFM plans

Refer to Appendix 1, reporting on Milestones 2.1, 2.4, 2.7 and 2.8.

Other new or revised policies or circulars for the financial year

EPA Forestry

During 2012–2013, the EPA developed the [Crown Forestry Compliance Strategy 2013–16](#) (EPA 2013a) and [Private Native Forestry Compliance Strategy 2013–16](#) (EPA 2013c) which adopt a risk-based approach to regulation to ensure compliance efforts are prioritised around issues and activities that present the greatest environmental risk.

Forestry Corporation

The following forest management related policies or circulars were revised or newly published:

Codes, guidelines and other

- Memorandum of understanding with Ulladulla LALC for the management of cultural sites in McDonald State Forest
- BP2013/01 Code of Conduct
- FPC 2012/02 – Hardwood Forests Branch Compliance Monitoring System
- FPC 2013/01 – Guidelines for the Identification and Management of Endangered Ecological Communities on State Forests and other Crown-timber Lands that are Subject to an Integrated Forestry Operations Approval
- Forests NSW Enterprise Agreement 2012
- NSW Biosecurity Strategy 2013–2021
- Population Management Plan – Bago Plateau yellow-bellied glider (FCNSW 2013)

Policies

- P2012/01 – Health and Safety Policy
- P2012/02 – Forest Contractor and Operator Licences
- P2012/07 – Fire Management Policy
- P2012/10 – Records Management
- P2013/01 – Mobile Phones and Mobile Devices
- P2013/02 – Forest Management Policy
- P2013/03 – Managing Excess Employees
- P2013/04 – Procurement Policy
- P2013/05 – Procurement – Selection and Commitment of External Plant Hire Policy
- P2012/08 – Fire Training Currency and Competency

NPWS

The following policies were revised or created in 2012–2013:

- Commercial trade of protected fauna: Policy Directive – new, March 2013
- Horse-riding policy directive – new, November 2012
- Memorials in parks policy – new, November 2012
- Revocation, Recategorisation and Road Adjustment Policy – new, August 2012
- Scientific Licensing Policy – new, November 2012

Case study: Managing bushfires in national parks (strategy)

In December 2012 OEH released a 10 year fire management strategy, [Living with Fire in NSW National Parks: A Strategy for Managing Bushfires in National Parks and Reserves 2012–2021 \(OEH 2012a\)](#). The strategy provides a clear statement and framework for the NPWS fire management approach, and outlines priorities in managing bushfire in national parks and reserves during the next 10 years. The strategy is supported by a five-year Enhanced Bushfire Management Program fund of \$62.5 million for 2011–2016. This is in addition to the recurrent budget for fire management on parks and reserves.

Community involvement

Parks

Encouraging children to explore the environment

In April 2012 OEH launched its interactive digital WilderQuest program to encourage children aged five to 12 to learn about the environment and visit NSW national parks with their families. The program includes an interactive website and free iPad app, a guided on-park tour program and a curriculum-linked education component. This was upgraded in December to simplify its game play and add registration as well as a new coastal environment. Since the launch, the website received over 21,000 unique visits while the app was downloaded around 26,000 times. The app also has a 4.5 to 5 star rating and has won a number of industry awards.

Volunteers caring for their environment

More than 6500 volunteers donated over 130,000 hours to NSW national parks programs such as bush regeneration, mountain bike track maintenance, heritage restoration and

shorebird recovery. Over 55 volunteer campground hosts contributed 6300 hours to campgrounds across the state by welcoming campers, providing local area information and supporting staff during critical periods like fires and park closures. OEH is working to create new and innovative volunteering programs like expanding corporate volunteering in partnership with the Foundation for National Parks and Wildlife and Landcare Australia. This provides opportunities for businesses to deliver team building experiences that benefit their employees and the environment.

Forestry Corporation

Encouraging children to explore forests

Staff from Cumberland State Forest participated in three events that were attended by 6344 students: Science in the City, Youth Eco Summit and Strickland Forest Expo. Regional staff also facilitated a small number of school and university groups to inform students on forest management.

Two digital games were launched as education resources for the four to nine age group. The first game, Forest Detectives, teaches children how foresters protect animals in the forest. The second game called Timber Sleuth allows the player to discover how much timber, hidden and obvious, is inside and outside an average home.

Volunteers caring for forests

Major volunteer programs included the Cumberland and Strickland State Forest bush regeneration programs and the Communities in Forests Program with Conservation Volunteers Australia (CVA).

During the year, CVA volunteers removed 392,050 m² of exotic weeds from native habitats to improve biodiversity values, repaired two kilometres of walking tracks to protect sensitive habitats and removed 7860 invasive pine wildings from native habitat to improve biodiversity values.

Volunteers continued to digitise and catalogue the Forestry Corporation photographic collection, with well over 15,000 images processed by the end of the year. Most of the photographs depict historical scenes from forest areas reported here.

2 Compliance with integrated forestry operations approvals

2.1 Introduction

Integrated forestry operations approvals (IFOAs) provide the operational framework for the conduct of forestry operations in state forests and on Crown timber land. The approvals, made under the *Forestry and National Park Estate Act 1998*, contain non-licence terms and terms of licences under the *Protection of the Environment Operations 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 the EPA, and Fisheries Licences are administered by NSW Fisheries. An IFOA enables authoritative, unambiguous and consistent environmental regulation of native forest harvesting operations. There are seven IFOAs currently in place; they cover each NSW forest region.

2.2 New IFOAs

No new IFOAs were established over 2012–2013.

In May 2012, the Minister for Primary Industries, the Hon Katrina Hodgkinson, announced a review of the Integrated Forestry Operations Approvals (IFOAs) for the Eden, Southern, Upper and Lower North East (coastal) regions of NSW. The announcement coincided with the corporatisation of the then Forests NSW.

The objectives of this work are to reduce the costs associated with implementation and compliance, and to improve the clarity and enforceability of the IFOAs and licences held by the Forestry Corporation.

The EPA, the Forestry Corporation and Department of Primary Industries Fisheries NSW have commenced discussions on the IFOA remake. On 19 June 2013, the Minister for the Environment, the Hon Robyn Parker announced that the IFOA remake will include a three stage engagement process to allow the NSW public an opportunity to understand and provide feedback on the new IFOAs.

2.3 IFOA amendments

A number of amendments were made to the IFOAs during 2013.

In March 2013, all IFOAs were revised to reflect amendments to the *Protection of Environment Operations Act 1997* and the Environment Operations (General) Regulation 2009 which related to pollution incident notification and response. The amendments include:

- Amendment No. 1 to Brigalow–Nandewar region IFOA
- Amendment No. 1 to South Western Cypress region IFOA
- Amendment No. 1 to Riverina Red Gum region IFOA
- Amendment No. 4 to Southern region IFOA
- Amendment No. 5 to Lower North East region IFOA
- Amendment No. 6 to Eden region IFOA
- Amendment No. 7 to Upper North-East region IFOA

Amendments 4 to 7 finalised the outcomes of the five and 10 year review of NSW Forest Agreements and IFOAs tabled in Parliament in December 2010. The amendments increase the consistency of licence conditions to improve the operational efficiency of the IFOAs.

Amendments to the Brigalow–Nandewar Region IFOA which commenced on 15 April 2013 extend the deadline for transition to green firewood by three years. The firewood limits were also adjusted to reflect the annual allocation of firewood under contractual commitments and a reduction in the quantity of western ironbark firewood below the annual allocation.

2.4 EPA compliance program

The role of the EPA in the management of 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 issued to the Forestry Corporation is the key means by which this is achieved. These licences are contained within the IFOAs for the Upper North East, Lower North East, Southern (including Tumut), Eden, Brigalow–Nandewar, South Western Cypress and Riverina Red Gum regions.

TSL coverage is mandatory in all active native forestry operations. In the Upper North East, Lower North East, Southern and Eden regions, EPL coverage is required for certain logging operations in accordance with Schedule 1 of the *Protection of the Environment Operations Act 1997*. For other logging operations in these regions the Forestry Corporation may exercise its right not to seek EPL coverage. These operations are still subject to section 120 of the Protection of the Environment Operations Act (POEO Act) that prohibits the pollution of waters.

Summary of regulatory work

In 2012–2013, the EPA completed 19 planned compliance audits and 50 investigations of active forestry operations on NSW public lands. This regulatory work targeted six compliance priorities for the management of important environmental values such as the retention, selection and protection of hollow-bearing and recruitment trees and koala habitat identification and protection. The EPA's compliance priorities are set annually and are subject to ongoing review.

The EPA also investigated 25 compliance incidents reported to it by the public during the year.

Total non-compliances

The EPA identified:

- 127 non-compliances with EPL conditions
- 202 non-compliances with the TSL conditions.

Range of regulatory tools to achieve compliance

A range of regulatory tools help achieve good compliance outcomes. Such tools include auditing, investigating, issuing statutory notices and fines, education and training, guideline and policy development, clean up, remedial or correction action requests and legislative reforms. Where compliance issues are identified, the EPA takes appropriate regulatory action.

Not all identified breaches present the same level of environmental risk or warrant the same regulatory response. Some non-compliances are of an administrative nature. Such

breaches included Forestry Corporation not completing forms correctly, not recording all relevant details in harvesting documents, or not including all information required on registers. Although these kinds of non-compliances may not result in environmental harm, the EPA raised the issues with Forestry Corporation to assist ongoing improvement.

Key non-compliances found across all regions included failure to undertake general compartment mark-up, failure to undertake compliant koala use searches, logging in exclusion areas such as rainforest, rocky outcrops, koala high use and large owl exclusion zones. There were also non-compliances in how snig tracks and roads were drained and for causing water pollution.

During 2012–2013, the EPA issued the Forestry Corporation of NSW with four warning letters, nine advisory letters, 11 penalty infringement notices and three official cautions.

One Land and Environment Court action was heard in May 2013 in relation to forestry operations in Mogo State Forest.

2.5 IFOA region summary

Upper North East region (UNE)

Seven audits were completed in the UNE region. The audits focused on IFOA Threatened Species Licence and Environment Protection Licence requirements regarding water pollution, retaining and protecting trees, landscape protection and threatened species protection. From the 162 assessments of compliance, the region achieved an overall compliance rate of 93%. In summary, there was a good level of compliance with marking up exclusion zones and not harvesting in exclusion zones. There was poor performance in koala identification.

Investigations were completed in the UNE region. Non-compliances identified included koala high use areas as well as logging in koala high use areas. Three penalty notices were issued for the failure to identify and for logging in koala high use areas and their exclusion zones. Remedial works requests were also issued in areas to protect waters.

Lower North East region (LNE)

Seven audits were completed in the LNE region. The audits focused on IFOA Threatened Species Licence and Environment Protection Licence requirements regarding water pollution, retaining and protecting trees, landscape protection, koala identification and threatened species protection. From the 922 assessments of compliance, the region achieved an overall compliance rate of 86%. Despite the rate of compliance the EPA identified high environmental risks in key compliance areas requiring improvement. There were poor levels of compliance with compartment marking up of hollow-bearing and recruitment tree resources, and exclusion zones. There was poor performance in koala identification requirements and refraining from logging in koala use areas. There was mixed performance in operating and maintaining road and snig track drainage and protecting waters. There was also poor performance in refraining from logging in other exclusion zones such as rocky outcrops and significant subterranean bat roosts. Some of these incidents activated separate investigations that resulted in regulatory action. The EPA issued 31 audit action plans as a result of these audit findings for matters that had environmental risks from high to low. The findings and proposed actions from these audits will inform future regulatory activities.

Forestry Corporation of NSW was issued with three penalty notices for the LNE region during the reporting period. These were for causing water pollution. Clean up action was also used to repair the environment and reduce environmental risk from those incidents.

Southern region

One compliance audit was completed in the Southern region. The audits focused on IFOA Threatened Species Licence and Environment Protection Licence requirements regarding water pollution, retaining and protecting trees, landscape protection, koala identification and threatened species protection. From the 97 assessments of compliance, the region achieved an overall compliance rate of 78%. In summary, there was a mixed level of compliance with compartment marking up of hollow-bearing and recruitment tree resources, and exclusion zones and drainage design and maintenance to protect waters. There was poor performance in refraining from logging in other exclusion zones such as large owl exclusion zones. The EPA issued 10 audit action plans as a result of these audit findings for matters with environmental risks from high to low. The findings and proposed actions from these audits will inform future regulatory activities.

Investigations were conducted into ground disturbance, hollow-bearing and recruitment trees, regeneration and water pollution. Warning and advisory letters were a result of this regulatory work.

Forestry Corporation of NSW was issued with three penalty notices for the Southern region during the reporting period. These were for failure to do compartment mark-up before logging, forestry operations in large owl exclusion zones, and burning in rainforest exclusion areas.

One Land and Environment Court action was heard for causing water pollution and damage to a wetland by burning activities in Mogo State Forest during the reporting period.

Tumut sub-region

The EPA conducted no proactive or responsive regulatory activity in this sub-region during the reporting period.

Eden region

The EPA investigated instances where forestry operations occurred within rocky outcrops and their exclusion zones. Investigation findings led to issuing penalty notices for not protecting rocky outcrops. The cause of these offences was a failure to do proper on ground assessment of rocky outcrops. The EPA previously used education and regulatory extension activities to improve field identification of rocky outcrops. These investigations and action will inform the EPA's future regulatory work.

Official cautions were also sent for logging in multiple rocky outcrop exclusion zones in the Eden region.

Brigalow–Nandewar region

The EPA conducted no proactive or responsive regulatory activity in this region during the reporting period.

Riverina Red Gum region

Investigations into the protection of riparian areas were the key focus of regulatory work in this region. The focus was on the method used to identify areas that needed protection. A key outcome of this regulatory work was a process towards developing better stream exclusion zone identification methods. This regulatory work also resulted in a warning letter for not complying with the IFOA and informed future regulatory activities.

South Western Cypress region

Four audits were completed in the South Western Cypress region. The audits focused on IFOA Threatened Species Licence requirements regarding white cypress tree retention and endangered ecological communities identification (Inland Grey Box).

From the 32 assessments of compliance, the region achieved an overall compliance rate of 81%. The EPA found mixed rates of compliance with the requirement to retain trees of the largest cohort of white cypress trees per hectare. In some instances trees of the largest cohort were harvested. Retaining a number of large white cypress trees is important for maintaining a diverse forest form and structure, to promote ESFM. The EPA also determined that the Forestry Corporation was not applying appropriate methods to identify Inland Grey Box ecologically endangered communities before commencing operations. Failure to properly identify Inland Grey Box communities increases the risk of harming these remnants during forestry operations. The EPA's regulatory work resulted in seven audit action plan requests for matters that had environmental risks from high to low. The findings and proposed actions from these audits will inform future regulatory activities.

2.6 Forestry Corporation internal compliance program

Forestry Corporation was recertified for a further three years to the Australian Forestry Standard (AS4708:2007) and Environmental Management System (ISO 14001:2004) through rigorous external audits carried out in five operational regions spanning all forestry regions. The regional operations and corporate systems were audited to ensure Forestry Corporation continued to meet and exceed the environmental, social, economic and sustainability criteria of these standards.

Forestry Corporation publishes the number of non-compliance incidents (NCIs) requiring corrective action identified by its supervisors annually. Table 7 summarises the NCIs recorded in the [Forestry Corporation Annual Report 2012–2013](#) (FCNSW 2013b) in the six years to 2013.

Revised guidelines for internal reporting of non-compliance incidents mean that any non-compliance incident that can be resolved within 24 hours and is not related to systemic failures is no longer recorded. Similarly, minor incidents with low consequence or harm are no longer recorded. In the previous period 2011–2012, the compliance system underwent a major modification to reduce the different levels or tiers of checks to three and to increase the focus on corrective and preventative action.

Table 7: Number of non-compliance incidents (NCIs) that required corrective action recorded across all state forests by Forestry Corporation, 2007–2013

Type of incident	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13
Soil erosion and water quality	318	28	143	135	175	84
Flora and fauna	89	93	93	103	32	61
Fish habitat and passage	0	0	38	67	28	1
Other NCI issues (e.g. safety)	689	434	319	72	150	86
Total	1,096	555	593	377	385	232

2.7 Private native forestry compliance and enforcement activities

The EPA is implementing a PNF monitoring and compliance strategy, and undertaking operational inspections, audits and investigations. This is supported by education, training and extension activities.

During 2012–2013, the EPA undertook 130 operational inspections and 123 audits of PNF operations. Five new compliance investigations were also initiated. During 2012–2013, 11 warning letters, 36 advisory letters and 12 corrective action requests were issued. Eighteen reports about non-complying or unauthorised private native forestry operations were received by the OEHL and the EPA during the year and all reports were investigated.

As in previous years, non-compliances have commonly been associated with the operation of roads and snig tracks, including road drainage feature crossings, and inadequate identification or protection of riparian areas. The EPA is working with landholders and contractors to improve operational best practice, including identifying features to be protected before commencing harvesting operations and minimising disturbance during them.

2.8 Fisheries

Compliance with the Fisheries Threatened Species Licence (FL) contained in the IFOAs is audited by Fisheries NSW.

Offences and issues under investigation for the 2012–2013 reporting period were as follows:

- one breach of the FL recorded in Royal Camp State Forest in the UNE region
- one formal caution notice issued under s. 221D(3) of the *Fisheries Management Act 1994* (contravene condition of a licence), relating to the above breach
- two compliance inspections were undertaken during the period (also in UNE region).

3 Achievement of milestones and undertakings defined for NSW forest regions

What are milestones?

Milestones record tasks and the timing required for continual improvement in the management of forested areas. Examples of topics for milestones are:

- developing environmental management systems (EMS)
- preparing management plans for areas of high conservation value
- reporting harvested timber volumes and other forest products such as firewood
- coordinating approaches to land management issues, such as pest, weed and feral animal control
- entering joint venture initiatives with local landholders and Aboriginal people
- monitoring criteria and indicators
- developing strategies with stakeholders to provide cooperative management opportunities
- preparing management plans for tourism and recreation within forest areas.

What are undertakings?

Undertakings are other tasks agreed between state agencies that are listed in approvals or licences. They include:

- documents to be prepared, such as a policies, roading plans and grazing management plans
- training to be provided
- monthly reports and annual reports
- systems for providing public access to documents.

Progress in Coastal Forest Agreements and IFOAs

Appendix 1 reports on 2012–2013 progress of milestones specified in the NSW Forest Agreements for the UNE, LNE, Eden and Southern regions.

Detailed information on progress against the milestones is provided in the report *Review of New South Wales Forest Agreements and Integrated Forestry Operations Approvals, Upper North East, Lower North East, Eden and Southern regions*, available at:

www.environment.nsw.gov.au/resources/forestagreements/ReviewFAandIFOA.pdf

Appendix 1 does not duplicate this work but updates it where necessary. Only ongoing milestones are reported. Completed milestones and those no longer applicable are only reported if there are significant updates or changes.

Brigalow and Nandewar Community Conservation Area Agreement and Brigalow–Nandewar IFOA

Milestones and undertakings in the Brigalow–Nandewar region are set out in the Brigalow and Nandewar Community Conservation Area Agreement (CCA Agreement) and the Brigalow–Nandewar IFOA:

- www.epa.nsw.gov.au/resources/forestagreements/ccaAgreement.pdf
- www.epa.nsw.gov.au/forestagreements/brigalownandewarifo.htm.

The achievement of milestones and undertakings is reported in Appendix 2.

Riverina Red Gum IFOA

Undertakings in the Riverina Red Gum region are set out in the Riverina Red Gum IFOA:

- www.epa.nsw.gov.au/forestagreements/redgumifoa.htm.

The achievement of milestones and undertakings is reported in Appendix 3.

South Western Cypress IFOA

Undertakings in the South Western Cypress region are set out in the South Western Cypress IFOA:

- www.epa.nsw.gov.au/forestagreements/swcypressifoa.htm.

The achievement of milestones and undertakings is reported in Appendix 4.

4 References

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Appendix 1: Milestones and undertakings – Coastal IFOAs

This appendix reports on 2012–2013 progress of milestones and undertakings specified in the NSW Forest Agreements for the UNE, LNE, Eden and Southern regions.

Milestones and undertakings previously recorded as complete or no longer applicable are not listed. The 2010 *Review of New South Wales Forest Agreements and Integrated Forestry Operations Approvals, Upper North East, Lower North East, Eden and Southern regions*, determined that these would no longer be reported in future reviews or annual reporting.

Report milestone number	Milestone	Progress for 2012–2013
1. Environmental Management Systems		
Milestone 1.2 Agency: PWG	Preparation of Parks and Wildlife Group (PWG) EMS Refer to UNE, LNE and Eden Forest Agreements section 2.1.2, Att 3; Southern Forest Agreement section 2.1.2, Att 6 (2)(b)	Revised status – Complete Will not have to be reported in the current period or following.
2. Management planning		
Milestone 2.1 Agency: NPWS	Plans of management for the NPWS estate Refer to UNE, LNE and Eden FAs section 2.3.2, Att 8; Southern FA section 2.3.2	Of the 394 reserves in the UNE and LNE regions, 251 have plans of management adopted by the NSW Minister for the Environment and 35 draft plans have been publicly exhibited. Of the 18 reserves in the Eden region, 16 have plans of management adopted by the NSW Minister for the Environment and one draft plan has been publicly exhibited. Of the 128 reserves in the Southern region, 112 have plans of management adopted by the NSW Minister for the Environment and one draft plan has been publicly exhibited.

Report milestone number	Milestone	Progress for 2012–2013
Milestone 2.4 Agency: FCNSW	Report on meeting targets in ESFM plans Refer to UNE, LNE, Eden, Southern FAs section 2.2.6	NSW is continuing to report on the current suite of ESFM criteria and indicators for NSW Forest Agreement regions. These indicators have been reported on annually since 1999 and are the same as the 'Sustainability Indicators' described in NSW Forest Agreements. Forestry Corporation also continues to report at a statewide scale, on performance across a range of social, environmental, economic and sustainability areas through the Annual Report and Sustainability Supplement.
Milestone 2.5 Agency: FCNSW and NPWS	Formation of a working group in Southern region to make recommendations on the management and tenure of areas of state forests that are isolated from the productive state forests Refer to Southern FA section 6.16	Ongoing No progress reported for 2012–2013.
Milestone 2.7 Agency: FCNSW	Working plans for flora reserves to be incorporated into ESFM plans Refer to UNE and LNE and FAs section 2.2.2; Eden FA section 2.2.2; Southern FA sections 2.2.2, 2.3.2	Ongoing All existing flora reserves on state forests have management plans. Management plans will be progressively prepared for new reserves. Model plans (document templates) have been issued to guide future preparation of management plans.
Milestone 2.8 Agency: FCNSW	Working plans for informal reserves to be incorporated into ESFM plans Refer to UNE, LNE and Eden FAs section 2.3.3; Southern FA section 2.3.3	Model plans developed by FCNSW have been issued for regions to develop plans for informal reserves and areas managed by prescription. The working plans are being completed progressively.
3. CAR reserve system		
Milestone 3.2 Agency: Fisheries	Aquatic reserves declared under the <i>Fisheries Management Act 1994</i> that affect forestry operations in the UNE, LNE, Eden or Southern regions Refer to LNE, UNE, Eden, Southern FAs section 2.3.4	No new aquatic reserves declared in the reporting period.

Report milestone number	Milestone	Progress for 2012–2013
Milestone 3.3 Agencies: NPWS with FCNSW	Upgrading of FMZs, reviewing mineral objections and lands for further consideration (FURCONS) Refer to UNE and LNE FAs sections 2.3.1, 2.3.3, 6.16.2; Eden FA section 6.16.1; Southern FA section 2.3.3	For the UNE 6.8 hectares of former state forest (held under Part 11 of the NPW Act) was reserved 10 August 2012 as an addition to Goonengerry NP. For the LNE 4.9 hectares of former state forest (held under Part 11 of the NPW Act) was reserved 23 November 2012 as an addition to Maria NP.
4. Crown reserves and assessment of Crown land		
Milestone 4.1 Agency: NPWS	Management and five-year review of Crown reserves/state conservation areas Refer to UNE, LNE and Eden FAs 2.3.3; UNE and LNE FA section 2.3.3; Eden FA section 2.2.3; Southern Forest Agreement section 2.3.3	The second five-year review of state conservation areas (SCAs) commenced in November 2012 with recommendations expected to be released early to mid 2014.
Milestone 4.2 Agency: NPWS	Assessment of Crown land Refer to UNE and LNE FAs section 6.16.2	There were no new assessments or reservations of Crown land under the UNE and LNE Forest Agreements in 2012–2013.
5. Threatened species management – no further reporting, see previous report		
6. Pest, weed and feral animal control		
Milestone 6.2 Agency: FCNSW	Preparation of grazing management plans, feral and introduced predator control plans and threatened flora species management plans on state forests Refer to UNE, LNE and Eden FAs section 2.4.2; Southern FA section 2.4.3	Pest and weed strategic plans have been approved by the EPA. Regional grazing plans are being progressively prepared based on an FCNSW approved model. As part of the remake of the coastal IFOAs, all supplementary plans including grazing would be reviewed to align with any new requirements. No further progress reported for 2012–13.

Report milestone number	Milestone	Progress for 2012–2013
7. Managing for other forest values and uses		
Milestone 7.4 Agencies: OEH, who chairs Occupation Permit Taskforce (NPWS, FCNSW, and NSW Farmers)	After consultation, the occupation permit taskforce must oversee the phasing out of occupation permits in state forests which currently exist in areas identified as formal reserves and informal reserves and permissive occupancies on Crown land identified as formal reserves and informal reserves. Refer to UNE, LNE, Eden FAs section 2.3.3; Southern FA section 2.3.3	No progress reported for 2012–13.
8. Private land		
Milestone 8.1 Agency: OEH Veg. mapping	Identification of private land of conservation priority Refer to UNE and LNE FAs section 2.9.1 – 1 January 2000; Southern FA section 2.9 – 30 June 2002	Processes in place for identifying private land of conservation priority are listed in the Review of New South Wales Forest Agreements and Integrated Forestry Operations Approvals (DECCW 2010). The information will continue to be updated in subsequent reports.
Milestone 8.5 Agency: FCNSW	Improve administrative arrangements and cooperation and coordination by state agencies to facilitate the timber industry utilising private forest resources including marketing and pricing Refer to Southern FA Att 6 (3)	The Review of New South Wales Forest Agreements and Integrated Forestry Operations Approvals (DECCW 2010) summarised programs and arrangements by state agencies and non-government organisations, including marketing and pricing, to assist use and management of private forest resources. No further update provided by Forestry Corporation for 2012–2013.

Report milestone number	Milestone	Progress for 2012–2013
Milestone 8.6 Agency: FCNSW	Arrangements to ensure ESFM on private forests involving the provision of technical advice, extension services, research and assistance in the estimation of sustainable yield Refer to Southern FA Att 6 (3 point 1)	The <i>NSW Annual Report on Native Vegetation</i> summarises actions by private forestry land managers, with the help of OEH, to conserve and manage native vegetation. The reports are available at: www.environment.nsw.gov.au/vegetation/reports.htm .
9. Private native forestry and plantations – no further reporting, see previous report		
10. World heritage and wilderness		
Milestone 10.1 Agency: NPWS	Review of CERRA World Heritage Areas to identify any additional rainforest to be included Refer to UNE and LNE FAs section 2.7	No progress reported for 2012–2013.
Milestone 10.2 Agency: NPWS	Studies of the dedicated reserve system to identify World Heritage values, including eucalypt dominant vegetation and religious beliefs embedded in the landscape Refer to UNE and LNE FAs section 2.7; Eden FA section 2.6; Southern FA section 2.7	No known progress to report for 2012–2013.
11. Cultural heritage – no further reporting, see previous report		

Report milestone number	Milestone	Progress for 2012–2013
12. Aboriginal interests		
Milestone 12.4 Agencies: NPWS FCNSW	NPWS and Forestry Corporation to undertake joint management arrangements with local Aboriginal communities and examination of state forests for co-management arrangements Refer to UNE, LNE and Eden FAs section 5.1.1; UNE and LNE FAs section 5.1.1; Southern Forest Agreement section 5.1.1	<p>In state forests five co-management agreements were developed with Aboriginal groups. A further 25 partnerships with Aboriginal groups were reported.</p> <p>For parks there are currently 13 formal joint management arrangements that have been established (including leases, ILUAs and MOUs) with Aboriginal communities that are formalised under the <i>National Parks and Wildlife Act 1974</i> within the Forest Agreement areas.</p> <p>There are also a number of joint management agreements under negotiation. The Gundungurra Non-Native Title Indigenous Land Use Agreement is nearing completion. It covers reserves in the north west of the Southern Forest Agreement area.</p> <p>The Southern Kosciuszko National Park Aboriginal Working Group met in Feb 2013 to progress the MOU. The NPWS staff working on the MOU presented a draft of the MOU to the group at this meeting. A few minor changes are required but it is anticipated that this MOU may be finalised by the end of 2013 (Southern).</p> <p>NPWS supported the purchase of Bellbrook Farm (110 ha) by the Gulaga and Biamanga NPs boards of management. The property will be added to Gulaga National Park and will form the base for the boards' cultural tourism operations. Planning for the site will be carried out in 2013–2014 (Southern).</p> <p>The draft Plan of Management Yuin Bangguri (Mountain) Parks was prepared by the boards of management for Gulaga and Biamanga national parks with staff from NPWS Far South Coast Region; it was placed on public exhibition until 12 April 2013.</p>

Report milestone number	Milestone	Progress for 2012–2013
Milestone 12.5 Agencies: NPWS FCNSW	Joint ventures with local Aboriginal communities and development of project plans Refer to UNE, LNE and Eden FAs section 5.1.1; Southern Forest Agreement section 5.1.1	<p>NPWS and Forestry Corporation staff are involved in many of the actions (activities) that are part of the Bundian Way project, for example in 2012–2013:</p> <ul style="list-style-type: none"> • 2012 Heritage Heroes (NSW Government Heritage Volunteer Awards) presented by Minister Robyn Parker to members of the BWMC in Sydney 11 December 2012 • NSW Heritage Listing 18 January 2013 • One of many Forestry Corporation NSW outdoor education camp sites on the BW had been completed. The Imlay Creek site official opening occurred Tuesday 19 March 2013 • Significant grasslands managed within LHPA stock reserves along the BW are being systemically planned for ecological survey over the coming years. This work involves local NPWS staff and grassland specialists from OEH • Numerous Aboriginal Place nominations are being progressed by OEH Cultural Heritage staff for places along the route. Delegate Mission Aboriginal Place was formerly recognised and celebrated in Delegate on 12 April 2013 • In May 2013 Eden LALC was notified of funding provided through the Queanbeyan Indigenous Coordination Centre to fund the Bundian Way Project Manager position. A selection committee comprising members of the BWMC met in July 2013 to commence the selection process. <p>Forestry Corporation Regional Aboriginal Affairs Officers continued to facilitate consultation and input from Aboriginal communities, on appropriate protection measures for sites.</p> <p>In the Southern Forest Agreement area a memorandum of understanding was agreed with Ulladulla LALC for the management of cultural sites in McDonald State Forest.</p>
13. Aboriginal interests in the Hume and Riverina regions of FCNSW and the South West Slopes region of NPWS		
Milestone 13.2	Specified enterprise development on state forests within Hume and Riverina regions of Forestry Corporation Refer to Southern FA section 5.1.4.2	The Review of NSW Forest Agreements and Integrated Forestry Operations Approvals (DECCW 2010) summarised initiatives. No further update provided by Forestry Corporation for 2012–2013.

Report milestone number	Milestone	Progress for 2012–2013
Milestone 13.5	Forestry Corporation to initiate specific employment opportunities in the Hume and Riverina regions of Forestry Corporation subject to external funding Refer to Southern FA section 5.1.4.4	The Review of NSW Forest Agreements and Integrated Forestry Operations Approvals (DECCW 2010) summarised initiatives. No further update provided by Forestry Corporation for 2012–2013.
Milestone 13.7 Agency: NPWS	Specified employment and training opportunities with NPWS Refer to Southern FA section 5.1.4.6	<p>Two temporary (three year) Aboriginal Field Officer positions were maintained, they are half funded from OEH and Biamanga and Gulaga boards of management. The appointments are based in Narooma and Tanja. These positions are part of the Enhanced Bushfire Management Program.</p> <p>An Aboriginal Cadet Ranger position was maintained and is based in Narooma.</p> <p>A temporary (three-year) Aboriginal Field Officer was maintained for the Southern Ranges Region Enhanced Bushfire Management Program.</p> <p>A temporary (three-year) Aboriginal Field Officer (Aboriginal identified position) was maintained for the South Coast Region Enhanced Bushfire Management Program. Another Aboriginal person was also appointed part-time to the program but is not an identified position. These positions are based at Nowra Depot but cover the South Coast region.</p> <p>A temporary part-time Clerk position is continuing for an Aboriginal Community Projects Officer. This position is located at Nowra.</p> <p>A salaried student-based apprentice was appointed to the South Coast region.</p> <p>South Coast Region continued employment of fulltime Aboriginal Rangers and field officers in all of its Areas.</p>
14. Supply arrangements		
Milestone 14.1 Agency: FCNSW	Consultation on timber arrangements through the development of plans of operation Refer to UNE, LNE and Eden FAs section 3.4; Southern FA section 4.3	Forestry Corporation regions continue to consult with stakeholders, such as industry and neighbours, in the development of annual plans of operation.

Report milestone number	Milestone	Progress for 2012–2013
Milestone 14.4 Agency: FCNSW	Review legislation and policies relevant to the allocation and pricing of hardwood logs from state forests Refer to UNE, LNE and Eden FAs Att 8	Forestry Corporation reports no new developments for 2012–2013.
15. Supplementing timber supply		
Milestone 15.1 Agency: FCNSW	Supplementary timber supply by actions such as purchasing private lands and/or timber rights to supply high quality large sawlogs and large veneer logs Refer to UNE and LNE FAs sections 2.9.2, 3.3, 3.6, 6.16.2, Att 10; Eden FA section 2.8.2; Southern FA sections 3.3.3, 3.6	In 2012–2013 Forestry Corporation obtained 9766 m ³ of supplementary timber supply. Of this, 3927 m ³ was high quality logs.
Milestone 15.2 Agency: FCNSW	Development of a process to consider unmet targets prior to land purchases Refer to UNE and LNE FAs section 6.16.2; Southern FA section 3.3.3	The Review of NSW Forest Agreements and Integrated Forestry Operations Approvals (DECCW 2010) summarised initiatives to consider unmet targets before land purchases. Forestry Corporation also noted that, as an alternative to purchasing land, it continues to source additional timber by purchasing timber rights.
Milestone 15.3 Agency: FCNSW	Establishment of plantations Refer to UNE FA section 3.2; LNE FA sections 3.1, 3.3, 3.6; Southern FA section 3.6, Att 8	No new establishment of hardwood plantations in 2012–2013 by Forestry Corporation.
16. FRAMES improvement, inventory, sustainable yield, volume review		
Milestone 16.1 Agency: FCNSW	Continuous FRAMES development program for the UNE, LNE, Eden and Southern regions Refer to UNE, LNE, Eden FAs section 3.5; Southern FA section 3.5 and Att 6 (7)	No further progress to report since that provided in detail in the Review of NSW Forest Agreements and Integrated Forestry Operations Approvals (DECCW 2010).

Report milestone number	Milestone	Progress for 2012–2013
Milestone 16.2 Agency: FCNSW	Inventory system for regrowth forests for Eden; improvement to inventory in UNE, LNE and Southern Refer to UNE, LNE and Eden FAs section 3.5, Att 8; Southern FA section 3.5, Att 6 (6) (e)	Some progress has been made on elements of Milestones 16.2 to 16.7 during 2012–2013, as part of the Forestry Corporation response to the Auditor General's Report (Audit Office 2009) which was an independent review of native forests performance. The outcomes of the review are published at: www.forests.nsw.gov.au/resources/pubs/corporate/auditor-generals-performance-audit-of-native-forest-and-hardwood-plantation-operations
Milestone 16.3 Agency: FCNSW	Commission and publish an independent review of the FRAMES system, including improvements applying to South Coast and Tumut sub-regions Refer to Southern FA Att 6 (8 point 1)	See Milestone 16.2
Milestone 16.4 Agency: FCNSW	Monitoring FRAMES through comparison of actual versus predicted volumes Refer to UNE, LNE, Eden section 3.5; Southern FA section 3.5, Att 6 (6) (f), Att 6 (7 point 12)	See Milestone 16.2
Milestone 16.5 Agency: FCNSW	Strategic and operational requirements of sustainable yield systems and processes, review sustainable yield every five years using enhanced FRAMES and publish methods Refer to UNE, LNE and Eden FAs section 3.1; Southern FA Att 6 (8)	See Milestone 16.2
Milestone 16.6 Agency: FCNSW	Complete and publish independent audits of sustainable yield Refer to Southern FA Att 6 (8 point 3)	See Milestone 16.2 Forestry Corporation reported no new developments for 2012–2013.

Report milestone number	Milestone	Progress for 2012–2013
Milestone 16.7 Agency: FCNSW	Review of wood supply/timber volumes Refer to UNE and LNE FAs sections 3.2, 3.5	See Milestone 16.2
17. Forestry Corporation practices including silviculture		
Milestone 17.4 Agency: FCNSW	Establishing demonstration areas in the Southern region, as an aid for field supervisor training Southern FA sections 2.2.8, 4.2, Att 6 (2) (o)	Forestry Corporation reports that adequate field training is being provided in Southern region. The demonstration areas will be established only if there is a need to further train field staff.
Milestone 17.10 Agency: FCNSW	Liaison by Forestry Corporation with the NSW Department of Planning, NPWS and EPA on proposed forestry operations not covered by a Forest Agreement or IFOA including environmental assessment and evaluation Refer to UNE, LNE and Eden FAs FA section 2.2.7	Forestry Corporation did not report significant liaison with key agencies during the reporting period 2012–2013.
19. Charcoal provisions in NSW Forest Agreements – no further reporting, see previous reports		
20. Staff training, employment and industry initiatives – no further reporting, see previous reports		
21. Community awareness and education – no further reporting, see previous reports		
22. Community consultation – informing the public – no further reporting, see previous reports		

Report milestone number	Milestone	Progress for 2012–2013
23. Reporting and monitoring		
Milestone 23.1 Agency: OEH	Monitoring and reporting of criteria and indicators Refer to UNE and LNE FAs section 2.11.2, Att 9; Eden FA section 2.10.2, Att 9; Southern FA section 2.11.2, Att 7	National Montreal Implementation Group (MIG) indicators were finalised in 2008 and published at: www.daff.gov.au/ABARES/forestsaustralia/Pages/framework/default.aspx The NSW Review of NSW Forest Agreements and Integrated Forestry Operations Approvals was finalised in 2010. The review recommended: <ul style="list-style-type: none"> • publication of a separate report entitled ESFM Criteria and Indicators for the Upper North East, Lower North East, Southern and Eden regions of NSW • that ESFM reporting should be extended to five-yearly. Extension of the reporting timeframe will allow changes in forest values over time to be reported more meaningfully and will align NSW EFMS criteria and indicator reporting with other RFA states, such as Victoria and Tasmania. No progress to report in 2012–2013.
Milestone 23.2 EPA	Annual reports on Forest Agreements and tabling reports Refer to UNE, LNE and Eden, Southern FA section 6.9	Annual reports on the implementation of the NSW Forest Agreements have been completed and tabled up to and including the current report. Progress for all regions is compiled into one annual report. The annual reports provide progress on: <ul style="list-style-type: none"> • achievement of milestones in the NSW Forest Agreements • monitoring of key ESFM criteria and indicators by Forestry Corporation and OEH each financial year • compliance with the IFOAs.
24. Research and data management		
Milestone 24.6	A compendium of NSW forest research must be prepared Refer to UNE and LNE FAs section 2.11.3; Eden FA section 2.10.3; Southern FA section 2.11.3	No progress to report in 2012–2013.

Report milestone number	Milestone	Progress for 2012–2013
Milestone 24.7 Agency: FCNSW	Operational research trial Refer to Eden FA section 3.1	Forestry Corporation was proposing a trial in the Eden region to assess the merits of selective harvesting of filter strips and any associated impacts. The project is dependent on timber supply and has continued to be deferred.
Milestone 24.8 Agency: FCNSW	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 Refer to Southern FA Att 6 (6) (a)	Forestry Corporation has a Forest Management System that integrates all regulatory and non-regulatory requirements to achieve best forest management outcomes. As part of the continuous improvement process Forestry Corporation continues to develop and enhance tools to better manage forests at an operational scale.
Milestone 24.9 Agency: FCNSW	Develop by the end of 2010, a model to predict recruitment and maintenance of habitat trees over time Refer to Southern FA Att 6 (6) (b)	Forestry Corporation reported no further developments in 2012–2013.

Appendix 2: Milestones and undertakings with identified time periods – Brigalow–Nandewar region

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
Community Conservation Area Agreement Undertakings 4.1 and 13.2	Community Conservation Area Agreement The Community Conservation Council will review the Community Conservation Area Agreement in consultation with the Community Conservation Advisory Committees after seven years. The Council may develop amendments or a replacement Agreement consistent with the Act.	10 June 2016	EPA	This undertaking is due by 2016.
Community Conservation Area Agreement Undertaking 10.1	Plans of management (OEH) OEH to develop plans of management for zones 1, 2 and 3 of the community conservation area in consultation with the Community Conservation Advisory Committees.	Ongoing	NPWS	Of the 62 reserves under zones 1, 2 and 3, five have plans of management adopted by the NSW Minister for the Environment and four draft plans have been publicly exhibited.
Brigalow Nandewar Green Firewood Strategy	Reporting on Green Firewood Strategy Annual reporting (to the Community Conservation Council) by FCNSW on progress and implementation of Brigalow–Nandewar Green Firewood Strategy.	Within 60 days of the end of each financial year	FCNSW	FCNSW submitted an expenditure and payment report to OEH in July 2012 The final report on the Strategy was submitted to the CCC by DPI.
I FOA clause 9(5)	Soil assessor training DECC approval of soil assessor training course(s).	When required	EPA	EPA approved soil assessor training has been conducted in Brigalow–Nandewar region since 2009–2010.

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
IFOA clauses 29(1) and (5)	Proposed new TSC Act listings DECC required to notify FCNSW of proposed new TSC Act listings relevant to forestry operations.	When required	EPA to notify FCNSW	No update reported. This is an ongoing task as listings become apparent.
IFOA clauses 37(1) to (5)	37. Sustainable yield study for hardwood species (1) Forestry Corporation is to conduct (over the first five years of the term of this approval) a study of the sustainable yield for logs and other timber products from tableland hardwood and western hardwood species (other than western ironbark trees) in the Brigalow–Nandewar region for the remainder of the term of this approval. See IFOA for full undertakings 37 (1) to (5).	Study to be undertaken within the first five years of commencement of the IFOA (by October 2015)	FCNSW	No action taken in 2012–2013 on a sustainable yield study.
IFOA clauses 41(1) to (7)	41. Travelling stock reserves (1) Forestry Corporation to assess or determine matters when deciding whether to carry out, or authorise the carrying out of, a logging operation in which timber on a travelling stock reserve (within the meaning of the <i>Rural Lands Protection Act 1998</i>) that is Crown-timber land is to be cut and removed. Continued...	Forestry Corporation plan for managing logging operations on travelling stock reserves in the Brigalow–Nandewar region is to be prepared within 12 months of the commencement of the approval	FCNSW (EPA may provide written comments)	Not complete; however, a project is underway and this milestone will be completed in line with FCNSW management priorities. FCNSW will provide detail on revised timelines for completion in the 2013–14 annual report.

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
IFOA clauses 41(1) to (7) continued	<p>41. Travelling stock reserves, cont.</p> <p>(4) Forestry Corporation is to prepare a plan for managing logging operations on travelling stock reserves in the Brigalow–Nandewar region within 12 months of the commencement of this approval. The plan is to include measures, in relation to each forested area within a travelling stock reserve that Forestry Corporation identifies as having high conservation value (under subclause (1) or otherwise), for ensuring that the environmental attributes that contribute to the high conservation value of the area are maintained or improved.</p> <p>(6) Forestry Corporation may not carry out, or authorise the carrying out of, any logging operations on land within a travelling stock reserve until it has forwarded its draft plan for managing those operations to DECCW and considered any written comments DECCW may provide regarding the contents of the plan within two months of receiving it.</p> <p>See IFOA for full undertakings 41(1) to (7).</p>	See above.	FCNSW (EPA may provide written comments)	Not complete; however, a project is underway and this milestone will be completed in line with FCNSW management priorities. FCNSW will provide detail on revised timelines for completion in the 2013–14 annual report.
IFOA clauses 44(1) to (3)	<p>44. Assessment of regeneration in silvicultural management</p> <p>(1) Forestry Corporation must assess the extent and nature of regeneration in areas of land within the Brigalow–Nandewar region that are logged during the term of this approval. Assessments must be carried out on a regular and periodic basis.</p> <p>See IFOA for full undertakings 44 (1) to (3).</p>	The first such assessment is to be completed by the end of 2013	FCNSW	No action to report in 2012–2013.

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
IFOA clauses 46 (1) to (3)	<p>46. Pest animal management plan – review and amendment</p> <p>(1) Forestry Corporation must review the pest animal management plan applying to state forests within the Brigalow–Nandewar region, regularly and periodically (and at least every five years from the date of its approval for implementation). Accordingly, the Pest Animal Management Plan 2006 Western Region NFOB (referred to in clause 45) must be reviewed by 30 June 2011.</p> <p>See IFOA for full undertakings 46(1) to (3).</p>	<p>The Pest Animal Management Plan 2006 Western Region NFOB (referred to in clause 45) must be reviewed by 30 June 2011</p>	FCNSW	<p>Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.</p>
IFOA clauses 49 (1) to (3)	<p>49. Weed management plan – review and amendment</p> <p>Forestry Corporation must review the weed management plan applying to state forests within the Brigalow–Nandewar region, regularly and periodically (and at least every five years from its approval for implementation). Accordingly, the Weed Management Plan 2006 Western Region NFOB (referred to in clause 48) must be reviewed by 30 June 2011.</p> <p>See IFOA for full undertakings 49 (1) to (3).</p>	<p>The Weed Management Plan 2006 Western Region NFOB (referred to in clause 48) must be reviewed by 30 June 2011</p>	FCNSW	<p>Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.</p>

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
IFOA clauses 52 (1) to (3)	<p>52. Grazing management plan – review and amendment</p> <p>(1) Forestry Corporation must review its grazing management plan applying to state forests within the Brigalow–Nandewar region, regularly and periodically (and at least every five years from the date of its approval for implementation). Accordingly, the Grazing Management Plan 2006 Western Region NFOB (referred to in clause 51) must be reviewed by 30 June 2011.</p> <p>See IFOA for full undertakings 52 (1) to (3).</p>	The Grazing Management Plan 2006 Western Region NFOB (referred to in clause 51) must be reviewed by 30 June 2011	FCNSW	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
IFOA clause 55	<p>55. Burning operations management plan – preparation of first plan</p> <p>Forestry Corporation must prepare (and approve for implementation) a burning operations management plan that complies with clause 54 within 12 months of the commencement of this approval. Forestry Corporation is to invite DECCW and DII (Fisheries) to provide comments on a draft of the plan, and is to take into account any comments made by those agencies (within a reasonable time) in finalising the plan.</p>	Plan is to be finalised within 12 months of commencement	FCNSW (EPA and Fisheries may provide written comments)	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
IFOA clauses 57 (1) to (3)	57. Burning operations management plan – review and amendment (1) Forestry Corporation must review the burning operations management plan applying to state forests within the Brigalow–Nandewar region, regularly and periodically (and at least every five years from the date of its approval for implementation). See IFOA for full undertakings 57 (1) to (3).	Regularly and periodically – and at least every five years from the date of its approval for implementation	FCNSW	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
IFOA clauses 60 (1) to (3)	60. Road and fire trail management plan – review and amendment (1) Forestry Corporation must review the road and fire trail management plan applying to the Brigalow–Nandewar region, regularly and periodically (and at least every five years from its approval for implementation). Accordingly, the Road Management Plan 2006 Western Region NFOB must be reviewed by 30 June 2011. See IFOA for full undertakings 60 (1) to (3).	Regularly and periodically and at least every five years from its approval for implementation	FCNSW	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
IFOA clauses 80 to 88	80. Annual reports on forestry operations (1) Forestry Corporation is to provide DECCW and DII (Fisheries) with a report on forestry operations undertaken in the Brigalow–Nandewar region in each financial year. The information that must be included in the annual report is set out in clauses 81 to 87. See IFOA for full undertakings 80 to 88.	The annual report for a financial year is to be provided to EPA and NSW Fisheries by 1 September in the next financial year (A copy of each annual report under this Division is to be kept by Forestry Corporation for the remainder of the term of this approval.)	FCNSW (to be confirmed by EPA and Fisheries)	The annual report for all western IFOA regions for the period 2012–2013 will be provided in September 2013. The information submitted is summarised in the current report – see Section 1.3, ‘Timber volumes harvested in western forests’.

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
IFOA clauses 149 to 151	<p>149. Species management plans for certain threatened plant species</p> <p>Forestry Corporation is to prepare a species management plan for each of the following threatened species of plant to assist in identifying, managing and controlling any adverse impacts of forestry operations on the species:</p> <p>(a) <i>Bertya sp.</i> A Cobar-Coolabah (also named <i>Bertya</i> opponents)</p> <p>(b) <i>Diuris tricolor</i></p> <p>(c) <i>Pomaderris queenslandica</i></p> <p>(d) <i>Pterostylis cobarensis</i></p> <p>(e) <i>Swainsona recta</i></p> <p>(f) <i>Swainsona sericea</i>.</p> <p>See IFOA for full undertakings 149–151.</p>	Within 12 months of the commencement approval and to be submitted to EPA	FCNSW	All identified SMPs have been submitted to the EPA and are being reviewed.
IFOA clauses 152 to 154	<p>152. Monitoring plans for plant species</p> <p>To review and approve the development of FMPs for the following species: <i>Acacia jucunda</i>, <i>Monotaxis macrophylla</i>, <i>Phebalium glandulosum</i> subsp. <i>eglandulosum</i>.</p> <p>See IFOA for full undertakings 152–154.</p>	Within 12 months of the commencement approval and to be submitted to EPA	FCNSW	All identified monitoring plans have been submitted to the EPA and are being reviewed.
IFOA clauses 149, 152 and 259	<p>Approved plans</p> <p>Intention to amend IFOA to give effect to approved plans under clauses referred to above. This will result in amendment and ultimately omission of clause 259.</p>	Potentially within 12 months of the commencement approval	EPA and FCNSW	Subject to finalisation of actions 149 and 152.

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
IFOA clause 155	<p>155. Strategic monitoring and assessment program</p> <p>Forestry Corporation is to develop and undertake a strategic monitoring and assessment program in the Brigalow–Nandewar region:</p> <p>(a) to improve knowledge of the habitat requirements of threatened species within the region, and</p> <p>(b) to monitor populations of native animals and plants within the region and assess the extent to which any changes in population levels may be attributable to forest management and practice.</p> <p>See IFOA for full undertaking 155.</p>	Forestry Corporation is to develop the strategic monitoring and assessment program in consultation with EPA before the end of the 12 month period following the commencement of this approval	FCNSW	A strategic monitoring and assessment program will be submitted to the EPA in early 2014.
IFOA clauses 158 and 159	<p>Give effect to species management plans</p> <p>Approval of monitoring plan for <i>Polygala linariifolia</i> and <i>Tylophora linearis</i>.</p>	Not stated	EPA and FCNSW	The existing SMP and monitoring plans were reviewed as part of the 5 and 10 year review. The IFOA 2013 Amendments, removed the monitoring plan requirements for <i>Polygala linariifolia</i> and <i>Tylophora linearis</i> . Both species were provided specific site based conditions.

Report milestone number	Milestone	Timeframe	Responsibility	Progress for 2012–2013
IFOA clauses 233 (1) to (4)	Auditing methodology for the retention of trees (1) Forestry Corporation is to develop, in consultation with DECCW, a methodology for auditing compliance with the requirements for the retention of trees for the purposes of this Part (namely, clauses 197 (2), 198, 199, 200, 206 and 216). Forestry Corporation is to endeavour to have in place an auditing methodology (approved by DECCW) within 12 months of the commencement of this approval. See IFOA for full undertaking 233 (1) to (4).	Within 12 months of the commencement approval	EPA and FCNSW	Forestry Corporation has proposed a draft methodology which EPA is reviewing in line with its compliance priorities program.

Appendix 3: Milestones and undertakings – Riverina Red Gum IFOA

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
26	Five-year review Five-year review of approval, consideration on minimum basal area retention, new TSC act listings, drainage protection features	Jan 2016	Ministers (both agencies)	No progress reported in 2012–2013.
27 (1) to (4)	Review early thinning operations (other than in the western lands leases) (1) A review of the early thinning program referred to in clause 5 will be conducted in the period 1 July 2012 to 31 December 2012 to determine a sustainable annual maximum amount of river red gum residue that may be produced from early thinning operations, taking into account the silvicultural and environmental impacts and benefits of the program, and the extent of the resource. (2) The terms of reference for the review will be set jointly by DECCW and Forestry Corporation. See IFOA for full undertakings 27 (1) to (4)	Prior to 1 July 2012 – review will be conducted from 1 July 2012 to 31 December 2012	Joint Forestry Corporation and OEH review conducted by independent scientific panel (membership mutually agreed by agencies) – jointly funded	Review and recommendations submitted to the EPA in May 2013.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
27 (5) to (10)	<p>Review residue operations in the western lands leases</p> <p>(5) Forestry Corporation will conduct a series of reviews for the purpose of recommending the maximum volume of residue and residue logs (including dry residue and dry residue logs) that may be produced from logging operations (including early thinning operations) in the western lands leases for each of the following periods:</p> <p>a) 1 January 2014 to 31 December 2019 b) 1 January 2020 to 31 December 2025 c) 1 January 2026 to 31 December 2031.</p> <p>(6) The terms of reference for the review will be set jointly by Forestry Corporation and DECCW no less than 12 months before the commencement of the next review period (for example, the terms of reference for the review described in subclause (5)(b) must be settled by 31 December 2012).</p> <p>See IFOA for full undertakings 27 (5) to (10)</p>	<p>Joint TOR by 31 Dec 2012 for the first review period 1 January 2014 – 31 December 2019</p> <p>Forestry Corporation must send draft copy to the EPA by June 2013.</p> <p>Forestry Corporation in consultation with the EPA must produce agreed recommendations for any amendments by 30 Sept 2013</p>	<p>Joint TOR</p> <p>Forestry Corporation (lead) EPA review and joint recommendations required</p>	<p>The Forestry Corporation commenced its review of appropriate volumes of residue and residue logs in the specified periods.</p>
28 (2), (3)	<p>Optimal basal area retention rate trial</p> <p>(2) Forestry Corporation may carry out a trial in accordance with this clause to determine the optimal rate of basal area retention for the purposes of clause 43, in a range between six and 12 square metres per hectare, having regard to the need for both ecologically sustainable forest management and a sustainable timber supply.</p> <p>See IFOA for full undertakings 27 (2) and (3)</p>	<p>Note: This research will inform the five-year review referred to in clause 26.</p> <p>Also part of RRG Structural Adjustment Package Agreements – to feed into Adaptive Management Program (by June 2013)</p>	<p>FCNSW (lead) must consult with the EPA as to the area selected and parameters of the trial</p>	<p>No progress to report in 2012–2013.</p>

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
29 (1) to (4)	<p>Auditing methodology for tree retention requirements in this approval</p> <p>(1) Forestry Corporation is to develop, within 12 months of the commencement of this approval and in consultation with EPA, a methodology for:</p> <p>a) auditing compliance with the requirements for the retention of trees for the purposes of this approval (clauses 42 to 45 and clause 179); and</p> <p>b) calculating dbhob using stump dimensions (clause 191).</p> <p>See IFOA for full undertakings 29 (1) to (4)</p> <p>See also tree retention requirements under clauses 42–45, 179 and 191.</p>	To be undertaken within 12 months of commencement (due 1 January 2012)	<p>FCNSW (lead) in consultation with the EPA</p> <p>Requires EPA written approval to have effect</p>	Forestry Corporation has proposed a draft methodology which EPA is reviewing in line with compliance priorities.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
30 (1) to (4)	<p>Methodology for targeted survey for regent parrot</p> <p>(1) Forestry Corporation is to develop, in consultation with EPA, a methodology for the targeted survey for the regent parrot required under clause 160, by 29 July 2011.</p>	Before 29 July 2011	<p>FCNSW (lead) in consultation with the EPA</p> <p>Requires EPA written approval to have effect</p>	<p>The IFOA is planned to be amended from 1 July 2013, with requirements to develop a methodology removed. Additional logging restrictions will instead apply to regent parrot habitat including:</p> <ul style="list-style-type: none"> • adding additional areas to the Riverina Forests Drainage Protection Map • application of an additional 50 m buffer to these areas and a 100 cm diameter at breast height maximum tree felling limit in these areas • additional lands identified in the Riverina Forests Drainage Protection Map, and • seasonal restrictions to harvesting in Regent Parrot Nest Tree Zones.
31	<p>Field protocol for measuring distances</p> <p>Develop a field protocol for measuring distances specified in clauses 104, 105 and 106.</p>	To be undertaken within 12 months of commencement (due 1 January 2012)	Joint FCNSW, Fisheries and the EPA	Draft protocols for measuring distance are being prepared following consultation with EPA.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
47 (4), (6) and (7)	<p>Travelling stock reserves</p> <p>Forestry Corporation must prepare a plan for managing operations on travelling stock reserves. EPA and RLPB to be consulted.</p> <p>See IFOA for full undertakings 47 (1) to (9)</p>	<p>To be undertaken within 12 months of commencement (due 1 January 2012); the EPA to comment on Forestry Corporation draft plan within two months of receiving draft.</p>	<p>FCNSW (lead) and OEH and RPLB consulted</p>	<p>Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.</p>
50 (1) to (4)	<p>Assessment of regeneration in silvicultural management</p> <p>Forestry Corporation must assess the extent and nature of regeneration in areas of land logged during the approval. OEH to be consulted regarding assessment of regeneration in silvicultural management.</p> <p>See IFOA for full undertakings 50 (1) to (4)</p>	<p>To be undertaken before carrying out the first assessment, which is due 31 December 2013</p>	<p>FCNSW (lead) and OEH consulted</p>	<p>No progress to report for 2012–2013.</p>
52 (1) to (3)	<p>Pest animal management plan – review and amendment</p> <p>(1) Forestry Corporation must review the pest animal management plan applying to state forests within the Riverina state forests, regularly and periodically (and at least every five years from the date of its approval for implementation).</p> <p>See IFOA for full undertakings 52 (1) to (3)</p>	<p>Regularly and periodically, and at least every five years from the date of its approval for implementation</p>	<p>FCNSW</p>	<p>Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.</p>

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
55 (1) to (3)	<p>Weed management plan – review and amendment</p> <p>(1) Forestry Corporation must review the weed management plan applying to state forests within the Riverina state forests, regularly and periodically (and at least every five years from its approval for implementation).</p> <p>See IFOA for full undertakings 55 (1) to (3)</p>	Regularly and periodically, and at least every five years from the date of its approval for implementation	FCNSW	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
58 (1) to (3)	<p>Grazing management plan – review and amendment</p> <p>(1) Forestry Corporation must review its grazing management plan applying to state forests within the Riverina state forests, regularly and periodically (and at least every five years from the date of its approval for implementation).</p> <p>See IFOA for full undertakings 58 (1) to (3)</p>	Regularly and periodically, and at least every five years from the date of its approval for implementation	FCNSW	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
61	<p>Burning operations management plan – preparation of first plan</p> <p>Forestry Corporation must prepare (and approve for implementation) a burning operations management plan that complies with clause 60 within 12 months of the commencement of this approval. Forestry Corporation is to invite DECCW and DII (Fisheries) to provide comments on a draft of the plan, and is to take into account any comments made by those agencies (within a reasonable time) in finalising the plan.</p>	Plan is to be finalised within 12 months of commencement (due by 1 January 2012)	FCNSW (lead) EPA and Fisheries consulted	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
63 (1) to (3)	<p>Burning operations management plan – review and amendment</p> <p>(1) Forestry Corporation must review the burning operations management plan applying to state forests within the Riverina state forests, regularly and periodically (and at least every five years from the date of its approval for implementation).</p> <p>See IFOA for full undertakings 63 (1) to (3)</p>	Regularly and periodically, and at least every five years from the date of its approval for implementation	FCNSW	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
66 (1) to (3)	<p>Road and fire trail management plan – review and amendment</p> <p>(1) Forestry Corporation must review the road and fire trail management plan applying to the Riverina state forests, regularly and periodically (and at least every five years from its approval for implementation).</p> <p>See IFOA for full undertakings 66 (1) to (3)</p>	Regularly and periodically, and at least every five years from the date of its approval for implementation	FCNSW	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
71 (1) to (5)	<p>Preparation of annual program of forestry operations</p> <p>Forestry Corporation must prepare annual program of operations for each financial year.</p> <p>See IFOA for full undertakings 71 (1) to (5)</p>	First one due 1 July 2011	FCNSW (lead) forward to EPA and Fisheries	An annual program for 2012–2013 submitted to EPA (August 2012).
82	Forestry Corporation to provide monthly advice on operations	Monthly reports commenced on 1 April 2011	FCNSW (lead)	The process of reporting is in place and reporting continues as per the requirements of the IFOA.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
86 to 91	Annual reports on forestry operations Annual report for financial year must be given to OEH and Fisheries See IFOA for full undertakings 86 to 91	By 1 Sept in next financial year (i.e. first report due 1 Sept 2012)	FCNSW (lead); report must be given to EPA and Fisheries	Forestry Corporation reported to the EPA for the period 2012–2013. The information submitted is summarised in the current report – see Section 1.3, ‘Timber volumes harvested in western forests’.
138, 140–143	New records to be forwarded to DECCW (1) Forestry Corporation must advise DECCW of any record of a threatened species of animal or plant made or found in the Riverina state forests during the term of this approval (‘new record’) if Forestry Corporation considers it may be suitable for inclusion on the Atlas of NSW Wildlife (referred to in clause 137). See IFOA for full undertakings related to new records	Within three months of the new record being made or two working days for spp. listed in cl. 140	FCNSW – must notify EPA	Action was not required for 2012–2013.
238–243	Environmental Protection Licence annual return In addition to the annual report required (cls 86 to 91) Forestry Corporation must prepare and give OEH an annual return relating to the EPL.	Calendar years – from the first year within 60 days of end of year (i.e. 1 March 2012)	FCNSW – must submit to EPA	EPL Annual Return submitted February 2013.

Appendix 4: Milestones and undertakings – South Western Cypress IFOA

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
32, 142, 144, 148, 178	New evidence of species Forestry Corporation to notify OEH of its discovery of new evidence of plant and animal species.	Within three months of the new record being made or found, or two working days for species listed in cl. 144	FCNSW	No action reported for 2012–2013.
41 (2), (4), (6) and (7)	Travelling stock reserves Forestry Corporation to prepare a plan managing logging operations on TSRs. OEH to be consulted regarding draft plan for managing operations on travelling stock reserves.	To be undertaken within 12 months of commencement (Due 1 July 2012) Forestry Corporation cannot carry out operations on TSRs until it has considered written comments on the plan from OEH OEH to comment on Forestry Corporation draft plan within two months of receiving draft	FCNSW (lead) RLPB and OEH consulted	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
44	Assessment of regeneration in silvicultural management Forestry Corporation must assess the extent and nature of regeneration in areas of land within the South Western Cypress region that are logged during the term of this approval. EPA to be consulted regarding assessment of regeneration in silvicultural management.	To be undertaken within the first five years of the IFOA (due by 31 December 2015) OEH consulted before carrying out the first assessment	FCNSW (lead) and EPA consulted	No action was required for 2012–2013.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
46, 49, 52, 57, 60	Plan reviews for South Western Cypress region Forestry Corporation must review the pest animal management, weed, grazing, road management, and burning operation plans applying to state forests within the South Western Cypress region, regularly and periodically (and at least every five years from the date of its approval for implementation).	By 30 June 2016 and at least every five years for pest animal management, weed, grazing, road management plans By 30 June 2017 for review of burning operations plan Preparation of first burning operations plan – see 55 below	FCNSW	No action was required for this period.
55	Preparation of first burning operations plan within 12 months of commencement Forestry Corporation must prepare (and approve for implementation) a burning operations management plan that complies with cl. 54 within 12 months of the commencement of this approval. EPA and Fisheries to be invited to comment on a draft burning operations management plan.	Plan is to be finalised within 12 months of commencement (due by 1 July 2012)	FCNSW (lead), Fisheries and OEH (comments)	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.
65	Preparation of annual program of forestry operations Forestry Corporation must prepare annual program of operations for each financial year See IFOA for full undertakings 65 (1) to (5)	First one due 1 July 2011	FCNSW (lead) forward to EPA and Fisheries	Forestry Corporation submitted the required annual program for 2012–2013 in August 2012.
76	Monthly advice on operations Forestry Corporation to provide monthly advice on operations	Monthly	FCNSW (lead)	The process of reporting is in place and reporting continues as per the requirements of the IFOA.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
80 to 88	<p>Annual reports on forestry operations</p> <p>Annual report for financial year must be given to OEH and Fisheries</p> <p>See IFOA for full undertakings 80 to 88</p>	By 1 Sept in next financial year (i.e. first report due 1 Sept 2012)	FCNSW (lead); report must be given to EPA and Fisheries	Forestry Corporation reported to the EPA for the period 2012–2013. The information submitted is summarised in the current report – see Section 1.3, 'Timber volumes harvested in western forests'.
149 and 151	<p>Preparation of species management plans</p> <p>Forestry Corporation must prepare and forward species management plans for the plant species referred to in cl. 149 to the EPA before the end of the 12 month period following the commencement of this approval.</p> <p>The species are: <i>Austrostipa metatoris</i>, <i>A. wakoolica</i>, <i>Diuris tricolor</i>, <i>Pterostylis cobarensis</i>, <i>Swainsona sericea</i>.</p> <p>Note: It is contemplated that if OEH approves the contents of a species management plan, the IFOA will be amended to require the plan to be given effect to. OEH and FCNSW intend that the species management plans required will be finalised and approved within 12 months of the commencement of the IFOA.</p>	12 months of the commencement (due by 1 July 2012)	FCNSW (lead) and OEH approve	All identified SMPs have been submitted to EPA for consideration.
155	<p>Strategic monitoring and assessment program (SM&AP)</p> <p>Forestry Corporation is to develop and undertake a strategic monitoring and assessment program in the South Western Cypress region.</p>	Within 12 months of the commencement (due by 1 July 2012)	Forestry Corporation (lead) and OEH	Proposal under development but not completed in 2012–2013. South Western Cypress SM&AP will utilise the same design as the Brigalow–Nandewar SM&AP. A copy of the latter has been forwarded to EPA for comment.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
233 (1) to (4)	<p>Auditing compliance with Part – methodology to be developed</p> <p>(1) Forestry Corporation is to develop, in consultation with OEH, a methodology for auditing compliance with the requirements for the retention of trees for the purposes of this Part (namely, cls 198 and 216). Forestry Corporation is to endeavour to have in place an auditing methodology (approved by OEH) within 12 months of the commencement of this approval.</p> <p>(4) The methodology developed under this clause does not have effect unless and until OEH has approved it in writing. It may be amended from time to time with the written approval of OEH.</p> <p>See IFOA for complete 233 (1) to (4)</p>	12 months of the commencement (due by 1 July 2012)	Forestry Corporation (lead) and OEH (approval)	Forestry Corporation has proposed a draft methodology which EPA is reviewing in line with compliance priorities.
240	<p>Burning operations – annual planning and mapping within five years</p> <p>Before including a burning operation in an annual program of forestry operations, Forestry Corporation must carry out a comparative assessment of the environmental impact of carrying out the operation and of not carrying out the operation.</p> <p>Continued...</p>	Annual assessment and mapping within five years (due July 2016)	FCNSW	Project is underway and in line with FCNSW management priorities. Date of completion is to be advised.

IFOA Clauses	Detail	Timeframe	Responsibility	Progress for 2012–2013
240 continued	<p>Forestry Corporation must, within the five years of the commencement of this approval:</p> <p>(a) identify and map vegetation types within the state forests of the South Western Cypress region and prepare post-fire age class distribution maps for those vegetation types, and</p> <p>(b) develop a theoretical post-fire age class distribution model for those vegetation types to enable a comparison to be made with actual post-fire age class distribution for those types, in accordance with the process outlined in the Forestry Corporation Corporate Fuel Management Plan 2008 (Chapter 6.2.2).</p> <p>See IFOA for full 240 (1) to (5)</p>			No progress in 2012–2013
306 and 307	<p>Pollution incident notification</p> <p>Relating to breaches of the terms of the EPL (in carrying out logging operations and ancillary road construction).</p> <p>Notification and reports of pollution incidents causing or threatening material harm to the environment.</p>	<p>Details relating to a breach must be included on the register within 14 days of Forestry Corporation becoming aware of the breach</p> <p>Written notification within seven days of Forestry Corporation becoming aware of the incident</p>	FCNSW (lead) and EPA notified	EPL Annual Return submitted February 2013.
309 to 314	<p>Special annual return to be given to EPA</p> <p>In addition to the annual report required to be prepared under Chapter 1 [of the IFOA], Forestry Corporation is to prepare and give to OEHL an annual return relating to logging operations and ancillary road construction regulated by the terms of the EPL.</p>	Within 60 days of the end of each calendar year (first date 1 March 2012)	FCNSW (lead) and EPA notified	EPL return submitted February 2013.

Acronyms and abbreviations

cl.	Clause from an Act or other legislation
CO ₂	Carbon dioxide
CVA	Conservation Volunteers Australia
dbhob	Diameter breast height over bark (referring to tree measurement)
DPI	NSW Department of Primary Industries
EMS	environmental management system
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
ESFM	ecologically sustainable forest management
FA	NSW Forest Agreement
FCNSW	Forestry Corporation of NSW
FL	Fisheries Licence
FMZ	Forest Management Zone
Forestry Corporation	Forestry Corporation of NSW
FRAMES	Forest Resource and Management Evaluation System
ha	hectares
IFOA	Integrated Forestry Operations Approval granted under the <i>Forestry Act 2012</i>
LNE	Lower North East region
m	metres
MOU	Memorandum of Understanding
NSW	New South Wales
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NPWS	National Parks and Wildlife Service (within OEH)
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
PR Act	<i>Plantations and Reforestation Act 1999</i>
PNF	Private Native Forestry
PVP	property vegetation plan
PWG	Former Parks and Wildlife Group of OEH
SCA	State Conservation Area
SOE	State of the Environment
TOR	Terms of reference
TSC Act	<i>Threatened Species Conservation Act 1995</i>
TSL	Threatened Species Licence
t	tonnes
UNE	Upper North East region