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About this report

ABARES has prepared this report under the auspices of the National Plantation Inventory (NPI). The NPI has surveyed public and private plantation growers and managers to collect data on plantations established primarily for wood production in Australia since 1993.

Australian plantation statistics is published every five years based on spatial data. It supports strategic forest industry planning and decision-making by presenting information on total plantation area, new planting and ownership. The spatial updates complement two other NPI information products published by ABARES: the annual tabular plantations update and the five-yearly comprehensive log supply forecast report. NPI data are subsequently reported in other national publications, including the biannual ABARES *Australian forest and wood products statistics*, the five-yearly *Australia's State of the Forests Report* and the annual Australian Bureau of Statistics *Year Book Australia*.

In this report, plantation areas are presented by NPI region (Map 1) for softwood and hardwood plantation types, species and jurisdiction, based on data collected from private growers and grower representatives and public state and territory agencies. The survey that underpins this report collects information on the total plantation estate and newly established plantations on land not previously used for plantations. Plantations are added if they have not been previously recorded, revised if earlier data were in error and removed if the land has been converted to another use, such as agriculture.

In this report, 2014–15 data are compared with data from the 1999–2000, 2004–05, 2009–10 and 2013–14 plantation reports.

A substantial area of plantations is harvested each year and some areas are not replanted. Replanting might not take place for some time after harvesting; unless advised of a change in land use, the NPI records such fallow land as plantation. Although care is taken to reconcile data, discrepancies may occur in area reported from year to year.

Grower information submitted to the NPI is confidential. For reporting purposes, data from individual growers and managers are aggregated within regions or states and territories and are not provided individually to other parties without the consent of the data owner.

The data presented in this report do not capture all small-scale and farm forestry plantings but do include farm forestry plantings reported in *Australian plantation statistics 2011*.

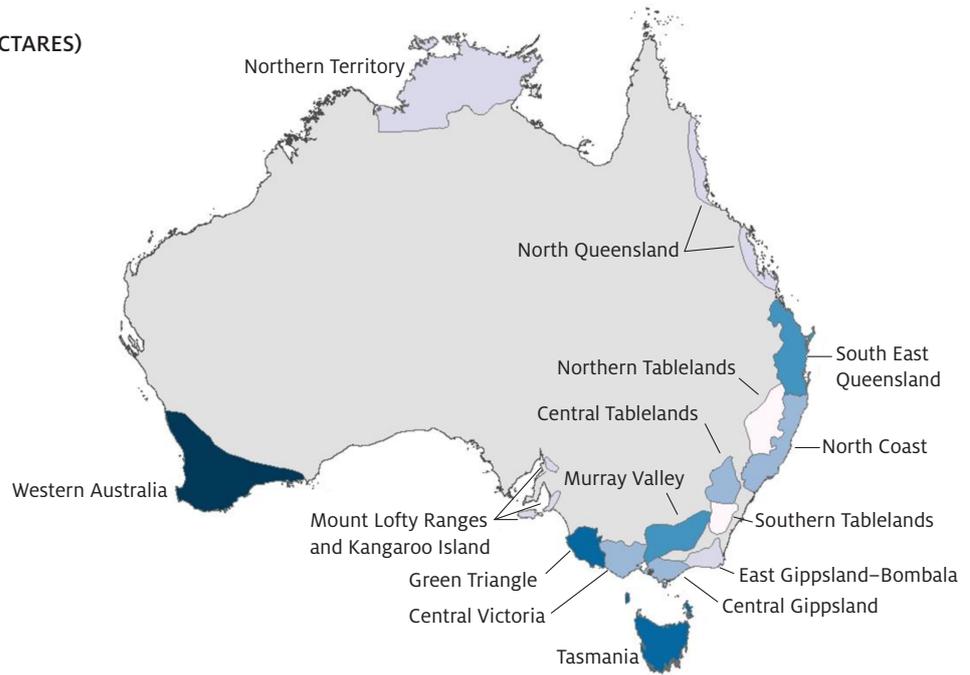
The totals in some tables may not tally exactly due to rounding.

MAP 1 National Plantation Inventory regions, 2014–15

NPI REGIONS

TOTAL PLANTATION AREA (HECTARES)

- <25 000
- 25 001–50 000
- 50 001–100 000
- 100 001–200 000
- 200 001–400 000
- 400 001–500 000



Source: ABARES



Summary

Australia's total commercial plantation area declined by 26 260 hectares from 2013–14 to 1 973 400 hectares in 2014–15. The total hardwood plantation area declined by 34 800 hectares to 928 300 hectares in 2014–15. The total softwood plantation area increased by around 11 200 hectares to 1 035 400 hectares; the increase comprised 130 hectares of new plantations and around 11 070 hectares identified because of improved mapping of plantations.

The changes in plantation area are the result of plantation managers revising their area figures, including previously unreported fallow land and unproductive plantation land being returned to agriculture or to the lessors on the expiration of hardwood plantation lease arrangements. Although the decline has been attributed to a one-year change, the decline has happened over the past five years and is captured in this five-yearly spatial update.

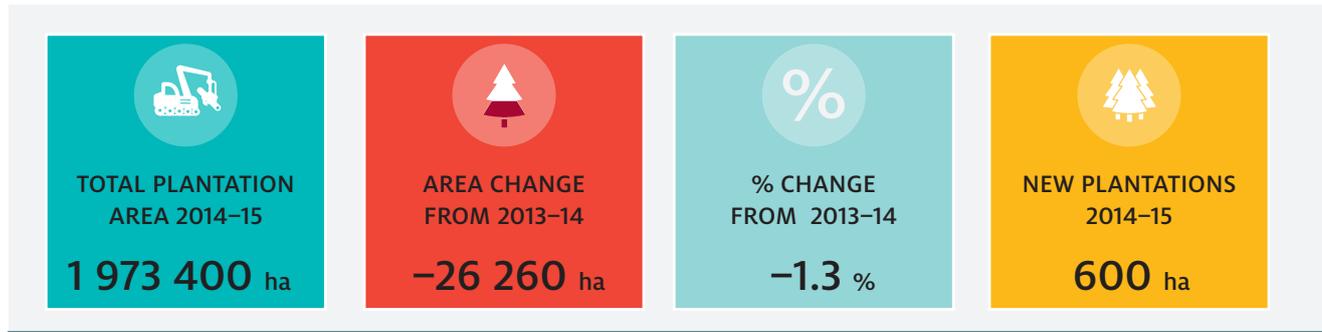
Similarly, plantations are added if they have not been previously recorded, revised if earlier data were in error and removed if the land has been converted to another use, such as agriculture.

Between 2013–14 and 2014–15, the total plantation area decreased in all states and territories except New South Wales and the Northern Territory, where it increased by 0.8 per cent and 6.5 per cent, respectively, mainly because of improved mapping of plantations.

The area of new plantations established in 2014–15 was around 600 hectares, with the majority planted in the Northern Territory and Queensland. Around 500 hectares of new hardwood plantations and around 100 hectares of new softwood plantations were established in 2014–15.

Victoria continued to have the largest total area of plantations, followed by New South Wales and Western Australia. The last time the New South Wales total plantation area was greater than Western Australia's was in 1999–2000; however, Western Australia's total plantation area declined by 8 100 hectares in 2014–15.

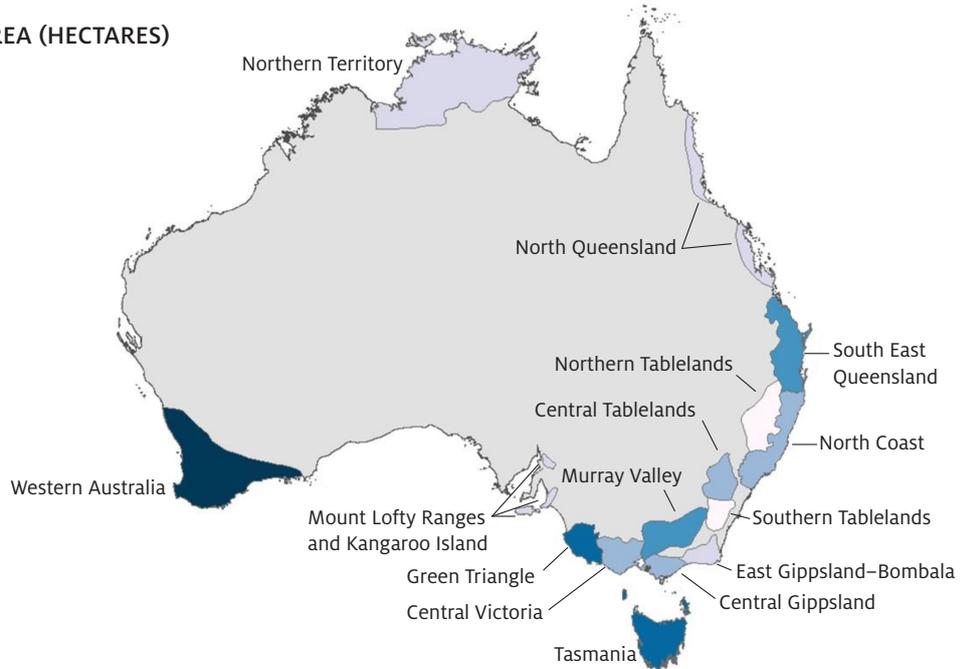
In 2014–15 institutional investors owned 50 per cent of the total plantation area. Governments and farm forestry and other private growers owned 21 per cent, respectively, of the total plantation area in 2014–15. The proportion of plantations owned by managed investment schemes (MIS) continued to decline and was around 5 per cent in 2014–15. This was a result of plantations that were previously owned by MIS being sold to institutional and private investors. The plantation area owned by timber industry companies was around 4 per cent in 2014–15; the remainder of the estate was owned as joint ventures.



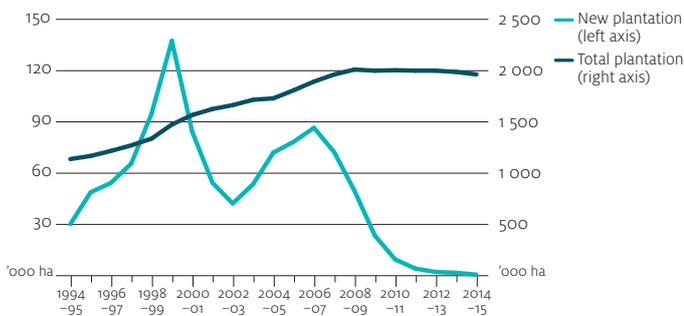
NPI REGIONS

TOTAL PLANTATION AREA (HECTARES)

- <25 000
- 25 001-50 000
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- 200 001-400 000
- 400 001-500 000

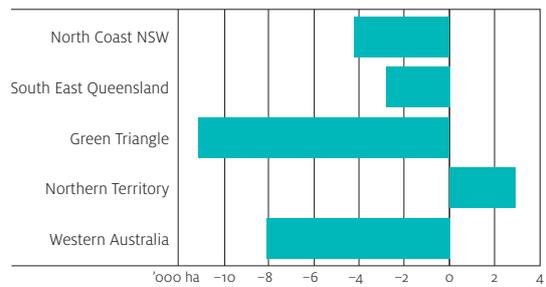


TOTAL AND NEW PLANTATION AREA

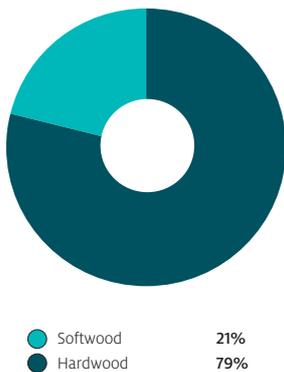


MAJOR CHANGES IN PLANTATION AREA BY REGION

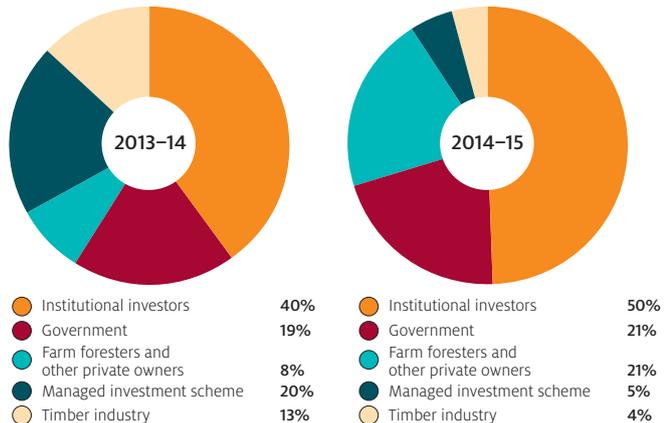
2013-14 TO 2014-15



NEW PLANTATIONS BY PLANTATION TYPE 2014-15



PLANTATION OWNERSHIP

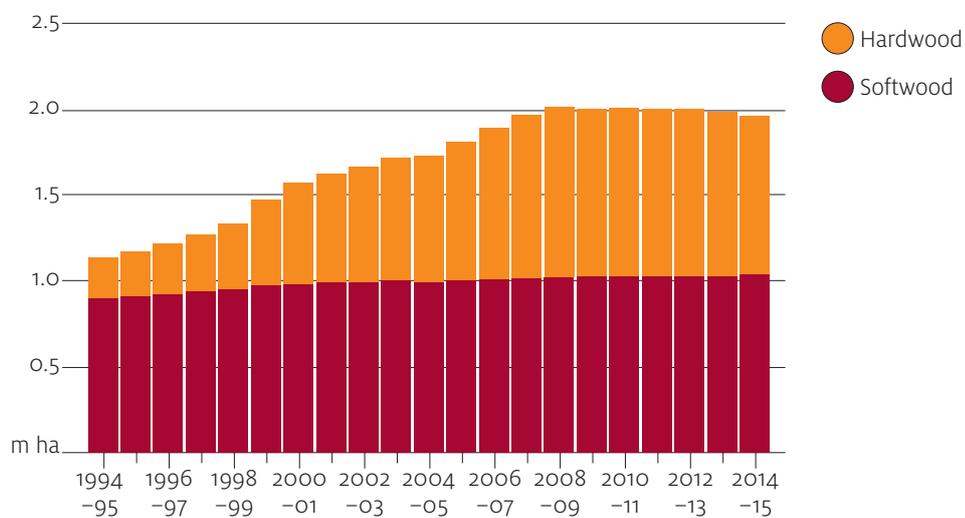


Overview

Total plantation estate

Australia's total commercial plantation area declined by 26 260 hectares from 2013–14 to 1 973 400 hectares in 2014–15 (Figure 1). The total softwood plantation area increased by around 11 200 hectares and was comprised of 130 hectares of new plantations and around 11 070 hectares identified because some plantation managers revised their area figures, including fallow areas for the first time. The hardwood plantation area declined by 34 800 hectares as plantation managers returned unproductive plantation land to agriculture or to lessors on the expiration of hardwood plantation lease arrangements.

FIGURE 1 Total plantation area, by type, 1994–95 to 2014–15



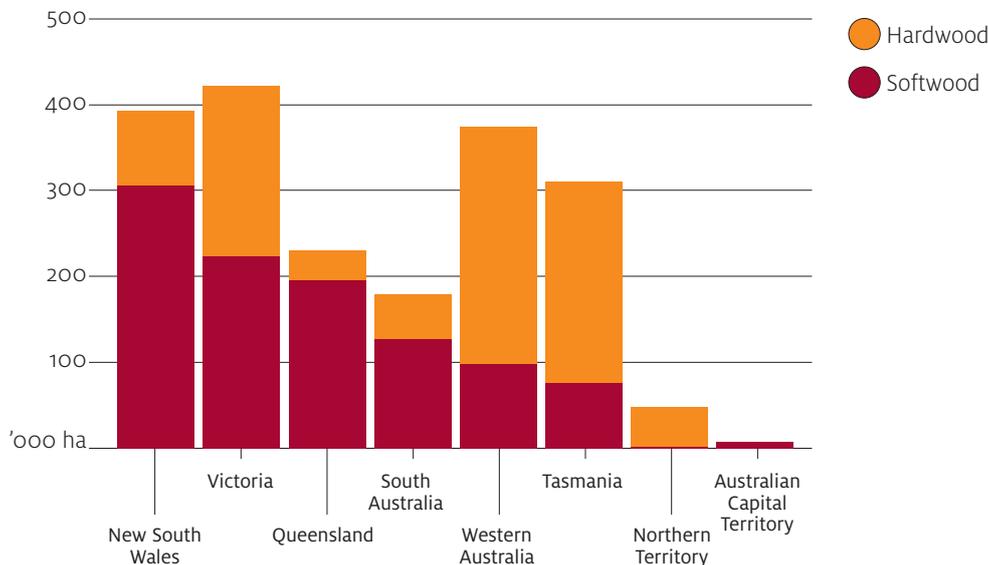
Note: Data for 1994–95 to 2004–05 are for calendar years 1994 to 2005; data for 2005–06 to 2014–15 are for financial years. 'Other' category plantations are not included.
Source: ABARES

States and territories

In 2014–15 Victoria continued to have the largest total area of plantations, followed by New South Wales and Western Australia (Figure 2). The last time the New South Wales total plantation area was greater than Western Australia's was 1999–2000, a year before the peak of new hardwood plantation establishments in Australia.

Between 2013–14 and 2014–15, the total plantation area decreased in all states except New South Wales and the Northern Territory, which increased by 0.8 per cent and 6.5 per cent, respectively, mainly because of improved mapping of plantations (Table 1).

FIGURE 2 Total plantation area, by state and type, 2014–15



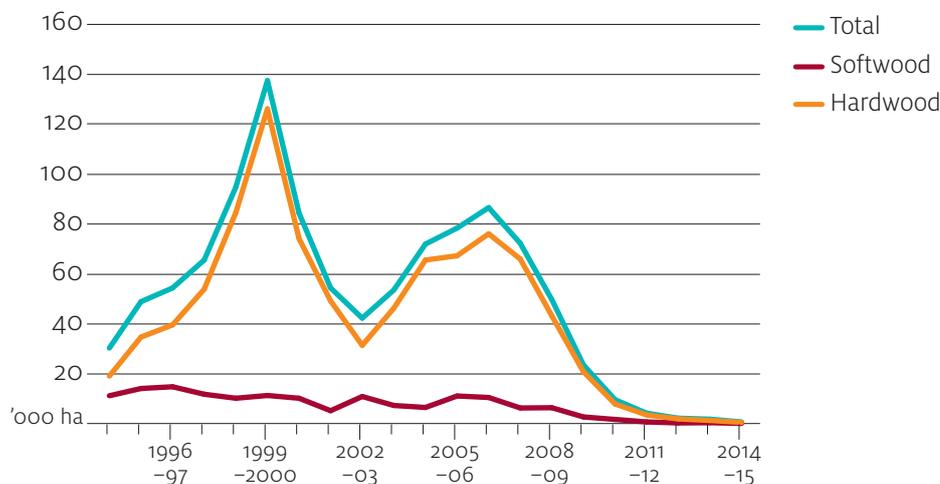
Note: 'Other' category plantations are not included.
Source: ABARES

New plantations

The area of new plantations established in 2014–15 was around 600 hectares (Figure 3), with the majority planted in the Northern Territory and Queensland. Around 500 hectares of new hardwood plantations were established, a decline of 60.1 per cent from 2013–14. Around 100 hectares of new softwood plantations were established in 2014–15, a decline of 65.9 per cent from 2013–14.

In comparison, in 1999–2000 around 137 500 hectares of new plantations were established in Australia, a difference of 136 800 hectares from 2014–15 (Table 1).

FIGURE 3 New plantations by type, 1994–95 to 2014–15



Note: Data for 1994–95 to 2004–05 are for calendar years representing 1994 to 2005; data for 2005–06 to 2014–15 are for financial years.
Source: ABARES

TABLE 1 Overview of Australia's plantations, 1999–2000, 2004–05, 2009–10, 2013–14 and 2014–15

Period	Area					Change from			
	1999–2000	2004–05	2009–10	2013–14	2014–15	15 years ago	10 years ago	5 years ago	Last year
Unit	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	%	%	%	%
Total plantation area									
Hardwood	502.6	740.2	972.7	963.2	928.3	45.9	25.4	-4.6	-3.6
Softwood	972.2	990	1 023.6	1 024.2	1 035.4	6.1	4.6	1.2	1.1
Other categories a	10.0	9.3	12.0	12.3	9.7	-2.6	4.8	-19.2	-21.1
Total	1 484.7	1 739.5	2 008.9	1 999.7	1 973.4	24.8	13.5	-1.8	-1.3
New plantations established b									
Hardwood	126.2	65.6	18.3	1.3	0.5	-99.6	-99.2	-97.2	-60.1
Softwood	11.3	6.5	2.7	0.4	0.1	-98.8	-97.9	-94.9	-65.9
Plantation area by state and territory									
New South Wales	318.9	331.6	391.3	390.0	393.0	23.2	18.5	0.4	0.8
Victoria	318.6	384.6	430.5	433.0	423.0	32.8	10.0	-1.7	-2.3
Queensland	190.9	225.6	230.6	233.5	230.4	20.7	2.1	-0.1	-1.3
South Australia	135.6	167	188.3	188.5	178.8	31.9	7.1	-5.1	-5.1
Western Australia	313.9	377.6	413.3	391.5	383.4	22.2	1.5	-7.2	-2.1
Tasmania	185.2	227.2	309.1	310.7	309.8	67.3	36.4	0.2	-0.3
Northern Territory	6.9	16.3	38.1	44.7	47.6	588.4	191.4	25	6.5
Australian Capital Territory	14.8	9.5	7.7	7.7	7.4	-49.9	-22.0	-3.4	-3.8
Plantation area by NPI region c									
Western Australia	313.9	377.6	413.3	391.5	383.4	22.2	1.5	-7.2	-2.1
Northern Territory	6.9	16.3	38.1	44.7	47.6	588.4	191.4	25.0	6.5
Mt Lofty Ranges and Kangaroo Island (South Australia)	20.9	28.8	34.3	34.1	33.4	59.6	15.8	-2.7	-2.1
Green Triangle (South Australia/Victoria)	224.2	298.8	344.6	347.7	336.6	50.2	12.6	-2.3	-3.2
North Queensland	23.6	29.3	36.7	38.4	36.6	54.9	25	-0.2	-4.6
South East Queensland	165.5	193.8	191.9	194.5	191.7	15.8	-1.1	-0.1	-1.5
Northern Tablelands (New South Wales)	16.5	17.5	24.4	24.4	17.4	5.3	-0.3	-28.6	-28.6
North Coast (New South Wales)	56.8	66.6	101.0	98.7	94.5	66.3	41.8	-6.5	-4.3
Central Tablelands (New South Wales)	80.6	80.4	81.2	82.5	86.9	7.8	8.1	7.0	5.3
Southern Tablelands (New South Wales)	26.6	22.2	22.1	22.1	22.1	-16.7	-0.4	0.4	0.2
Murray Valley (New South Wales/Victoria)	179.5	184.6	195.4	195.3	196.5	9.5	6.4	0.5	0.6
Central Victoria	49.5	57.2	68.8	68.7	67.8	36.9	18.5	-1.6	-1.3
Central Gippsland (Victoria)	90.1	92.9	96.2	94.9	91.7	1.8	-1.3	-4.7	-3.4
East Gippsland–Bombala (New South Wales/Victoria)	42.9	46.1	51.7	51.5	57.4	33.7	24.6	11.1	11.5
Tasmania	185.2	227.2	309.1	310.7	309.8	67.3	36.4	0.2	-0.3

a Other categories are mixed hardwood and softwood species and plantations for which species were not reported. b New plantations are those established on land not previously used for plantation forestry. c The locations of the NPI regions listed are shown in Map 1.

Plantation ownership

The total public plantation area increased marginally from 376 700 hectares in 2013–14 to 397 233 hectares in 2014–15, as some plantation managers revised their softwood area figures. The total private plantation area decreased by around 45 500 hectares from 2013–14, to 1 505 202 hectares in 2014–15 (Table 2). Although the decline has been attributed to one year, the decline has happened over the past five years and is captured in this spatial update. The total joint plantation area decreased by around 2 500 hectares from 2013–14, to 71 000 hectares in 2014–15.

TABLE 2 Total plantation area, by states and territories and ownership, 2014–15

State	Unit	Joint a	Private	Public	Total
New South Wales	'000 ha	7.9	124.7	260.4	393.0
Victoria	'000 ha	0.1	420.4	2.5	423.0
Queensland	'000 ha	0.0	230.3	0.1	230.4
South Australia	'000 ha	0.0	163.5	15.3	178.8
Western Australia	'000 ha	46.9	260.2	76.3	383.4
Tasmania	'000 ha	16.2	258.4	35.2	309.8
Northern Territory	'000 ha	0.0	47.6	0.0	47.6
Australian Capital Territory	'000 ha	0.0	0.0	7.4	7.4
Total	'000 ha	71.0	1 505.2	397.2	1 973.4
Proportion of tree ownership	%	3.6	76.3	20.1	100

a Includes some small areas for which ownership details were not reported.

Note: All columns and rows have been rounded, so column and row totals may not tally.

Source: ABARES.

In 2014–15 institutional investors owned 50 per cent of the total plantation area. Government owned 21 per cent and farm forestry and other private growers owned 21 per cent of the total plantation area in 2014–15. The proportion of plantations owned by managed investment schemes (MIS) continued to decline and was around 5 per cent in 2014–15. This was a result of plantations that were previously owned by MIS being sold to institutional and private investors (Table 3). The plantation area owned by timber industry companies was around 4 per cent in 2014–15.

TABLE 3 Plantation ownership, 2004–05, 2009–10, 2013–14 and 2014–15

Plantation owner	2004–05	2009–10	2013–14	2014–15
	%	%	%	%
Farm foresters and other private owners	13	9	8	21
Government	37	35	19	21
Managed investment scheme	23	36	20	5
Institutional investors	12	13	40	50
Timber industry	15	7	13	4

Note: 2004–05 is a calendar year representing 2005; 2009–10, 2013–14 and 2014–15 are financial years. Joint venture plantations are not included.

Source: ABARES

Major species

The hardwood plantation estate is dominated by Tasmanian blue gum (52.7 per cent) and shining gum (25.2 per cent); both are managed primarily for pulplog production (Table 4). Most Tasmanian blue gum plantations are located in Western Australia and the Green Triangle region. Most shining gum plantations are located in the Tasmania region. Tasmanian blue gum and shining gum plantations are also managed to produce sawlogs in Tasmania.

Other regionally important hardwood plantation species include blackbutt, flooded gum and spotted gum plantations in the North Coast (New South Wales) and South East Queensland regions, which are managed primarily for sawlog production.

TABLE 4 Major hardwood species, by National Plantation Inventory region, 2014–15

Region	Unit	Tasmanian blue gum	Shining gum	Blackbutt and flooded gum	Dunn's white gum	Corymbia species	Other eucalypts	Other hardwood	Acacia species	Total hardwood
Western Australia	'000 ha	251.8	0.0	0.1	0.0	1.1	22.3	1.1	0.0	276.4
Northern Territory	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0	14.5	31.2	45.7
Mount Lofty Ranges and Kangaroo Island (South Australia)	'000 ha	13.9	0.0	0.0	0.0	0.0	0.6	0.1	0.0	14.6
Green Triangle (South Australia/Victoria)	'000 ha	152.1	0.0	0.0	0.0	0.1	4.5	0.6	0.0	157.3
North Queensland	'000 ha	0.0	0.0	0.0	0.0	0.0	1.0	3.8	0.0	4.9
South East Queensland	'000 ha	0.0	0.0	1.4	12.1	8.6	5.9	1.7	0.1	29.8
Northern Tablelands (New South Wales)	'000 ha	0.0	1.3	0.0	0.1	0.0	0.9	0.0	0.0	2.3
North Coast (New South Wales)	'000 ha	0.1	3.1	23.5	17.4	9.9	25.1	0.6	0.0	79.6
Central Tablelands (New South Wales)	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Southern Tablelands (New South Wales)	'000 ha	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.4
Murray Valley (New South Wales/Victoria)	'000 ha	6.0	0.5	0.0	0.0	0.0	0.6	0.1	0.0	7.3
Central Victoria	'000 ha	31.7	3.7	0.0	0.0	0.0	2.2	0.1	0.0	37.7
Central Gippsland (Victoria)	'000 ha	14.1	10.7	0.0	0.0	0.0	4.9	0.0	0.0	29.8
East Gippsland–Bombala (New South Wales/Victoria)	'000 ha	0.6	6.2	0.0	0.0	0.0	0.6	1.2	0.0	8.7
Tasmania	'000 ha	19.1	208.2	0.0	0.0	0.0	0.9	5.7	0.0	233.9
Total	'000 ha	489.4	233.8	25.1	29.5	19.9	69.6	29.4	31.6	928.3
Proportion of hardwood area	%	52.7	25.2	2.7	3.2	2.1	7.5	3.2	3.4	100.0

Source: ABARES

The softwood plantation estate is dominated by radiata pine (74.4 per cent) and southern pines (15.1 per cent) (Table 5). Both are managed for sawlog production. Most radiata pine plantations are in the Murray Valley, the Green Triangle, the Central Tablelands and the Tasmania regions. Most southern pine plantations are located in the South East Queensland region. Other regionally important softwood species are maritime pine (4.0 per cent) in Western Australia and hoop pine (4.4 per cent), mainly in South East Queensland.

TABLE 5 Major softwood species, by National Plantation Inventory region, 2014–15

Region	Unit	Radiata pine	Southern pines	Maritime pine	Hoop pine	Other pines	Other softwood	Total softwood	Other
Western Australia	'000 ha	56.2	0.0	41.4	0.0	0.3	0.5	98.4	9.0
Northern Territory	'000 ha	0.0	0.0	0.0	0.0	1.9	0.0	1.9	0.1
Mount Lofty Ranges and Kangaroo Island (South Australia)	'000 ha	18.4	0.0	0.2	0.0	0.1	0.0	18.7	0.1
Green Triangle (South Australia/Victoria)	'000 ha	174.5	0.0	0.0	0.0	0.0	4.7	179.3	0.1
Northern Queensland	'000 ha	0.0	29.4	0.0	1.0	0.0	1.3	31.8	0.0
South East Queensland	'000 ha	0.8	115.8	0.0	43.5	1.0	0.7	161.8	0.1
Northern Tablelands (New South Wales)	'000 ha	13.4	0.1	0.0	0.0	1.3	0.2	15.1	0.0
North Coast (New South Wales)	'000 ha	0.3	11.0	0.0	0.6	2.5	0.4	14.8	0.1
Central Tablelands (New South Wales)	'000 ha	84.0	0.0	0.0	0.0	0.0	2.8	86.8	0.0
Southern Tablelands (New South Wales)	'000 ha	21.7	0.0	0.0	0.0	0.0	0.0	21.7	0.0
Murray Valley (New South Wales/Victoria)	'000 ha	186.6	0.0	0.2	0.0	1.8	0.5	189.2	0.0
Central Victoria	'000 ha	29.6	0.0	0.0	0.0	0.1	0.3	30.0	0.0
Central Gippsland (Victoria)	'000 ha	61.2	0.0	0.0	0.0	0.0	0.1	61.3	0.6
East Gippsland–Bombala (New South Wales/Victoria)	'000 ha	48.6	0.0	0.0	0.0	0.0	0.0	48.7	0.1
Tasmania	'000 ha	75.5	0.0	0.0	0.0	0.2	0.2	75.9	0.0
Total	'000 ha	770.7	156.4	41.8	45.1	9.5	11.9	1 035.4	9.7
Proportion of softwood area	%	74.4	15.1	4.0	4.4	0.9	1.1	100.0	na

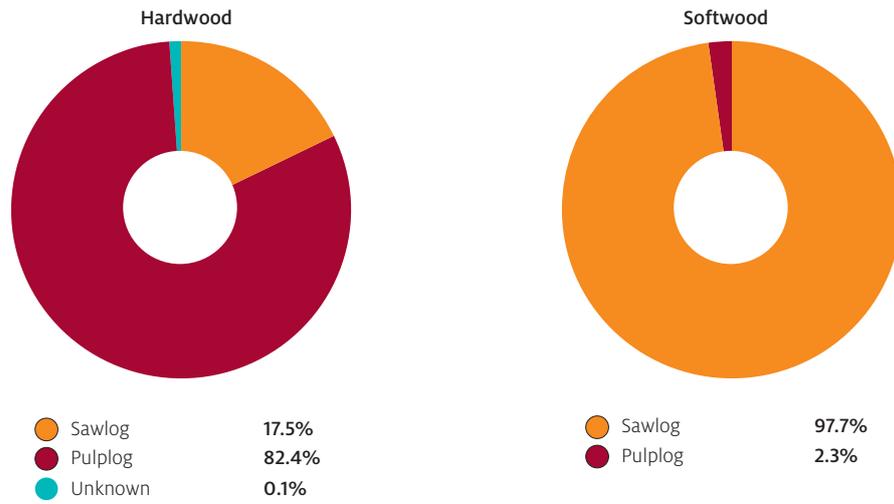
Source: ABARES

Products

In 2014–15 the majority of softwood plantations (97.7 per cent) were managed to produce sawlogs for the Australian housing market and the majority of hardwood plantations were mainly exported as woodchips or pulplogs (82.4 per cent) to produce paper products (Figure 4). The hardwood plantations managed to produce sawlogs for the Australian market (17.5 per cent of hardwood plantations) supplement the sawlogs supplied from native forests to produce flooring, structural timbers and other products.



FIGURE 4 Proportion of plantations managed for sawlogs and pulplogs, 2014–15



Source: ABARES



Regional highlights

Western Australia

The total plantation area in Western Australia in 2014–15 was 383 400 hectares (Table 6), a net decrease of 8 100 hectares (2.1 per cent) from 2013–14. Although the decline has been attributed to the one year, the decline has happened over the past five years, which is captured in this spatial update.

In 2014–15 the total area of softwood plantations was 97 900 hectares, the total area of hardwood plantations was 276 400 hectares and other plantations was around 9 000 hectares.

The total plantation area in Western Australia peaked at 425 100 hectares in 2008–09, declining by 41 700 hectares (9.8 per cent) to 383 400 hectares in 2014–15. Over this period hardwood plantations declined by 35 400 hectares (mainly Tasmanian blue gum) and softwood plantations declined by 3 070 hectares (mainly radiata pine).

In 2014–15 the majority of hardwood plantations were managed for pulplogs (91.1 per cent) and around 9 per cent were managed for sawlog production. In contrast, almost all softwood plantations were managed for sawlog production.

TABLE 6 Western Australia plantations, 2014–15

Planting period	Unit	Tasmanian blue gum	Other eucalypts	Other hardwood	Total hardwood	Radiata pine	Maritime pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	6.6	0.0	6.6	0.1	1.0	0.0	1.1	0.0	7.7
1961–1965	'000 ha	0.0	0.0	0.0	0.0	0.1	0.7	0.0	0.8	0.0	0.9
1966–1970	'000 ha	0.0	0.0	0.0	0.0	0.3	3.4	0.0	3.7	0.0	3.7
1971–1975	'000 ha	0.0	0.0	0.0	0.0	1.7	2.9	0.0	4.6	0.1	4.7
1976–1980	'000 ha	0.0	0.3	0.0	0.3	1.1	2.5	0.0	3.6	0.0	3.9
1981–1985	'000 ha	0.0	0.9	0.1	1.1	6.5	2.8	0.0	9.2	0.0	10.3
1986–1990	'000 ha	0.3	0.8	0.1	1.2	7.5	1.2	0.1	8.7	0.0	9.9
1991–1995	'000 ha	5.2	0.3	0.2	5.7	7.8	1.7	0.0	9.5	0.0	15.2
1996–2000	'000 ha	60.7	1.1	0.0	61.8	6.1	10.6	0.1	16.8	0.2	78.7
2001–2005	'000 ha	67.6	1.8	0.2	69.6	7.8	7.6	0.1	15.5	0.1	85.2
2006–2010	'000 ha	76.7	9.8	0.9	87.4	8.3	6.1	0.0	14.5	0.3	102.2
2011–2015	'000 ha	21.2	0.3	0.0	21.4	8.6	0.8	0.0	9.5	0.0	30.9
Unknown	'000 ha	20.0	0.5	0.7	21.3	0.4	0.0	0.0	0.4	8.3	30.0
Total	'000 ha	251.8	22.4	2.2	276.4	56.2	41.4	0.4	97.9	9.0	383.4
Proportion of type	(%)	91.1	8.1	0.8	0.0	57.4	42.3	0.4	0.0	100.0	na
Proportion of total	(%)	na	na	na	72.1	na	na	na	25.5	2.4	100.0

MAP 2 Western Australia plantations



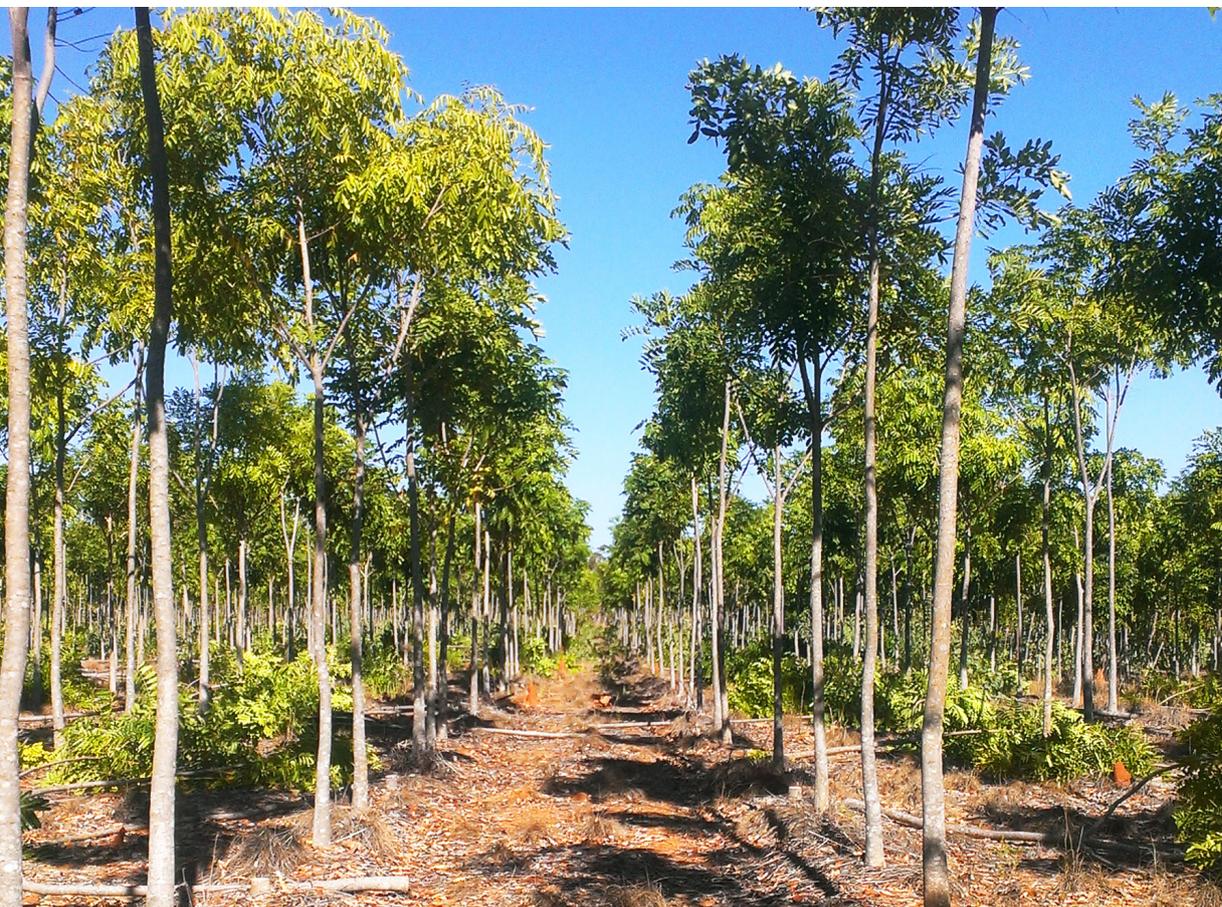
Northern Territory

The total plantation area in the Northern Territory increased by around 2 900 hectares from 2013–14 to 47 600 hectares in 2014–15, comprised of around 350 hectares of new plantations and around 2 550 hectares identified because of improved mapping of plantations. The total area of softwood plantations was 1 900 hectares and the total area of hardwood plantations was 45 700 hectares in 2014–15 (Table 7).

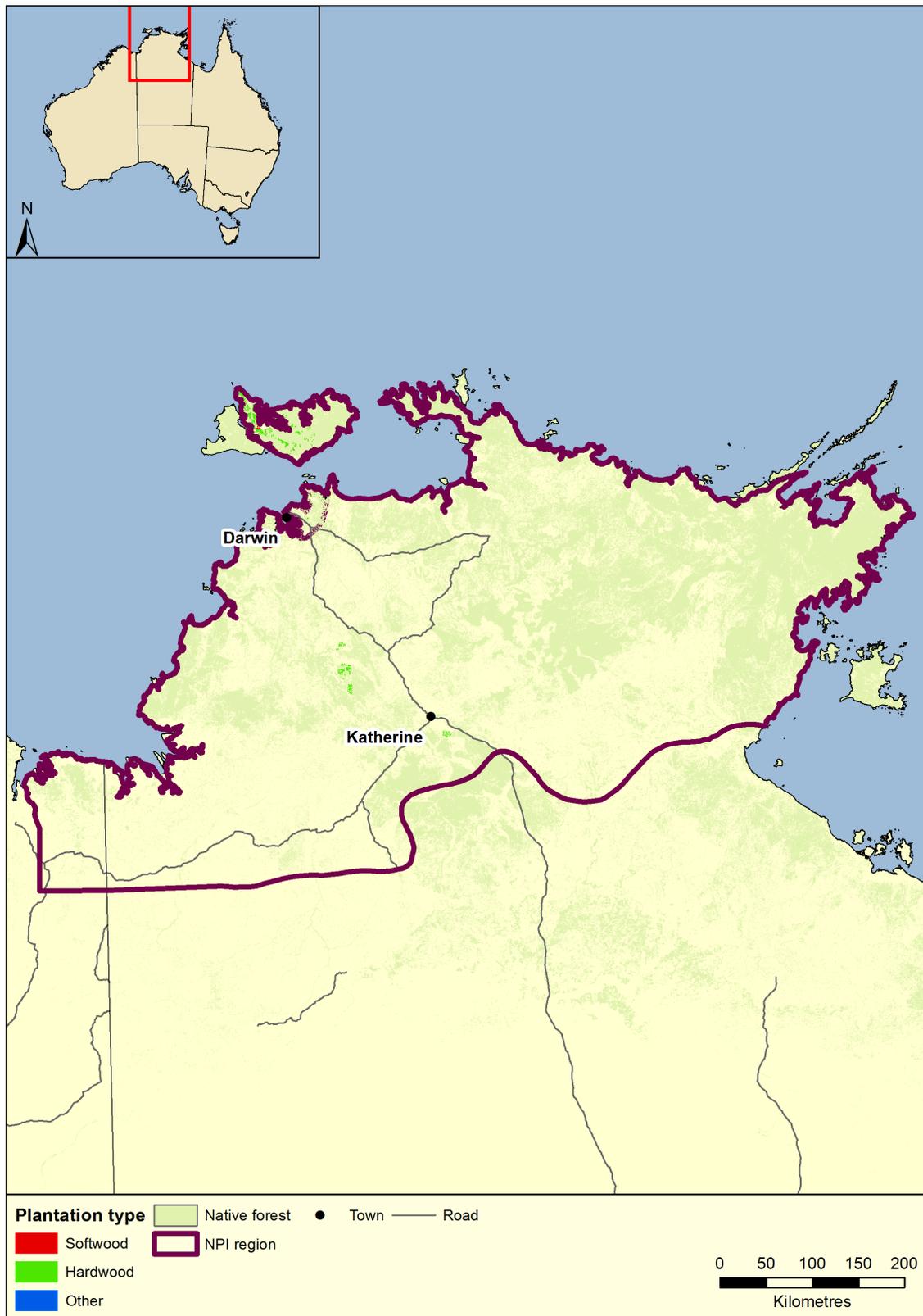
The majority of the hardwood plantations are mangium (31 200 hectares) planted on Melville Island and African mahogany (14 500 hectares) planted on the mainland. Around 68 per cent of the hardwood plantations are managed for pulplogs; the remaining 32 per cent are managed for sawlogs. The softwood plantations are managed for sawlog.

TABLE 7 Northern Territory plantations, 2014–15

Planting period	Unit	Mangium	Mahogany	Total hardwood	Caribbean pine	Total softwood	Total
<1961	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0
1981–1985	'000 ha	0.0	0.0	0.0	1.1	1.1	1.1
1986–1990	'000 ha	0.0	0.0	0.0	0.7	0.7	0.7
1991–1995	'000 ha	0.0	0.0	0.0	0.1	0.1	0.1
2001–2005	'000 ha	14.8	0.0	14.8	0.0	0.0	14.8
2006–2010	'000 ha	16.4	8.1	24.5	0.0	0.0	24.5
2011–2015	'000 ha	0.0	6.4	6.4	0.0	0.0	6.4
Total	'000 ha	31.2	14.5	45.7	1.9	1.9	47.6
Proportion of type	(%)	68.3	31.7	100.0	100.0	100.0	na
Proportion of total	(%)	na	na	96.0	na	4.0	100.0



MAP 3 Northern Territory plantations



Mount Lofty and Kangaroo Island (South Australia)

The total plantation area in the Mount Lofty and Kangaroo Island region has declined by around 700 hectares since 2013–14 to 33 400 hectares in 2014–15 (Table 8). The total figure includes the softwood plantations in the mid north burnt in the January 2013 fires. The majority of the hardwood plantations are privately managed and the majority of the softwood plantations are under public ownership.

TABLE 8 Mount Lofty and Kangaroo Island plantations, 2014–15

Planting period	Unit	Tasmanian blue gum	Other hardwood	Total hardwood	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.5	0.5	0.3	0.1	0.4	0.1	1.0
1961–1965	'000 ha	0.0	0.0	0.0	0.3	0.1	0.4	0.0	0.4
1966–1970	'000 ha	0.0	0.0	0.0	0.8	0.1	0.8	0.0	0.9
1971–1975	'000 ha	0.0	0.0	0.0	0.7	0.0	0.7	0.0	0.7
1976–1980	'000 ha	0.0	0.0	0.0	0.9	0.0	1.0	0.0	1.0
1981–1985	'000 ha	0.0	0.0	0.0	1.7	0.0	1.7	0.0	1.7
1986–1990	'000 ha	0.0	0.0	0.0	2.0	0.0	2.0	0.1	2.1
1991–1995	'000 ha	0.0	0.1	0.1	1.8	0.0	1.8	0.0	1.9
1996–2000	'000 ha	0.5	0.0	0.5	2.4	0.0	2.4	0.0	3.0
2001–2005	'000 ha	5.5	0.1	5.6	0.9	0.0	0.9	0.0	6.5
2006–2010	'000 ha	7.8	0.0	7.8	1.5	0.0	1.5	0.0	9.3
2011–2015	'000 ha	0.0	0.0	0.0	1.3	0.0	1.3	0.0	1.3
Unknown	'000 ha	0.0	0.0	0.0	3.7	0.0	3.7	0.0	3.7
Total	'000 ha	13.9	0.7	14.6	18.4	0.3	18.7	0.1	33.4
Proportion of type	(%)	95.0	5.0	100.0	98.4	1.6	100.0	100.0	na
Proportion of total	(%)	na	na	43.7	na	na	55.9	0.4	100.0



Green Triangle (South Australia/Victoria)

The total plantation area in the Green Triangle region has declined by 11 000 hectares (3.2 per cent), from 347 700 hectares in 2013–14 to 336 610 hectares in 2014–15 (Table 9). Although the decline has been attributed to the one year, the decline has happened over the past five years and is captured in this spatial update.

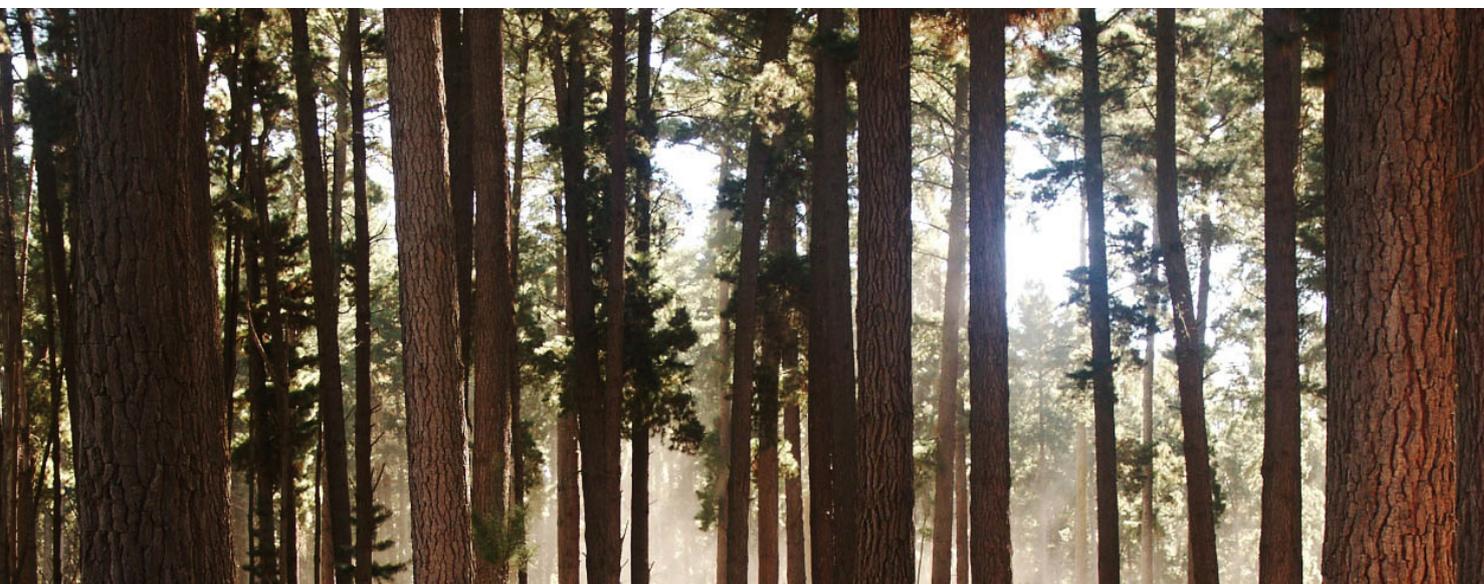
The majority of the decline is hardwood plantations that have been converted to another land use or are no longer managed for wood production because the plantations were not commercially viable or their leases have expired.

In 2014–15 the total area of softwood plantations was 179 200 hectares, the total area of hardwood plantations was 157 300 hectares and other plantations was around 100 hectares.

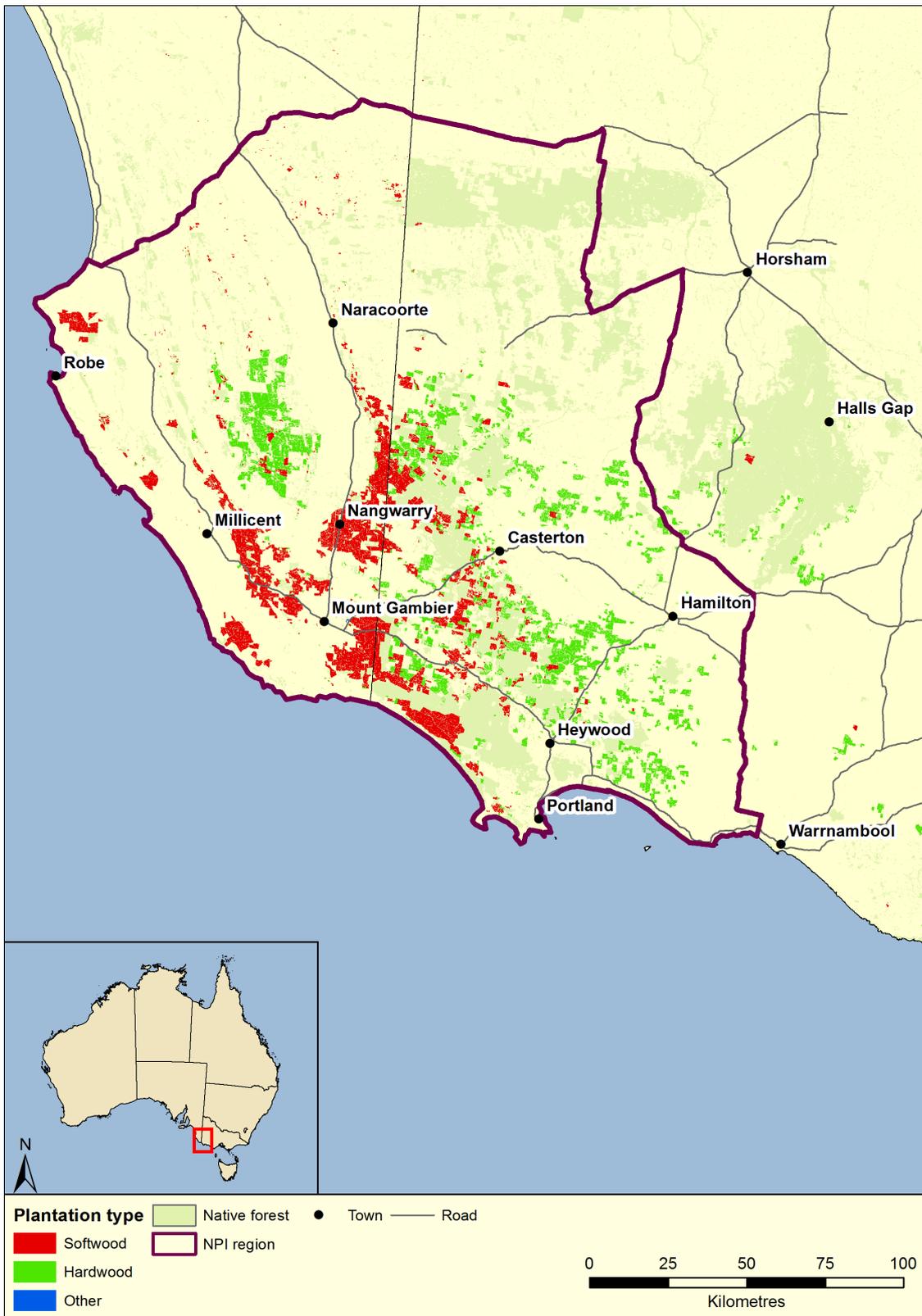
The Green Triangle region has a well-established wood processing industry that predominately sources its logs from plantations.

TABLE 9 Green Triangle plantations, 2014–15

Planting period	Unit	Tasmanian blue gum	Other hardwood	Total hardwood	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.2
1961–1965	'000 ha	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.2
1966–1970	'000 ha	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1
1971–1975	'000 ha	0.0	0.0	0.0	2.1	0.0	2.1	0.0	2.1
1976–1980	'000 ha	0.0	0.0	0.0	2.8	0.0	2.8	0.0	2.8
1981–1985	'000 ha	0.0	0.0	0.0	14.0	0.0	14.0	0.0	14.0
1986–1990	'000 ha	0.0	0.0	0.0	24.6	0.0	24.6	0.0	24.7
1991–1995	'000 ha	0.5	0.0	0.5	21.3	0.0	21.3	0.0	21.7
1996–2000	'000 ha	49.8	0.1	49.9	30.1	0.0	30.2	0.0	80.1
2001–2005	'000 ha	57.8	0.2	58.0	29.1	0.0	29.1	0.0	87.1
2006–2010	'000 ha	37.5	0.0	37.5	29.0	0.0	29.0	0.0	66.5
2011–2015	'000 ha	6.5	0.0	6.5	18.5	0.0	18.5	0.0	25.0
Unknown	'000 ha	0.0	4.7	4.7	2.7	4.7	7.3	0.0	12.1
Total	'000 ha	152.1	5.2	157.3	174.5	4.7	179.2	0.1	336.6
Proportion of type	(%)	96.7	3.3	100.0	97.4	2.6	100.0	100.0	na
Proportion of total	(%)	na	na	46.7	na	na	53.2	na	100.0



MAP 5 Green Triangle plantations



North Queensland

The total plantation area in North Queensland declined by 1 780 hectares from 2013–14 to 36 620 hectares in 2014–15 (Table 10). The total hardwood plantation area declined by 5 300 hectares to 4 860 hectares in 2014–15. The softwood plantation area increased by around 4 300 hectares to 31 760 hectares in 2014–15, comprised of around 25 hectares of new plantations and around 4 275 hectares identified because of improved mapping of plantations. Although these changes in area have been attributed to one year, they have occurred over the past five years and are captured in this spatial update.

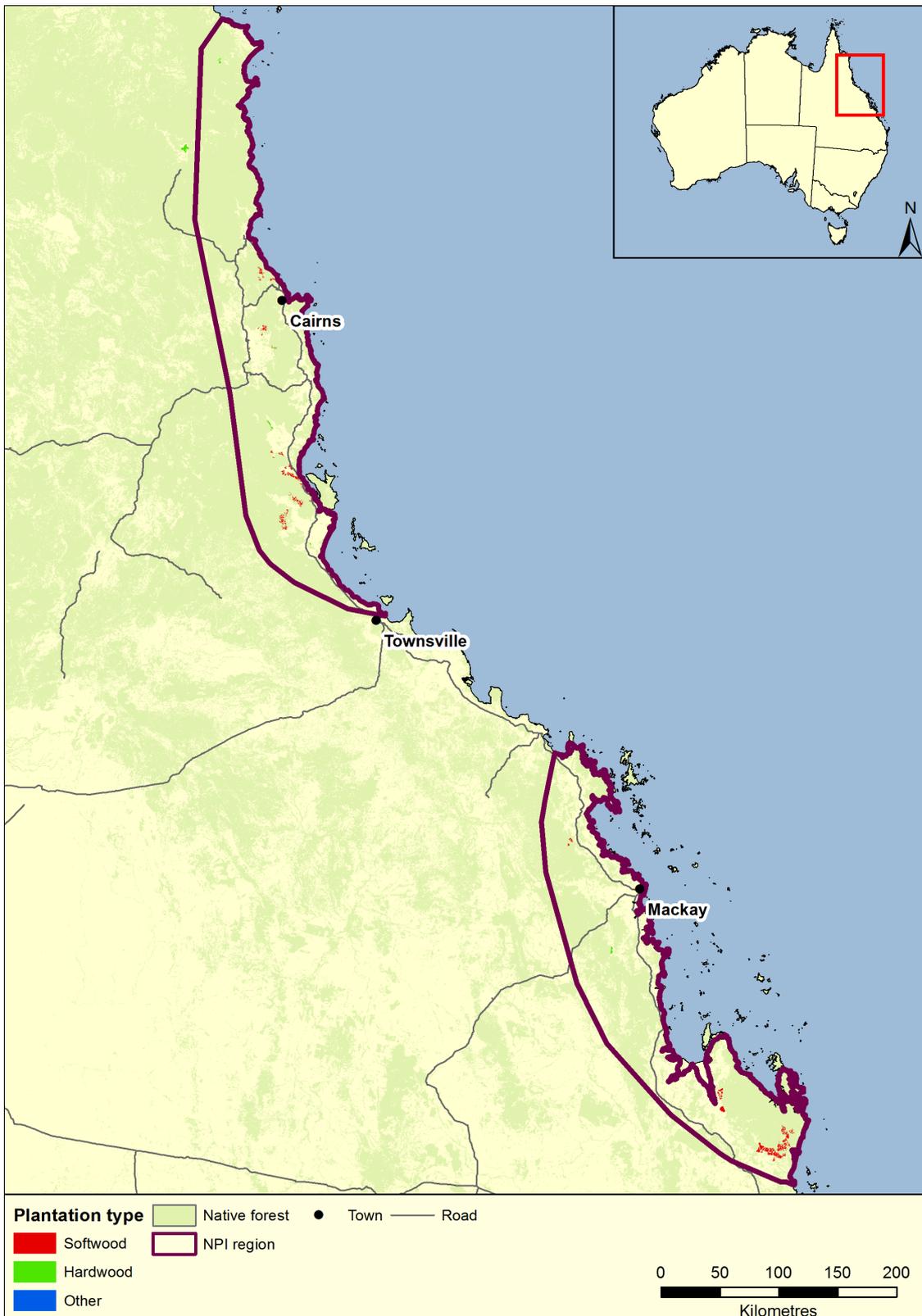
The remaining hardwood plantations are privately owned or managed to produce pulplogs. The softwood plantations are privately managed or owned to produce sawlogs.

TABLE 10 North Queensland plantations, 2014–15

Planting period	Unit	Eucalypts	Other hardwood	Total hardwood	Southern pines	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.3
1961–1965	'000 ha	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1
1966–1970	'000 ha	0.0	0.0	0.0	0.1	0.2	0.3	0.0	0.3
1971–1975	'000 ha	0.0	0.0	0.0	0.6	0.4	1.0	0.0	1.0
1976–1980	'000 ha	0.0	0.0	0.0	1.2	0.0	1.2	0.0	1.2
1981–1985	'000 ha	0.0	0.0	0.0	1.0	0.0	1.0	0.0	1.0
1986–1990	'000 ha	0.0	0.0	0.0	1.4	0.0	1.4	0.0	1.4
1991–1995	'000 ha	0.0	0.0	0.0	0.8	0.1	0.9	0.0	0.9
1996–2000	'000 ha	0.0	0.0	0.0	0.5	0.1	0.6	0.0	0.7
2001–2005	'000 ha	0.0	0.4	0.4	2.7	0.1	2.8	0.0	3.2
2006–2010	'000 ha	0.1	0.5	0.6	5.3	0.0	5.3	0.0	5.9
2011–2015	'000 ha	0.0	0.0	0.0	3.4	0.0	3.4	0.0	3.4
Unknown	'000 ha	0.9	2.8	3.7	12.3	1.3	13.5	0.0	17.2
Total	'000 ha	1.0	3.8	4.9	29.4	2.3	31.8	0.0	36.6
Proportion of type	(%)	21.3	78.7	100.0	92.6	7.4	100.0	100.0	na
Proportion of total	(%)	na	na	13.3	na	na	86.7	0.0	100.0



MAP 6 North Queensland plantations



South East Queensland

The total area in the South East Queensland region has decreased marginally from 194 500 hectares in 2013–14 to 191 600 hectares in 2014–15 (Table 11). More than half of the hardwood plantations are managed to produce sawlogs; the remainder are managed to produce pulplogs. The softwood plantations are managed to produce sawlogs.

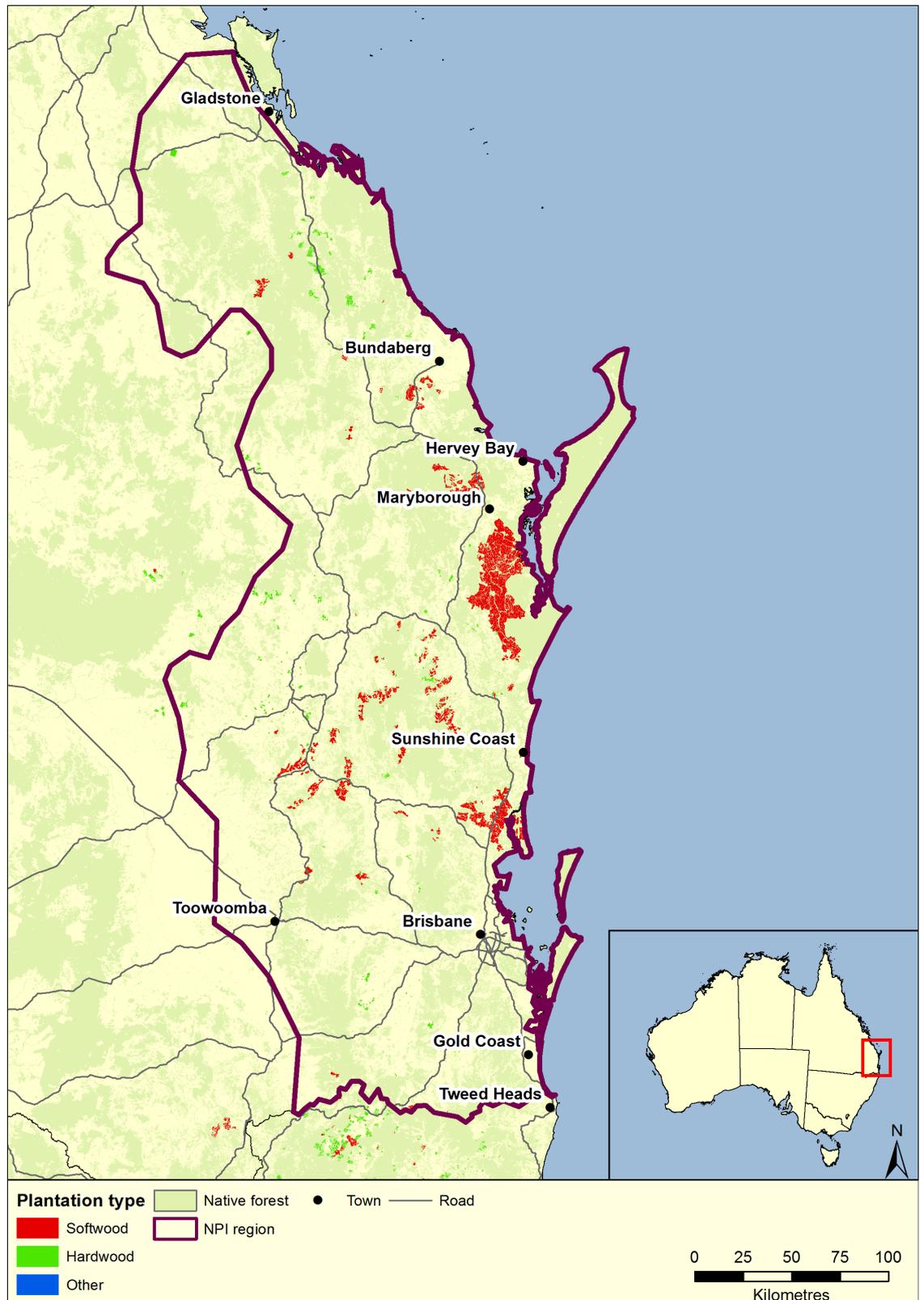
TABLE 11 South East Queensland plantations, 2014–15

Planting period	Unit	Dunn's white gum	Other eucalypt	Corymbia species	Other hardwood	Total hardwood
<1961	'000 ha	0.0	0.0	0.0	0.0	0.0
1961–1965	'000 ha	0.0	0.0	0.0	0.0	0.0
1966–1970	'000 ha	0.0	0.0	0.0	0.0	0.0
1971–1975	'000 ha	0.0	0.0	0.0	0.0	0.0
1976–1980	'000 ha	0.0	0.0	0.0	0.0	0.0
1981–1985	'000 ha	0.0	0.0	0.0	0.0	0.0
1986–1990	'000 ha	0.0	0.0	0.0	0.0	0.1
1991–1995	'000 ha	0.0	0.1	0.0	0.0	0.1
1996–2000	'000 ha	0.3	1.3	0.4	0.3	2.3
2001–2005	'000 ha	7.3	1.4	3.7	0.0	12.4
2006–2010	'000 ha	2.0	3.2	3.4	0.0	8.6
2011–2015	'000 ha	0.0	0.6	1.1	0.0	1.7
Unknown	'000 ha	2.4	0.6	0.0	1.3	4.3
Total	'000 ha	12.1	7.3	8.6	1.7	29.6
Proportion of type	(%)	40.8	24.7	28.9	5.7	100.0
Proportion of total	(%)	na	na	na	na	15.5

TABLE 11 South East Queensland plantations, 2014–15 *continued*

Planting period	Unit	Southern pines	Hoop pine	Other softwood	Total Softwood	Other	Total
<1961	'000 ha	0.0	4.1	0.0	4.1	0.0	4.1
1961–1965	'000 ha	0.0	3.6	0.0	3.7	0.0	3.7
1966–1970	'000 ha	0.3	6.4	0.0	6.8	0.0	6.8
1971–1975	'000 ha	0.9	6.0	0.1	6.9	0.0	6.9
1976–1980	'000 ha	5.2	4.3	0.1	9.6	0.0	9.6
1981–1985	'000 ha	11.1	2.5	0.0	13.6	0.0	13.7
1986–1990	'000 ha	17.8	2.8	0.1	20.7	0.0	20.7
1991–1995	'000 ha	10.7	2.4	0.1	13.2	0.0	13.3
1996–2000	'000 ha	14.7	2.8	0.4	17.9	0.1	20.3
2001–2005	'000 ha	18.2	2.5	0.1	20.9	0.0	33.3
2006–2010	'000 ha	19.3	3.8	0.8	23.8	0.0	32.4
2011–2015	'000 ha	12.5	1.5	0.1	14.1	0.0	15.8
Unknown	'000 ha	5.1	1.1	0.3	6.5	0.1	10.9
Total	'000 ha	115.8	43.9	2.1	161.8	0.2	191.6
Proportion of type	(%)	71.6	27.1	1.3	100.0	100.0	na
Proportion of total	(%)	na	na	na	84.4	0.1	100.0

MAP 7 South East Queensland plantations



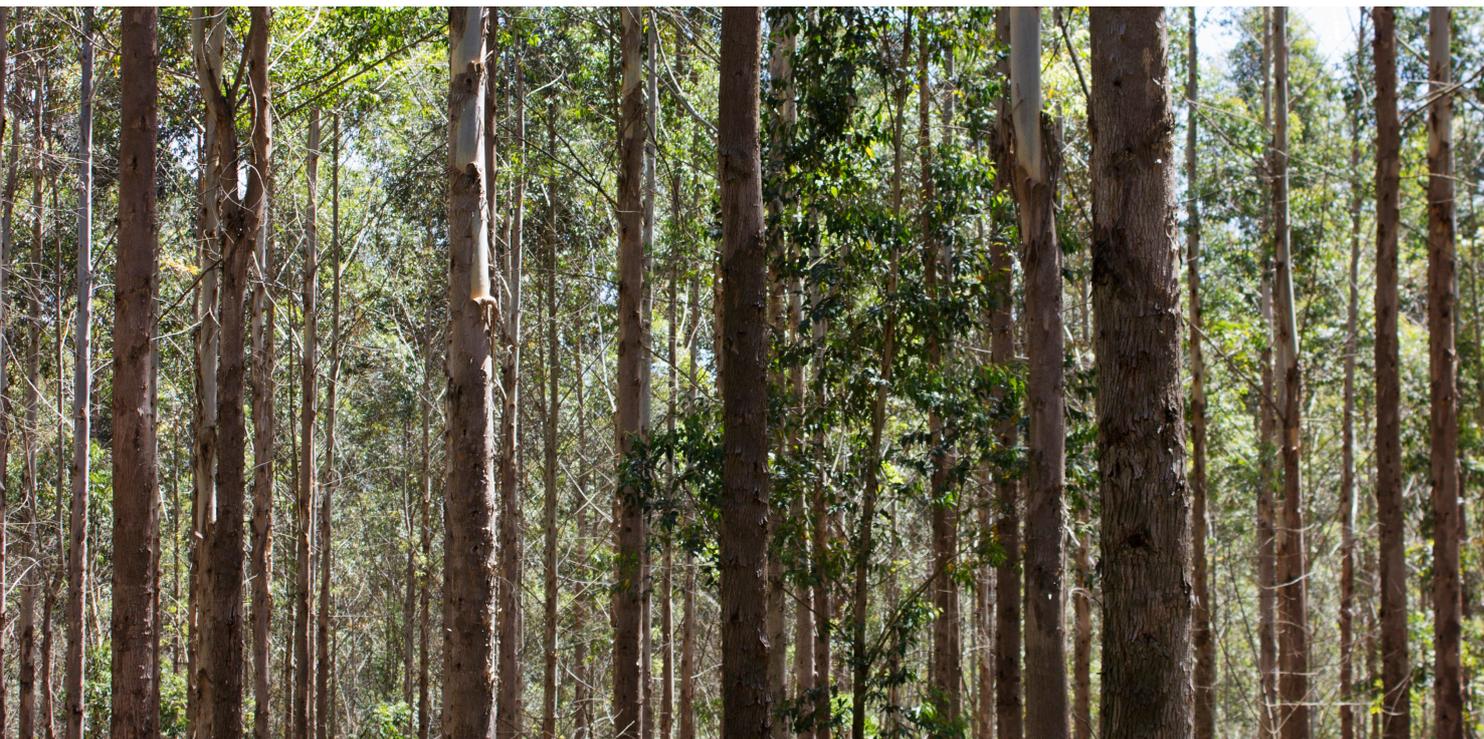
Northern Tablelands (New South Wales)

The plantation area in the Northern Tablelands region has declined by 7 000 hectares (28.6 per cent), from 24 400 hectares in 2013–14 to 17 400 hectares in 2014–15 (Table 12). Although the decline has been attributed to the one year, the decline has happened over the past five years and is captured in this spatial update.

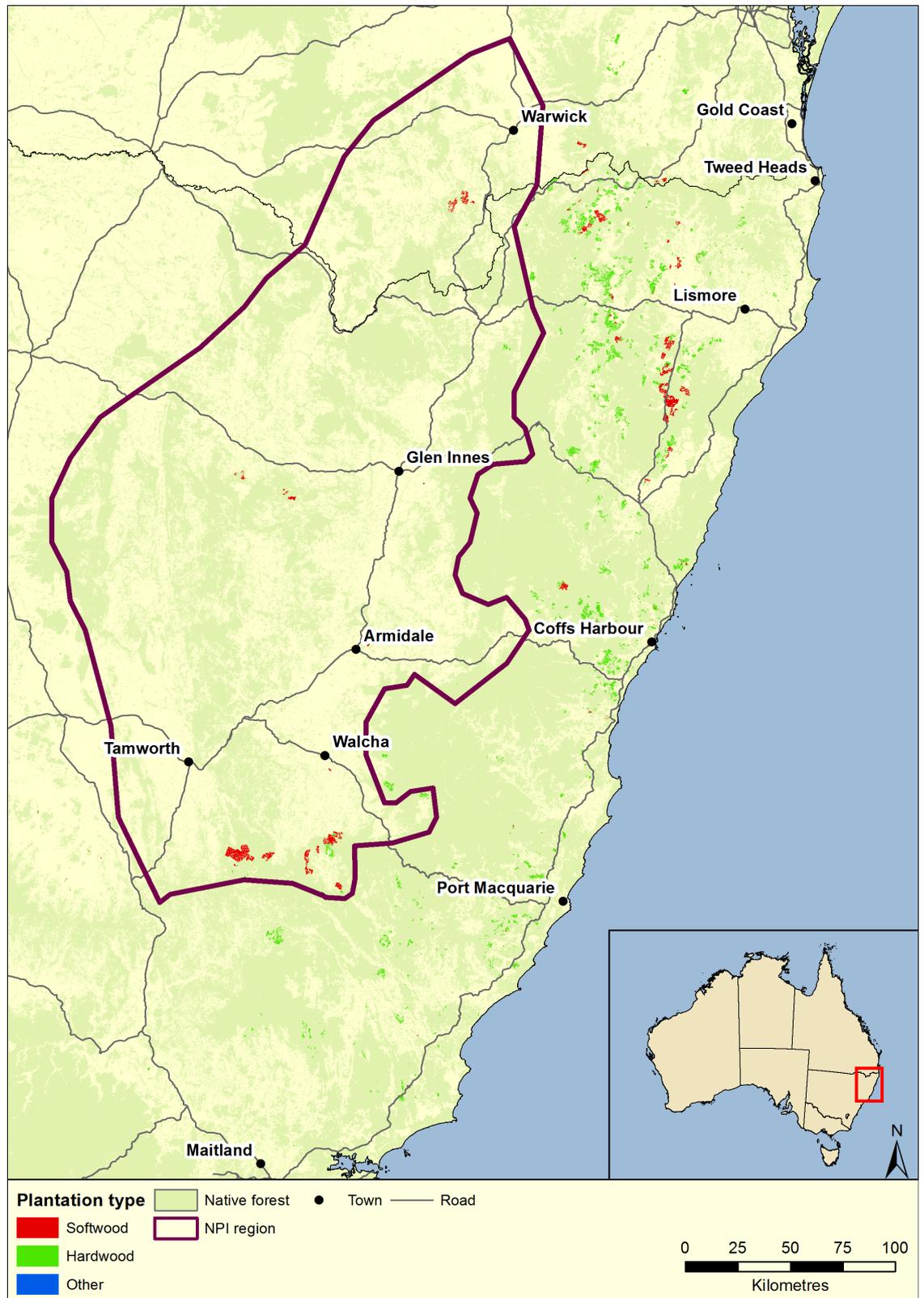
The softwood plantation area declined by 2 500 hectares to 14 900 hectares, the hardwood plantation area declined by 4 300 hectares to 2 300 hectares and other plantations were around 200 hectares in 2014–15.

TABLE 12 Northern Tablelands plantations, 2014–15

Planting period	Unit	Shining gum	Other hardwood	Total hardwood	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.2
1961–1965	'000 ha	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1
1966–1970	'000 ha	0.0	0.0	0.0	0.6	0.0	0.6	0.0	0.6
1971–1975	'000 ha	0.0	0.0	0.0	1.4	0.0	1.4	0.0	1.4
1976–1980	'000 ha	0.0	0.0	0.0	1.8	0.1	1.9	0.0	1.9
1981–1985	'000 ha	0.0	0.0	0.0	2.1	0.1	2.2	0.0	2.2
1986–1990	'000 ha	0.0	0.0	0.0	2.4	0.0	2.4	0.0	2.4
1991–1995	'000 ha	0.2	0.0	0.2	1.0	0.1	1.1	0.0	1.3
1996–2000	'000 ha	0.0	0.0	0.1	1.3	0.0	1.3	0.0	1.3
2001–2005	'000 ha	0.2	0.3	0.6	0.4	0.1	0.5	0.2	1.2
2006–2010	'000 ha	0.9	0.0	0.9	0.4	0.3	0.8	0.0	1.7
2011–2015	'000 ha	0.0	0.0	0.0	0.7	0.2	0.9	0.0	0.9
Unknown	'000 ha	0.0	0.6	0.6	1.3	0.4	1.6	0.0	2.2
Total	'000 ha	1.3	1.0	2.3	13.4	1.5	14.9	0.2	17.4
Proportion of type	(%)	57.2	42.8	100.0	90.1	9.9	100.0	100.0	na
Proportion of total	(%)	na	na	13.1	na	na	85.7	1.2	100.0



MAP 8 Northern Tablelands plantations



North Coast (New South Wales)

The plantation area in the North Coast of New South Wales declined by around 4 200 hectares (4.3 per cent), from 98 700 hectares in 2013–14 to 94 500 hectares in 2014–15 (Table 13). Around 47 400 hectares (60.0 per cent) of the hardwood plantations are managed to produce sawlogs to supplement sawlogs harvested from native forests. In 2014–15 the softwood plantation area was 14 400 hectares, which was a decline of 4 per cent from 2013–14; the hardwood plantation area was 79 500 hectares, which was a decline of 1.4 per cent from 2013–14; and around 500 hectares was other plantations.

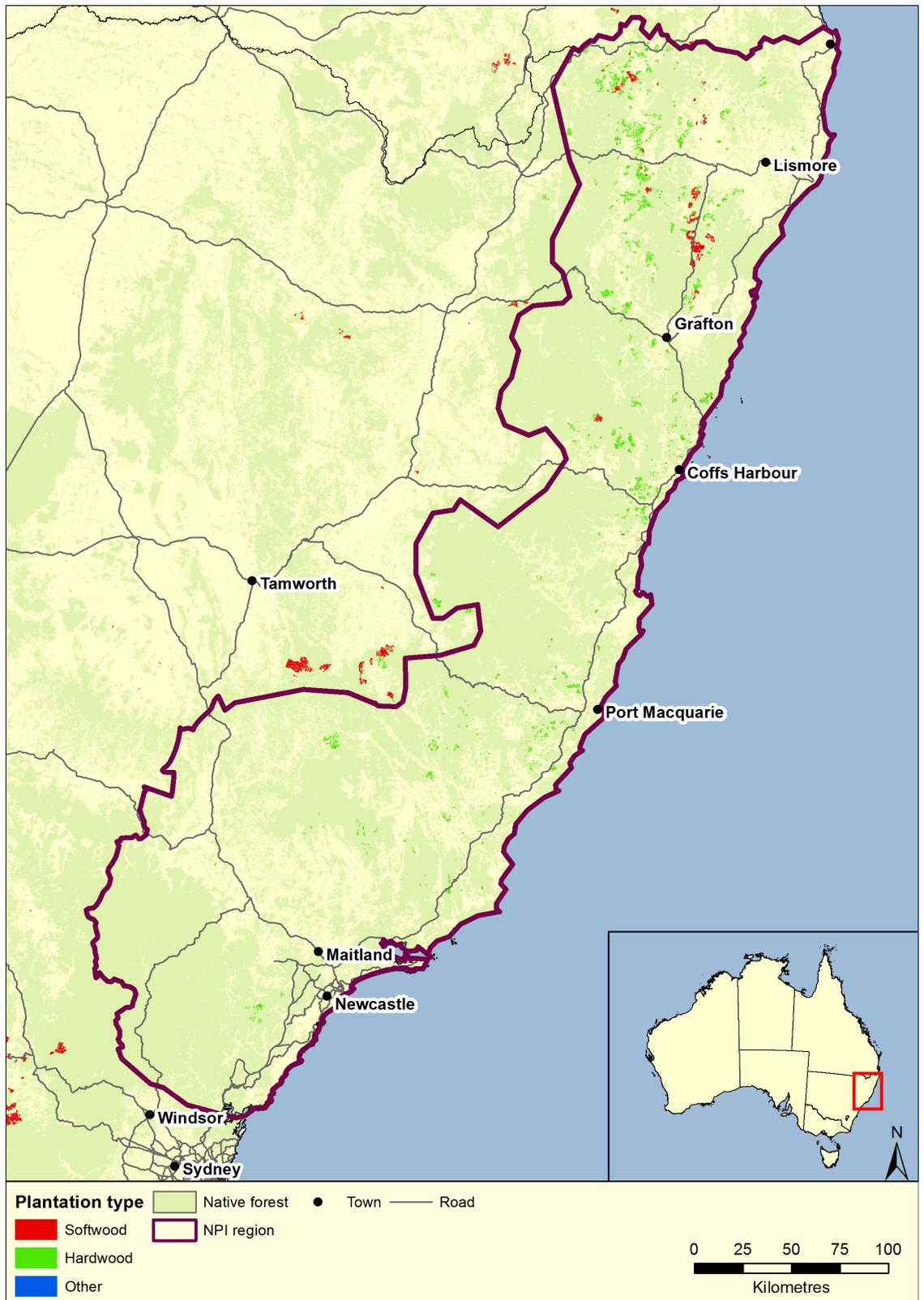
TABLE 13 North Coast plantations, 2014–15

Planting period	Unit	Dunn's white gum	Blackbutt	Corymbia species	Flooded gum	Shining gum	Other eucalypts	Other hardwoods	Total hardwood
<1961	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961–1965	'000 ha	0.0	0.4	0.0	0.1	0.0	0.0	0.1	0.6
1966–1970	'000 ha	0.0	1.5	0.0	1.0	0.0	0.3	0.0	2.8
1971–1975	'000 ha	0.0	2.4	0.0	0.6	0.0	0.5	0.2	3.7
1976–1980	'000 ha	0.0	0.9	0.0	0.3	0.0	0.8	0.1	2.1
1981–1985	'000 ha	0.0	0.2	0.0	0.0	0.0	0.3	0.1	0.7
1986–1990	'000 ha	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.5
1991–1995	'000 ha	0.1	0.4	0.2	0.3	0.0	0.1	0.0	1.1
1996–2000	'000 ha	7.0	4.7	5.5	2.6	0.1	1.0	0.0	21.0
2001–2005	'000 ha	3.2	1.2	2.7	0.7	0.0	0.9	0.0	8.7
2006–2010	'000 ha	7.0	2.9	1.1	0.9	2.9	3.6	0.0	18.4
2011–2015	'000 ha	0.0	1.6	0.0	0.1	0.0	0.4	0.0	2.1
Unknown	'000 ha	0.0	0.0	0.4	0.0	0.0	17.3	0.0	17.7
Total	'000 ha	17.4	16.7	9.9	6.8	3.1	25.2	0.5	79.5
Proportion of type	(%)	21.9	21	12.5	8.5	3.8	31.6	0.7	100.0
Proportion of total	(%)	na	na	na	na	na	na	na	84.2

TABLE 13 North Coast plantations, 2014–15 *continued*

Planting period	Unit	Southern pines	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.3	0.3	0.0	0.3
1961–1965	'000 ha	0.0	0.0	0.0	0.0	0.6
1966–1975	'000 ha	0.0	0.0	0.0	0.0	2.9
1971–1975	'000 ha	0.0	0.0	0.0	0.0	3.7
1976–1980	'000 ha	0.2	0.1	0.3	0.1	2.5
1981–1985	'000 ha	0.2	0.7	0.9	0.0	1.6
1986–1990	'000 ha	0.4	1.0	1.4	0.1	2.0
1991–1995	'000 ha	0.6	0.1	0.7	0.0	1.8
1996–2000	'000 ha	1.9	0.3	2.1	0.1	23.2
2001–2005	'000 ha	3.7	0.0	3.7	0.1	12.5
2006–2010	'000 ha	2.3	0.2	2.5	0.0	21.0
2011–2015	'000 ha	1.3	0.1	1.5	0.0	3.6
Unknown	'000 ha	0.3	0.6	0.9	0.1	18.7
Total	'000 ha	11.0	3.4	14.4	0.5	94.5
Proportion of type	(%)	76.3	23.7	100.0	100.0	na
Proportion of total	(%)	na	na	15.3	0.5	100.0

MAP 9 North Coast plantations



Central Tablelands (New South Wales)

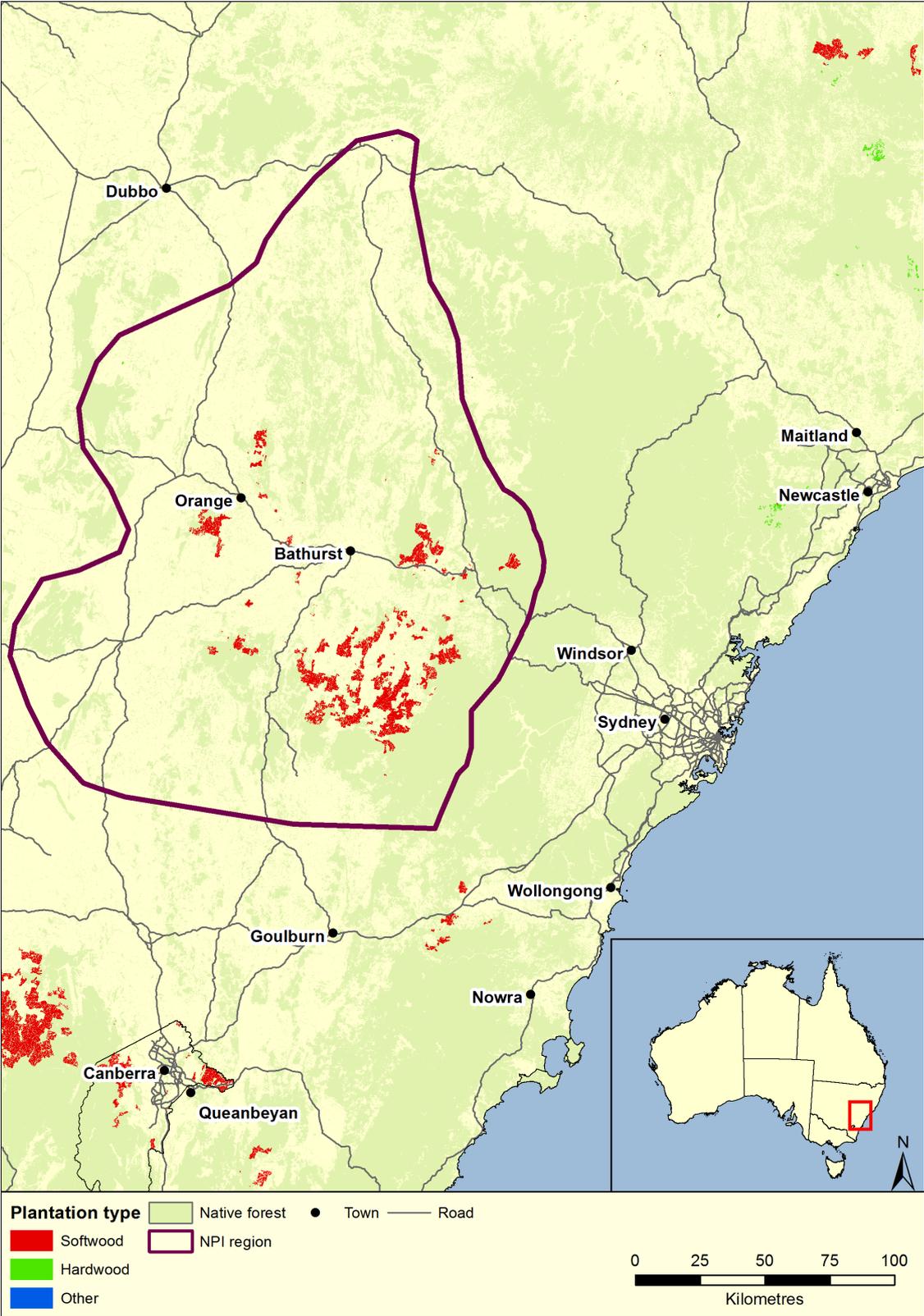
The Central Tablelands plantation area has increased by 5.3 per cent, from 82 700 in 2013–14 to 86 900 hectares in 2014–15, because of improved mapping of plantations (Table 14). Although the increase has been attributed to one year, the increase has happened over the past five years and is captured in this spatial update. Ownership information was not available for around 7 000 hectares in the Central Tablelands region; therefore, the plantations were validated using satellite imagery.

TABLE 14 Central Tablelands plantations, 2014–15

Planting period	Unit	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.1	0.1	0.0	0.1
1961–1965	'000 ha	0.2	0.0	0.2	0.0	0.2
1966–1970	'000 ha	1.1	0.2	1.2	0.0	1.2
1971–1975	'000 ha	1.4	1.2	2.5	0.0	2.5
1976–1980	'000 ha	3.4	0.5	3.9	0.0	3.9
1981–1985	'000 ha	7.9	0.6	8.5	0.0	8.5
1986–1990	'000 ha	12.3	0.1	12.3	0.0	12.3
1991–1995	'000 ha	6.7	0.0	6.7	0.0	6.7
1996–2000	'000 ha	9.1	0.1	9.2	0.0	9.2
2001–2005	'000 ha	9.9	0.2	10.1	0.1	10.1
2006–2010	'000 ha	14.1	0.0	14.1	0.0	14.1
2011–2015	'000 ha	12.1	0.0	12.1	0.0	12.1
Unknown	'000 ha	5.7	0.0	5.7	0.0	5.7
Total	'000 ha	84.0	2.9	86.8	0.1	86.9
Proportion of type	(%)	96.7	3.3	100.0	100.0	na
Proportion of total	(%)	na	na	99.9	0.1	100.0



MAP 10 Central Tablelands plantations



Southern Tablelands (New South Wales)

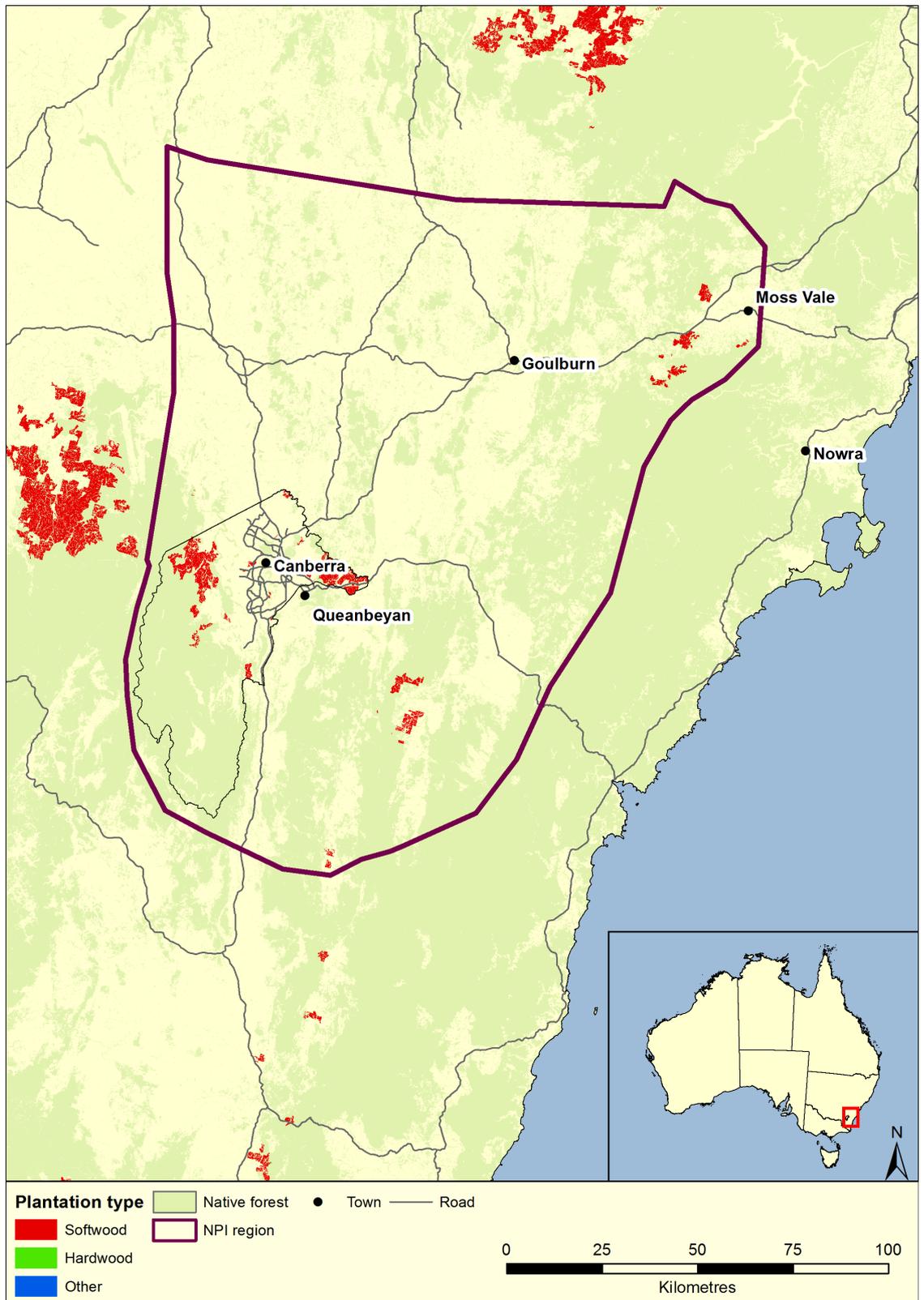
The Southern Tablelands plantation area has remained steady over the past decade at around 22 100 hectares (Table 15). Around 98 per cent of the total plantation area are softwood plantations concentrated around Canberra and Moss Vale and managed for sawlogs.

TABLE 15 Southern Tablelands plantations, 2014–15

Planting period	Unit	Total hardwood	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.1	0.0	0.1	0.0	0.1
1961–1965	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0
1966–1970	'000 ha	0.0	0.7	0.0	0.7	0.0	0.7
1971–1975	'000 ha	0.0	2.2	0.0	2.2	0.0	2.2
1976–1980	'000 ha	0.0	1.0	0.0	1.0	0.0	1.0
1981–1985	'000 ha	0.0	1.7	0.0	1.7	0.0	1.7
1986–1990	'000 ha	0.0	1.9	0.0	1.9	0.0	1.9
1991–1995	'000 ha	0.0	1.8	0.0	1.8	0.0	1.8
1996–2000	'000 ha	0.1	1.6	0.0	1.6	0.0	1.8
2001–2005	'000 ha	0.3	3.4	0.0	3.4	0.0	3.6
2006–2010	'000 ha	0.0	5.3	0.0	5.3	0.0	5.3
2011–2015	'000 ha	0.0	1.8	0.0	1.8	0.0	1.8
Unknown	'000 ha	0.0	0.2	0.0	0.2	0.0	0.2
Total	'000 ha	0.4	21.7	0.0	21.7	0.0	22.1
Proportion of type	(%)	100.0	99.8	0.2	100.0	100.0	na
Proportion of total	(%)	1.8	na	na	98.2	na	100.0



MAP 11 Southern Tablelands plantations



Murray Valley (New South Wales/Victoria)

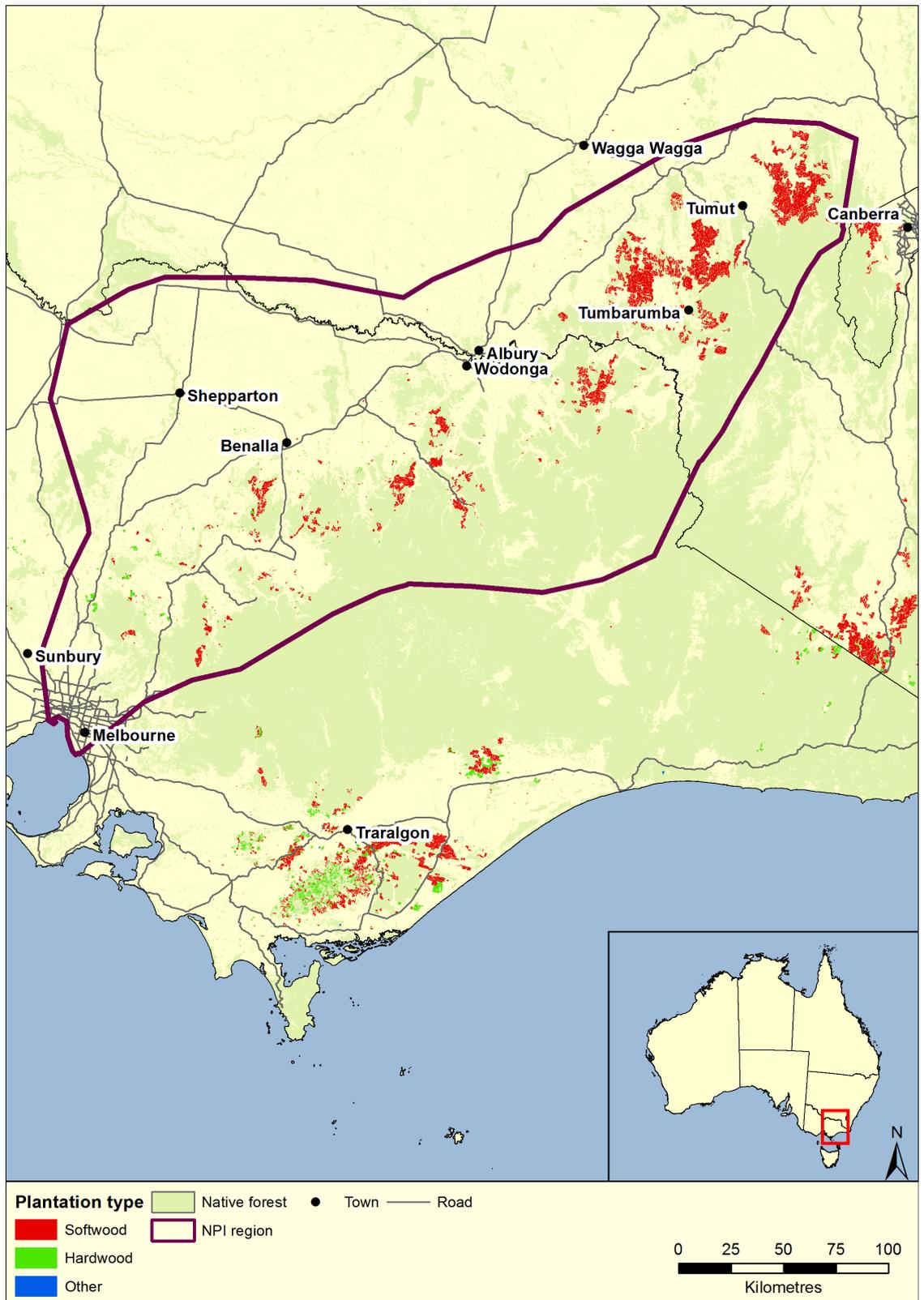
The plantation area in the Murray Valley region has increased marginally by around 1 per cent from 2013–14 to 196 500 hectares in 2014–15, comprised of around 110 hectares of new plantations and around 1 060 hectares identified because of improved mapping of plantations (Table 16). Over the past decade the plantation area has remained stable, as the majority of the plantation area was not adversely impacted by the collapse of the companies using managed investment schemes for plantations. Around 96 per cent of the plantations are softwoods managed to produce sawlogs for local sawmills.

TABLE 16 Murray Valley plantations, 2014–15

Planting period	Unit	Tasmanian blue gum	Other hardwood	Total hardwood	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.0	0.0	0.1	0.2	0.3	0.0	0.3
1961–1965	'000 ha	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1
1966–1970	'000 ha	0.0	0.0	0.0	1.4	0.0	1.4	0.0	1.4
1971–1975	'000 ha	0.0	0.0	0.0	1.6	0.2	1.8	0.0	1.8
1976–1980	'000 ha	0.0	0.0	0.0	3.7	0.0	3.7	0.0	3.7
1981–1985	'000 ha	0.0	0.1	0.1	15.0	0.1	15.1	0.0	15.1
1986–1990	'000 ha	0.0	0.0	0.0	25.8	0.0	25.9	0.1	26.0
1991–1995	'000 ha	0.0	0.1	0.2	14.7	0.0	14.7	0.0	14.8
1996–2000	'000 ha	2.2	0.7	3.0	18.2	0.1	18.3	0.0	21.3
2001–2005	'000 ha	0.6	0.2	0.9	25.7	0.1	25.8	0.0	26.7
2006–2010	'000 ha	2.0	0.0	2.0	42.1	0.0	42.1	0.0	44.1
2011–2015	'000 ha	1.1	0.0	1.1	28.2	0.0	28.2	0.0	29.3
Unknown	'000 ha	0.0	0.1	0.1	9.9	1.8	11.7	0.0	11.8
Total	'000 ha	6.0	1.2	7.3	186.6	2.5	189.1	0.1	196.5
Proportion of type	(%)	83.1	16.9	100.0	98.7	1.3	100.0	100.0	na
Proportion of total	(%)	na	na	3.7	na	na	96.2	0.1	100.0



MAP 12 Murray Valley plantations



Central Victoria

The plantation area in the Central Victoria region has remained stable over the past decade and declined marginally by 1.3 per cent from 68 700 hectares in 2013–14 to 67 800 hectares in 2014–15 (Table 17). The hardwood plantation area increased slightly to 37 700 hectares because of improved mapping of plantations, the softwood plantation area decreased marginally to 30 000 hectares and other plantations was around 100 hectares. The majority of the hardwood plantations are Tasmanian blue gum (84.1 per cent) managed to produce pulplogs. The majority of softwood plantations are radiata pine (98.6 per cent) managed to produce sawlogs.

TABLE 17 Central Victoria plantations, 2014–15

Planting period	Unit	Tasmanian blue gum	Shining gum	Other hardwood	Total hardwood	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.0	0.3	0.3	0.1	0.2	0.3	0.0	0.6
1961–1965	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
1966–1970	'000 ha	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.2
1971–1975	'000 ha	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.5
1976–1980	'000 ha	0.0	0.0	0.0	0.0	1.2	0.0	1.2	0.0	1.3
1981–1985	'000 ha	0.0	0.0	0.0	0.0	3.7	0.1	3.8	0.0	3.8
1986–1990	'000 ha	0.0	0.0	0.0	0.0	4.0	0.0	4.0	0.0	4.0
1991–1995	'000 ha	0.2	0.0	0.0	0.3	1.6	0.0	1.6	0.0	1.9
1996–2000	'000 ha	5.9	0.0	0.3	6.3	3.5	0.0	3.5	0.0	9.8
2001–2005	'000 ha	9.8	0.2	0.4	10.4	4.0	0.0	4.0	0.0	14.4
2006–2010	'000 ha	10.6	1.5	0.0	12.2	5.7	0.0	5.7	0.0	17.9
2011–2015	'000 ha	5.1	2.0	0.1	7.2	4.2	0.0	4.2	0.0	11.5
Unknown	'000 ha	0.0	0.0	1.0	1.0	0.7	0.0	0.8	0.0	1.8
Total	'000 ha	31.7	3.7	2.3	37.7	29.6	0.4	30.0	0.1	67.8
Proportion of type	(%)	84.1	9.9	6.0	100.0	98.6	1.4	100.0	100.0	na
Proportion of total	(%)	na	na	na	55.7	na	na	44.3	0.0	100.0



MAP 13 Central Victoria plantations



Central Gippsland (Victoria)

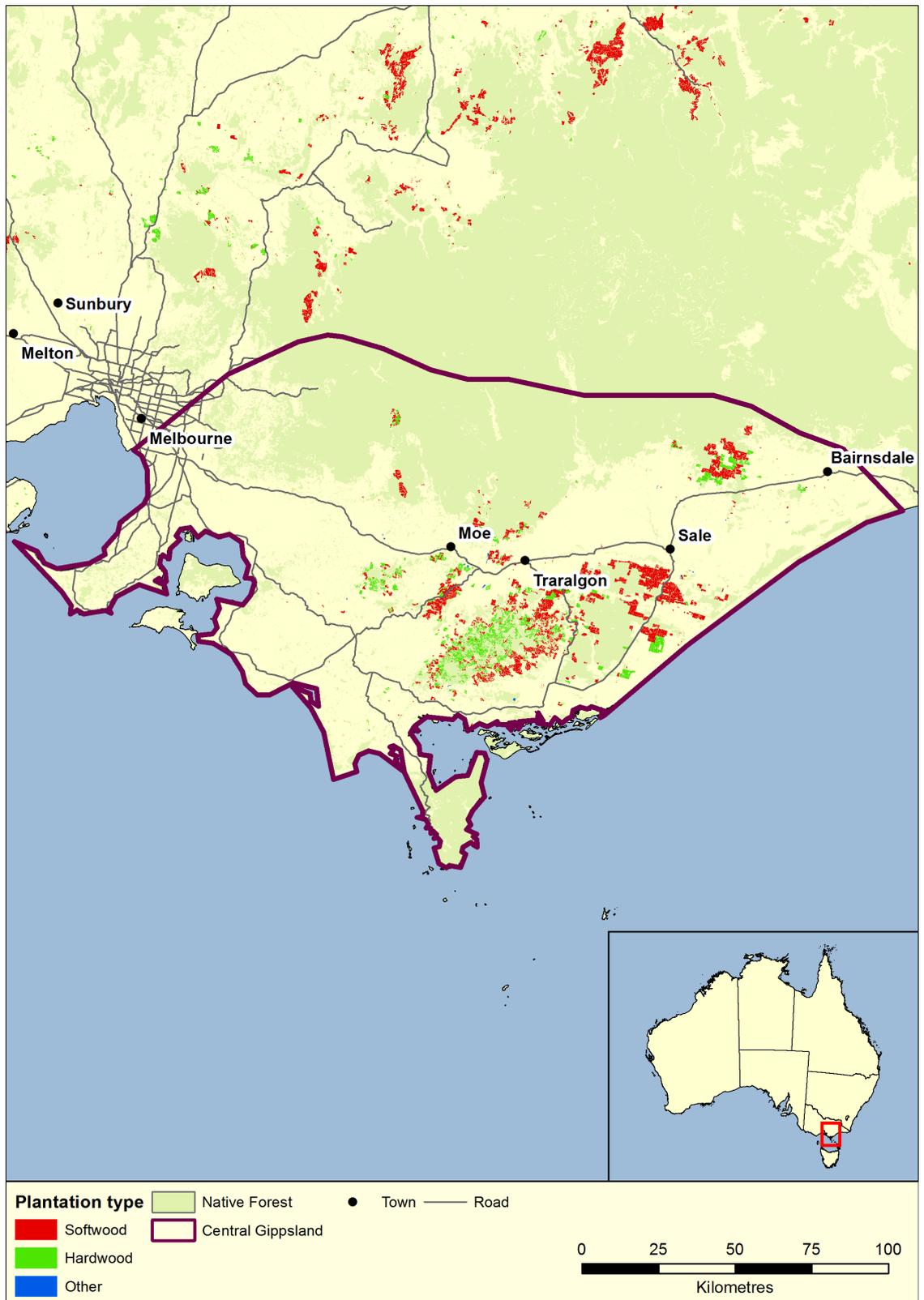
The Central Gippsland region plantation area has declined by 3.4 per cent from 2013–14, to 91 700 hectares in 2014–15 (Table 18). The hardwood plantation area declined by 9.0 per cent to 29 800 hectares, the softwood plantation area decreased marginally to 61 300 hectares (1.6 per cent) and around 700 hectares was other plantations. Although the decrease in plantation area has been attributed to the one year, the decrease has happened over the past five years and is captured in this spatial update.

TABLE 18 Central Gippsland plantations, 2014–15

Planting period	Unit	Tasmanian blue gum	Shining gum	Mountain ash	Other hardwood	Total hardwood	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1
1961–1965	'000 ha	0.0	0.0	0.3	0.0	0.3	0.1	0.0	0.1	0.0	0.4
1966–1970	'000 ha	0.0	0.0	0.8	0.0	0.8	0.0	0.0	0.1	0.0	0.8
1971–1975	'000 ha	0.0	0.0	0.8	0.0	0.8	0.2	0.0	0.2	0.0	1.1
1976–1980	'000 ha	0.0	0.0	0.6	0.0	0.7	0.7	0.0	0.7	0.0	1.4
1981–1985	'000 ha	0.0	0.0	0.4	0.0	0.4	1.3	0.0	1.3	0.0	1.7
1986–1990	'000 ha	0.2	0.0	1.1	0.1	1.4	6.0	0.0	6.0	0.0	7.4
1991–1995	'000 ha	1.4	0.2	0.1	0.1	1.9	5.8	0.0	5.8	0.0	7.6
1996–2000	'000 ha	3.4	0.7	0.2	0.0	4.2	7.7	0.0	7.7	0.0	12.0
2001–2005	'000 ha	1.8	2.4	0.0	0.0	4.3	10.4	0.0	10.4	0.1	14.7
2006–2010	'000 ha	6.4	4.2	0.0	0.2	10.8	12.1	0.0	12.1	0.0	22.9
2011–2015	'000 ha	0.8	3.2	0.0	0.0	4.1	14.4	0.0	14.4	0.0	18.5
Unknown	'000 ha	0.0	0.0	0.0	0.1	0.1	2.5	0.0	2.5	0.6	3.1
Total	'000 ha	14.1	10.7	4.4	0.6	29.8	61.2	0.0	61.3	0.7	91.7
Proportion of type	(%)	47.3	36.0	14.6	2.0	100.0	99.9	0.1	100.0	100.0	na
Proportion of total	(%)	na	na	na	na	32.5	na	na	66.8	0.7	100.0



MAP 14 Central Gippsland plantations



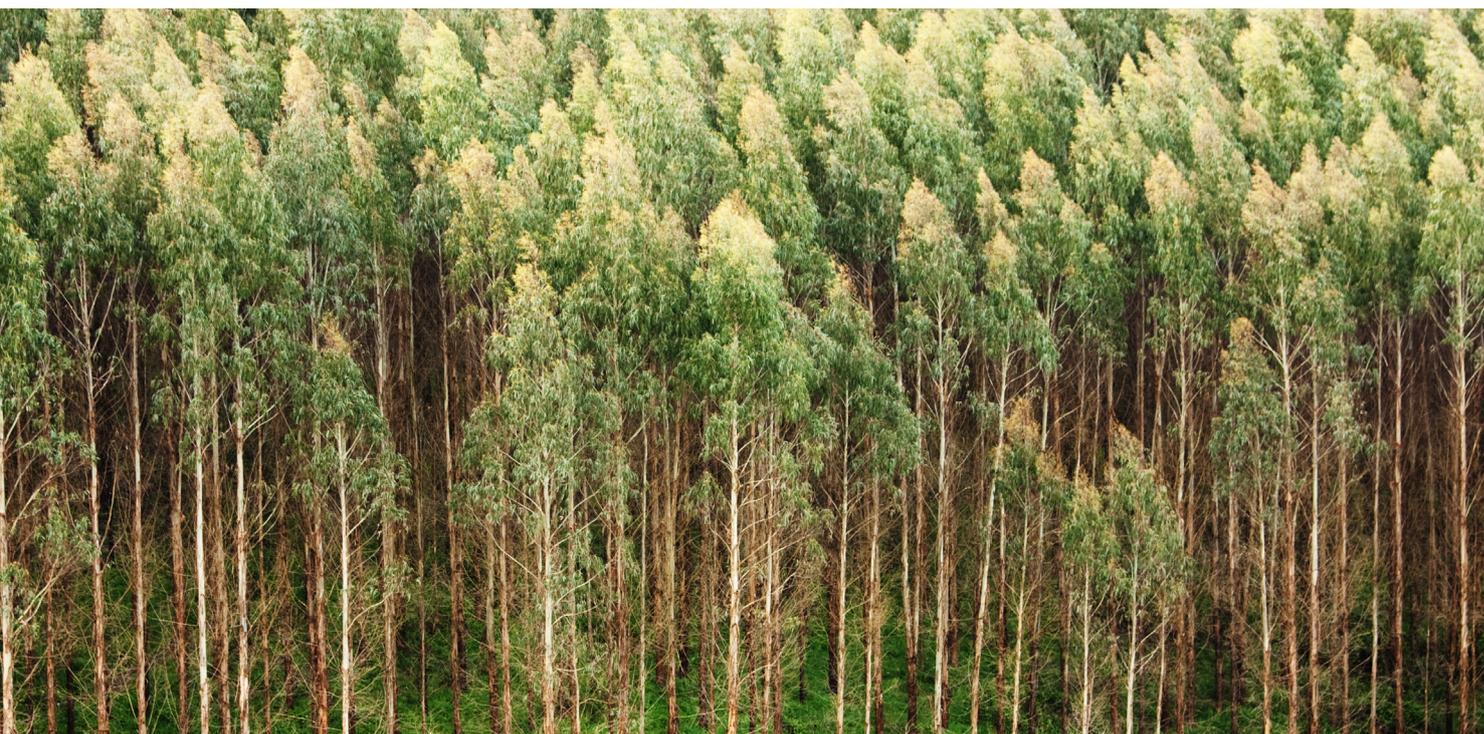
East Gippsland–Bombala (New South Wales/Victoria)

The plantation area in the East Gippsland–Bombala region has increased by 11.5 per cent from 2013–14 to 57 400 hectares in 2014–15, because of improved mapping of plantations (Table 19). Although the increase in plantation area has been attributed to one year, the increase has happened over the past five years and is captured in this spatial update using revised company data.

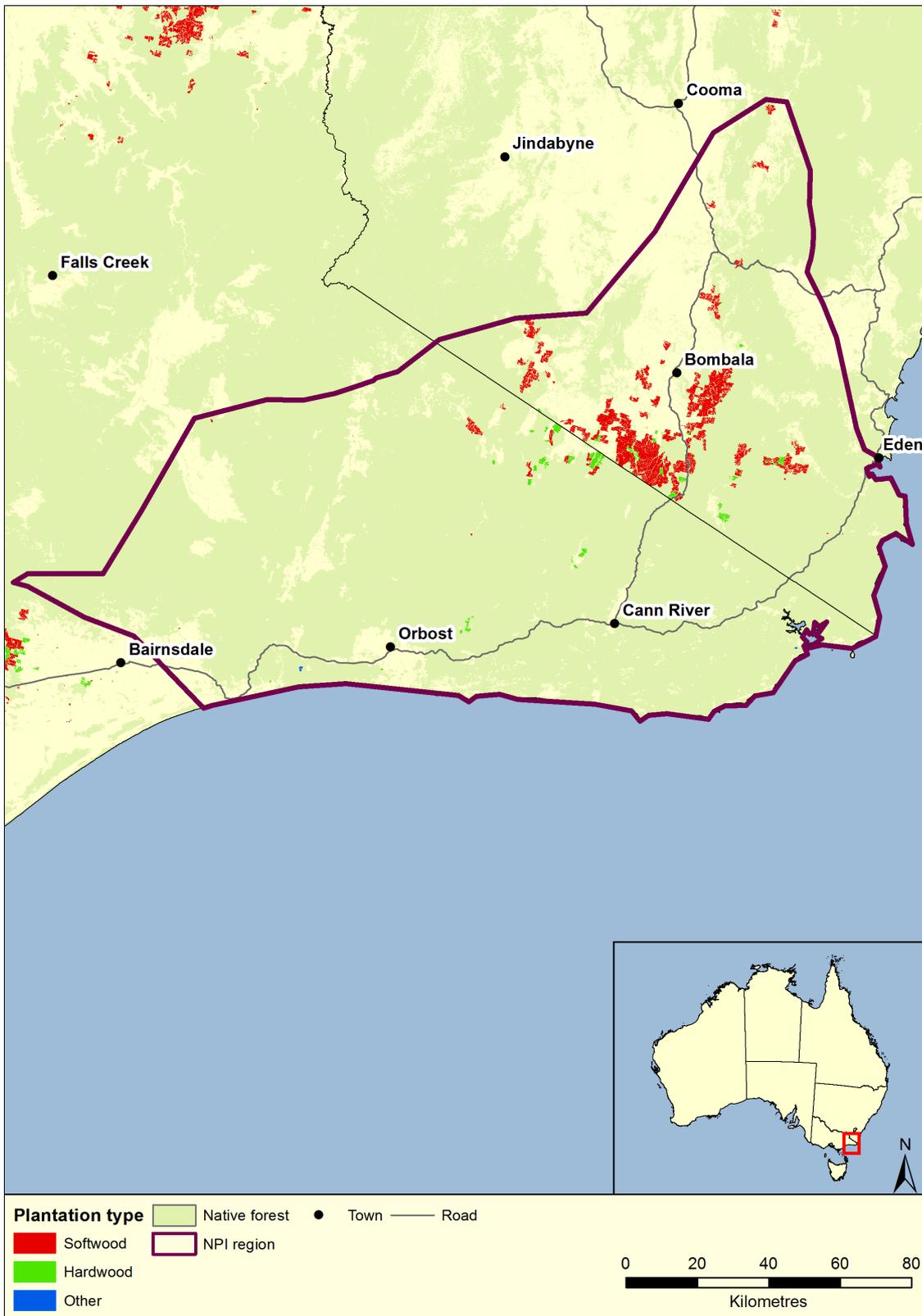
The hardwood plantation area has increased by 52.0 per cent from a low base to 8 700 hectares, the softwood plantation area has increased by 5.0 per cent to 48 600 hectares and other plantations was around 100 hectares in 2014–15.

TABLE 19 East Gippsland—Bombala plantations, 2014–15

Planting period	Unit	Shining gum	Other hardwood	Total hardwood	Radiata pine	Other softwood	Total softwood	Other	Total
<1961	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961–1965	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1966–1970	'000 ha	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1971–1975	'000 ha	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1
1976–1980	'000 ha	0.0	0.0	0.0	1.9	0.0	1.9	0.0	1.9
1981–1985	'000 ha	0.0	0.0	0.0	10.2	0.0	10.2	0.0	10.2
1986–1990	'000 ha	0.0	0.0	0.0	6.0	0.0	6.0	0.0	6.1
1991–1995	'000 ha	0.4	0.1	0.5	1.2	0.0	1.2	0.0	1.7
1996–2000	'000 ha	1.0	0.5	1.5	6.1	0.0	6.1	0.0	7.6
2001–2005	'000 ha	1.2	0.7	1.9	7.4	0.0	7.4	0.0	9.3
2006–2010	'000 ha	1.2	0.0	1.2	9.7	0.0	9.7	0.0	10.9
2011–2015	'000 ha	2.4	0.0	2.4	4.4	0.0	4.4	0.0	6.8
Unknown	'000 ha	0.0	1.2	1.2	1.6	0.0	1.6	0.1	2.9
Total	'000 ha	6.2	2.5	8.7	48.6	0.0	48.6	0.1	57.4
Proportion of type	(%)	71.6	28.4	100.0	100.0	100.0	na	100.0	na
Proportion of total	(%)	na	na	15.1	na	na	84.7	0.3	100.0



MAP 15 East Gippsland—Bombala plantations



Tasmania

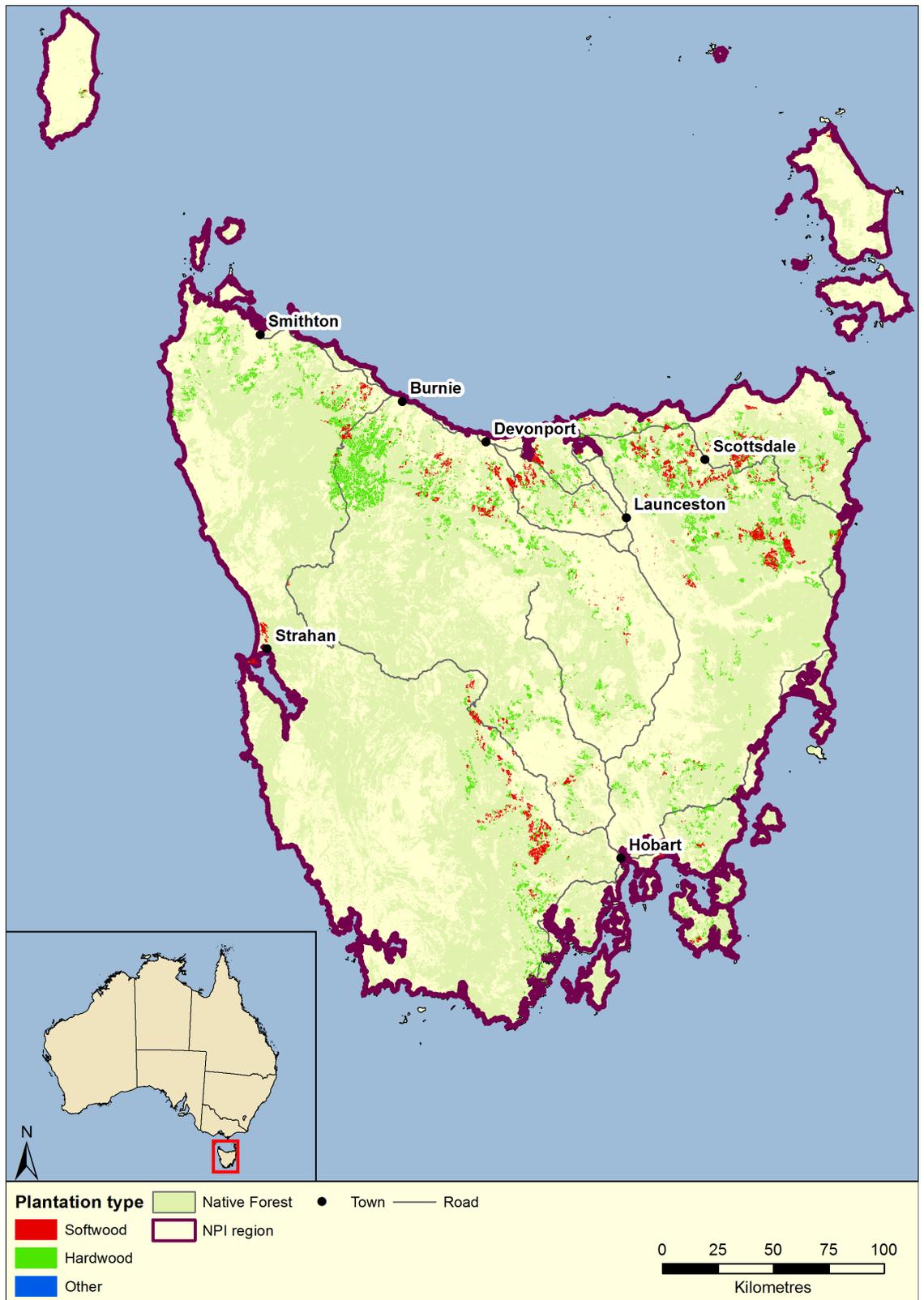
The Tasmania region had a small reduction of less than 1 per cent of plantation area in the past five years to 309 800 hectares (Table 20). This was mainly because of conversion of plantation land to agriculture and improved mapping of previously recorded plantations. The hardwood plantation area was about 233 900 hectares in 2014–15, with around 85 per cent managed on short rotations for pulpwood production. The softwood plantation area was 75 900 hectares predominately managed for sawlog production. Some areas of hardwood plantation damaged by the 2013 bushfires remained as unrehabilitated fallow land.

TABLE 20 Tasmania plantations, 2014–15

Planting period	Unit	Shining gum	Tasmanian blue gum	Other hardwood	Total hardwood	Radiata pine	Other softwood	Total softwood	Total
<1961	'000 ha	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.3
1961–1965	'000 ha	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.2
1966–1970	'000 ha	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.5
1971–1975	'000 ha	0.0	0.0	0.0	0.0	0.6	0.0	0.6	0.6
1976–1980	'000 ha	0.0	0.1	0.2	0.3	1.4	0.0	1.4	1.7
1981–1985	'000 ha	0.1	0.2	0.5	0.8	1.6	0.0	1.6	2.5
1986–1990	'000 ha	1.3	0.2	1.3	2.9	5.5	0.0	5.5	8.4
1991–1995	'000 ha	10.6	0.3	1.5	12.4	10.1	0.0	10.1	22.5
1996–2000	'000 ha	35.4	9.0	0.4	44.8	16.3	0.1	16.4	61.2
2001–2005	'000 ha	59.8	4.7	0.1	64.6	14.6	0.0	14.6	79.2
2006–2010	'000 ha	97.8	3.0	0.4	101.2	16.7	0.0	16.7	117.9
2010–2015	'000 ha	2.9	1.5	0.2	4.7	7.2	0.0	7.2	11.9
Unknown	'000 ha	0.2	0.0	1.5	1.8	1.1	0.1	1.2	3.0
Total	'000 ha	208.2	19.1	6.6	233.9	75.5	0.4	75.9	309.8
Proportion of type	(%)	89.0	8.2	2.8	100.0	99.5	0.5	100.0	na
Proportion of total	(%)	na	na	na	75.5	na	na	24.5	100.0



MAP 16 Tasmania plantations



Methodology

ABARES classified plantation areas into six classes to represent the reliability of the data. This approach has been developed for plantations where ownership information is not available—for example, former Elders and Great Southern Plantations. These plantations were identified using historical ABARES plantation spatial datasets and classified using satellite imagery, National Carbon Accounting Systems spatial layers and validated by local knowledge where possible. Plantations where data were not provided by plantation growers and managers were classified into classes 2 to 6.

The six classes are:

1. **Commercial plantations**—spatial and tabular data provided by plantation growers and managers (validated using previously supplied plantation spatial datasets, no further analysis)
2. **Commercial plantations unknown ownership**—plantations that are classified as commercially viable (growing well and within an economic distance of a processing facility or port) where ownership information is not available
3. **Low commerciality plantations**—plantations classified as having a low total yield and/or limited commercial value due to distance to processing facility or ports and where ownership information is not available
4. **Non-commercial**—plantations classified as non-commercial (plantations have failed or their total yield is very low) or are unharvestable due to changes in regulation and where ownership information is not available
5. **Cleared**—plantations that have been harvested or cleared with the intent to revert to a previous or another land use and where ownership information is not available
6. **Not plantation**—plantations that were previously classified as plantations but have been verified using satellite imagery as another land use, including native forests.

The data received from growers and managers were validated using previously supplied spatial plantation datasets and when required ABARES contacted plantation managers to clarify any issues with the data. The remaining plantation areas (classes 2 to 6) were classified using satellite imagery to determine their current status and classified into one of the classes.

Detailed spatial and tabular data are not publicly available as ABARES has confidentiality agreements with all data providers. Nevertheless, a spatial dataset has been made publicly available with the following attributes—hardwood plantations and softwood plantations area.

Glossary

<i>Acacia mangium</i>	See 'Mangium'.
African mahogany (<i>Khaya senegalensis</i>)	A tall broadleaved (hardwood) tree species from Africa that has shown promise for sawn timber production in northern Australia.
Araucaria	A genus of large coniferous softwood trees, two species of which— <i>Araucaria cunninghamii</i> (hoop pine) and <i>A. bidwillii</i> (bunya pine)—are native to Australia. <i>A. cunninghamii</i> is the only native conifer used extensively in plantations in Australia.
Blackbutt (<i>Eucalyptus pilularis</i>)	A eucalypt abundant along the east coast of New South Wales from just north of the Victorian border and extending into coastal south-east Queensland.
Blue cypress pine (<i>Callitris intratropica</i>)	A coniferous (softwood) tree species native to tropical northern Australia.
Blue gum or Tasmanian blue gum (<i>Eucalyptus globulus</i> subspecies <i>globulus</i>)	A eucalypt, native to Tasmania and parts of southern Victoria, one of the species preferred for production of wood fibre for paper manufacture in temperate climate regions.
Blue leaved stringybark (<i>Eucalyptus agglomerata</i>)	A eucalypt from the Central Tablelands of New South Wales and south and central coast from the Victorian border north to the Hunter River.
Caribbean pine	See 'Southern pines'
Corymbias	A group of eucalypts classified into the genus <i>Corymbia</i> , rather than genus <i>Eucalyptus</i> .
Dunn's white gum or white gum (<i>Eucalyptus dunnii</i>)	A eucalypt native to north eastern New South Wales and southern Queensland.
Fallow	Land from which the crop has been harvested and where the next crop has not yet been planted.

Flooded or rose gum (<i>Eucalyptus grandis</i>)	A eucalypt, native to coastal New South Wales and Queensland and widely planted in subtropical regions for pulpwood and sawlog production.
Gympie messmate (<i>Eucalyptus cloeziana</i>)	A Queensland eucalypt native to a number of separate locations from near Gympie in the south to Cooktown in the north.
Hoop pine	See 'Araucaria'.
Hybrid southern pines	See 'Southern pines'.
Lemon scented gum (<i>Corymbia citriodora</i>)	A eucalypt native to central coastal Queensland and up to 400 km inland in a disjunct distribution.
Loblolly pine (<i>Pinus taeda</i>)	A coniferous (softwood) tree species introduced from the south east of the United States.
Mangium (<i>Acacia mangium</i>)	A medium-sized broadleaved (hardwood) tree species native to Queensland and Papua New Guinea grown in tropical regions, usually for pulpwood for paper making. The common name 'brown salwood' is sometimes used for this species.
Maritime pine (<i>Pinus pinaster</i>)	A coniferous (softwood) tree species introduced to Australia from southern Europe and planted for sawlog production in lower rainfall, temperate climate areas not suitable for radiata pine, especially in Western Australia.
Mountain ash (<i>Eucalyptus regnans</i>)	A eucalypt native to Victoria and Tasmania, used as a plantation species for reforestation in the Strzelecki Ranges, Gippsland, from the 1960s to the 1980s.
<i>Pinus caribaea</i> ; <i>P. elliotii</i>	See 'Southern pines'.
Plantation	Intensively managed stands of trees of native or introduced species established by the regular placement of seedlings or seeds, usually to produce timber. Plantations established primarily to produce eucalyptus oil, sandalwood oil, bioenergy, carbon or other non-timber products are not currently recorded by the National Plantation Inventory.
Radiata pine (<i>Pinus radiata</i>)	A coniferous (softwood) tree species introduced to Australia from California and found to be the most productive plantation species in medium to higher rainfall temperate climate regions of southern Australia.
Red mahogany (<i>Eucalyptus pellita</i>)	An Australian native broadleaved (hardwood) tree species that has shown promise for sawn timber production in northern Australia.
River red gum (<i>Eucalyptus camaldulensis</i>)	Most widely distributed of eucalypts, found on floodplains and along watercourses throughout inland Australia west of the Great Dividing Range.

Shining gum (<i>Eucalyptus nitens</i>)	A eucalypt, native to eastern Victoria and New South Wales, one of the broadleaved species preferred for production of wood fibre for paper manufacture.
Silvertop stringybark (<i>Eucalyptus laevopinea</i>)	A native broadleaved (hardwood) tree species from the northern tablelands of New South Wales and adjacent areas in southern Queensland that has shown promise for sawn timber production in the subtropics.
Slash pine (<i>Pinus elliotii</i>)	See 'Southern pines'.
Southern pines	Coniferous (softwood) species introduced from the southern United States and Caribbean regions. Species include Caribbean pine (<i>Pinus caribaea</i>) and slash pine (<i>P. elliotii</i>) and several varieties of those. A hybrid between southern pine varieties is now the preferred plantation conifer in subtropical to tropical regions of Australia.
Spotted gums	<i>Corymbia maculata</i> , <i>Corymbia variegata</i> and related species; eucalypts native to south east Queensland and coastal New South Wales.
Teak (<i>Tectona grandis</i>)	A broadleaved (hardwood) tree originating from tropical areas of Asia and planted widely in Indonesia, India and other countries to produce cabinet and furniture timber.



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