



Australia's State of the Forests Report

Indicator 1.1a: Area of forest by forest type and tenure

This indicator uses the area for each forest type over time as a broad measure of the extent to which forest ecosystems and their diversity are being maintained. Reporting on forest tenure aids our understanding of how different land management regimes may impact on forest biodiversity.



1.1a.iii Forest area in Regional Forest Agreement regions (2023)

This part of Indicator 1.1a presents the area of Australia's forests in Regional Forest Agreement regions by forest category, type and tenure.

The three other parts of Indicator 1.1a are:

- 1.1a.i Forest area by forest type
- 1.1a.ii Forest area by tenure
- 1.1a.iv Forest area change over time

Context

Regional Forest Agreements (RFA) were established to provide a framework for sustainable forest management and conservation in regions containing substantial forestry activities. There are 10 RFAs across New South Wales, Victoria, Tasmania and Western Australia.

Definition

A Regional Forest Agreement is an agreement between the Australian Government and a state government about the long-term management and use of forests in a region, and that meets the requirements listed in the Commonwealth *Regional Forest Agreements Act 2002*.

Other terms used here can be found in <u>Australia's forests</u> and <u>forestry glossary</u>.

What are Regional Forest Agreements?

Regional Forest Agreements (RFAs) are long-term Commonwealth–state agreements for the conservation and sustainable management of specific regions of Australia's native and plantation forests.

A key outcome of the <u>National Forest Policy Statement</u> was the negotiation of RFAs between the Australian Government and four state governments. The origins and development of Australia's RFAs are described in Davey (2018). The RFAs were designed to balance the competing values placed on forests and provide certainty for forest-based industries, and were informed by science-based methodologies and Comprehensive Regional Assessments (CRAs) that determined forest allocation for different uses and underpinned forest management strategies.

Between 1997 and 2001 ten RFAs covering 11 regions were signed between the Australian Government and the New South Wales, Tasmania, Victoria and Western Australia state governments (Figure 1.1a.iii-1). The Upper North East and Lower North East RFA regions of New South Wales are covered by a single RFA. The Australian and Queensland governments completed a CRA for south-east Queensland, however an RFA was not signed and is not reported herein. Between 2017 and 2020 all ten RFAs were varied and extended. RFAs in New South Wales, Tasmania and Western Australia were extended on a 20-year rolling agreement, and RFAs in Victoria were extended to 2030.

Core objectives of RFAs were the promotion of ecologically sustainable forest management and sustainable yield of wood products, and the development of a comprehensive, adequate and representative (CAR) reserve system on

public and private land. The <u>scientific framework</u> behind the CAR reserve system underpins the <u>National Reserve</u> <u>System</u>, Australia's network of protected areas. Information on forests in protected area categories is reported in Indicator 1.1c. A compilation of data on reservation and resource availability outcomes for all RFA regions is reported in Jacobsen et al. (2020) using the forest ecosystems mapped at the time the RFAs were signed.

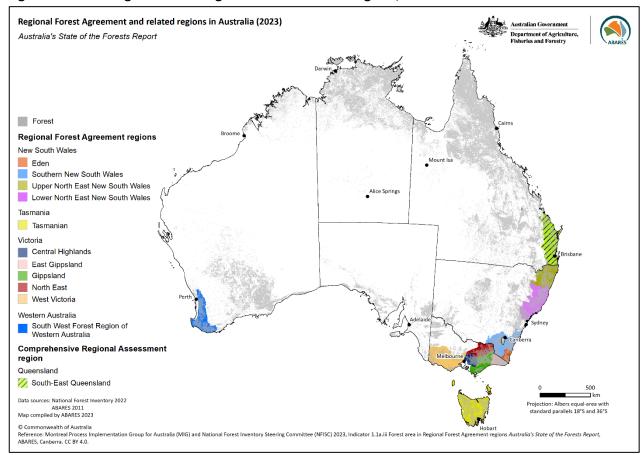


Figure 1.1a.iii-1: Regional Forest Agreement and related regions, and current forest cover

Click here to download a high-resolution version of Figure 1.1a.iii-1.

Forest area in RFA regions

The ten RFAs across eleven RFA regions cover 39.2 million hectares of south-eastern and south-western Australia (Figure 1.1a.iii-1, Table 1.1a.iii-1), and include 21.7 million hectares of Australia's forests (55% of the total area of RFA regions, and 16% of Australia's total forest area).

The total forest area in RFA regions of 21.7 million hectares comprises:

- 20.5 million hectares of native forests (94% of all forest in RFA regions)
- 1.1 million hectares of commercial plantations (5.2%)
- 0.1 million hectares of other forests (0.4%).

The 1.1 million hectares of commercial plantations in RFA regions is 62% of the total area of Australia's commercial plantations.

The largest areas of forest in RFA regions are found in:

- New South Wales (42% of total forest in RFA regions)
- Victoria (28%)
- Tasmania (17%)

• Western Australia (13%).

The largest areas of forest by individual RFA regions (Table 1.1a.iii-1) are in the:

- Tasmanian RFA region (3.7 million hectares of forest)
- Lower North East New South Wales region (3.4 million hectares)
- South West Forest Region of Western Australia (2.8 million hectares).

Table 1.1a.iii-1: Area of forest in Regional Forest Agreement Regions, by state

	Area ('000 hectares)				
RFA region	Land area	Native forest	Commercial plantation	Other forest	Total forest
Eden	813	556	42	0	599
Upper North East (New South Wales)	3,909	2,326	49	16	2,391
Lower North East (New South Wales)	5,784	3,411	34	4	3,450
Southern New South Wales	4,510	2,521	150	5	2,677
Total RFA regions in New South Wales	15,016	8,815	276	26	9,116
Tasmanian	6,810	3,393	288	26	3,707
Total RFA regions in Tasmania	6,810	3,393	288	26	3,707
Central Highlands	1,130	708	12	2	722
East Gippsland	1,214	1,101	6	1	1,108
Gippsland	2,662	1,491	88	6	1,586
North East Victoria	2,320	1,293	55	5	1,353
West Victoria	5,778	1,087	243	14	1,344
Total RFA regions in Victoria	13,105	5,681	404	28	6,112
South West Forest Region of Western Australia	4,258	2,617	155	0	2,772
Total RFA regions in Western Australia	4,258	2,617	155	0	2,772
Total RFA regions in Australia	39,189	20,506	1,122	80	21,707

Forest data on this table and throughout this indicator are from the *Forests of Australia (2023)* spatial dataset, and do not relate to the forest ecosystems mapped at the time the RFAs were signed.

Areas for Tasmania are derived from the spatial boundary of the Tasmanian RFA region held by ABARES, and differ slightly from the areas derived from the spatial boundary of the state of Tasmania used in tables elsewhere.

The Upper North East and Lower North East regions are covered by a single RFA, North East New South Wales.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory, National Plantation Inventory.

Click here for a Microsoft Excel workbook of the data for Table 1.1a.iii-1.

Tenure of forest in RFA regions

Forest in RFA regions occurs mostly across the three tenure classes of Nature conservation reserve, Multiple-use public forest and Private forest (Table 1.1a.iii-2):

- 7.9 million hectares of forest in RFA regions is on Nature conservation reserve (37% of all forest in RFA regions)
- 6.5 million hectares are on Multiple-use public forest tenure (30%)
- 6.5 million hectares are on Private tenure (30%).

RFA regions contain a significant portion of Australia's total native forest area on Multiple-use public forest tenure. RFA regions cover 5.1% of Australia's land area, but contain 16% of Australia's total forest area, and account for 61% of the total area of Multiple-use public native forest.

RFA regions also contain 36% of Australia's total native forest area on Nature conservation reserve tenure.

The tenure of forest land in RFAs varies across regions. Three RFA regions in New South Wales (Southern, Upper North East and Lower North East) contain smaller proportions of their forest area as Multiple-use public forest (15%, 18% and 14%, respectively), and larger proportions of their forest areas as either on Nature conservation reserve tenure (Southern, 48%) and Private forest tenure (Upper North East and Lower North East, 52% and 44% respectively). This contrasts with four RFA regions in Victoria (Central Highlands, East Gippsland, Gippsland and North East), which contain larger proportions of their forest area on Multiple-use public forest tenure (55%, 52%, 55% and 57%, respectively) and smaller proportions of their forest area on Private forest tenure (17%, 6%, 13% and 13% respectively).

Table 1.1a.iii-2: Area of forest by tenure in Regional Forest Agreement Regions, by state

	Area ('000 hectares)						
		Multiple-	Nature	Other			
	Leasehold	use public	conservation	Crown	Private	Unresolved	Total
RFA region	forest	forest	reserve	land	forest	tenure	forest
Eden	0	205	236	6	152	0	599
Upper North East (New South Wales)	9	429	642	56	1,252	3	2,391
Lower North East (New South Wales)	4	484	1,342	93	1,524	2	3,450
Southern New South Wales	4	403	1,274	89	904	3	2,677
Total RFA regions in New South Wales	17	1,520	3,494	245	3,831	9	9,116
Tasmanian	9	762	1,533	379	1,024	0	3,707
Total RFA regions in Tasmania	9	762	1,533	379	1,024	0	3,707
Central Highlands	0	400	185	16	121	0	722
East Gippsland	0	579	455	5	70	0	1,108
Gippsland	0	866	492	13	214	0	1,586
North East Victoria	0	776	388	19	170	0	1,353
West Victoria	0	342	477	29	496	0	1,344
Total RFA regions in Victoria	0	2,963	1,996	82	1,071	0	6,112
South West Forest Region of Western Australia	12	1,241	908	66	545	0	2,772
Total RFA regions in Western Australia	12	1,241	908	66	545	0	2,772
Total RFA regions in Australia	38	6,487	7,931	772	6,471	9	21,707

Forest data on this table and throughout this indicator are from the *Forests of Australia (2023)* spatial dataset, and do not relate to the forest ecosystems mapped at the time the RFAs were signed.

Areas for Tasmania are derived from the spatial boundary of the Tasmanian RFA region held by ABARES, and differ slightly from the areas derived from the spatial boundary of the state of Tasmania used tables elsewhere.

The Upper North East and Lower North East regions are covered by a single RFA, North East New South Wales.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory, National Plantation Inventory.

Click here for a Microsoft Excel workbook of the data for Table 1.1a.iii-2.

Supporting information for Indicator 1.1a.iii Forest area in Regional Forest Agreement regions

Forest types in RFA regions

The national forest types are not evenly distributed across areas in and outside RFA regions. RFA regions include 16% of Australia's total native forest area and 18% of all Eucalypt forest, but they contain all 100% of Eucalypt tall closed forests, 93% of Eucalypt tall open forests, and 46% of the Eucalypt medium open forests, which are the three major forest types used for wood production. RFA regions also contain 37% of the total area of Rainforest (Table 1.1a.iii-3).

In contrast, RFA regions contain comparatively small proportions of other forest types, namely Casuarina (6% of total extent of this forest type), Callitris (5%), Melaleuca (3%), Acacia (1%) and Mangrove (0.7%) (Table 1.1a.iii-3). Only 0.6% by area of the Eucalypt mallee subtype is in RFA regions.

A total of 62% of the area of Australia's commercial plantations is in RFA regions, including 71% of hardwood plantations and 56% of softwood plantations (Table 1.1a.iii-3).

Table 1.1a.iii-3: Area of forest in Regional Forest Agreement regions, by forest type

	Area in RFA regions	Area in Australia	Proportion in
Forest type	('000 hectares)	('000 hectares)	RFA regions (%)
Acacia	128	10,895	1
Callitris	93	1,993	5
Casuarina	70	1,086	6
Eucalypt	18,013	101,081	18
Eucalypt Low Woodland	212	17,339	1
Eucalypt Low Open	263	1,419	19
Eucalypt Low Closed	6	22	28
Eucalypt Medium Woodland	3,903	55,208	7
Eucalypt Medium Open	9,213	20,169	46
Eucalypt Medium Closed	1	26	4
Eucalypt Tall Woodland	261	2,418	11
Eucalypt Tall Open	4,081	4,405	93
Eucalypt Tall Closed	74	74	100
Mangrove	7	1,110	0.7
Melaleuca	181	7,193	3
Rainforest	1,278	3,442	37
Other native forest	735	4,701	16
Total native forest	20,506	131,501	16
Softwood plantation	588	1,060	56
Hardwood plantation	523	739	71
Mixed species plantation	10	22	45
Total Commercial plantation	1,122	1,821	62
Other forest	80	243	33
Total forest	21,707	133,565	16

Forest data on this table and throughout this Indicator are from the *Forests of Australia (2023)* spatial dataset, and do not relate to the forest ecosystems mapped at the time the RFAs were signed.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory, National Plantation Inventory.

Click here for a Microsoft Excel workbook of the data for Table 1.1a.iii-3.

Differences in forest areas in RFA regions in 2018 and 2023

The forest area in RFA regions (21.7 million hectares) is 177 thousand hectares less than reported in SOFR 2018.

- The forest area in RFA regions in New South Wales, the Tasmanian RFA region and all RFA regions in Victoria except for the West Victoria RFA region was largely unchanged.
- The forest area in the West Victoria RFA region is 60 thousand hectares less than reported in SOFR 2018, due mostly to a decrease in the area of Other forest due to clearing of non-commercial plantations for agricultural purposes.
- The forest area in the South West Forest Region of Western Australia is 147 thousand hectares less than reported in SOFR 2018, due to a combination of corrections from improved mapping, and clearing of commercial plantations to non-forest for other land uses.

In the Upper and Lower regions of the North East New South Wales RFA region, the area of commercial plantations decreased by 25 thousand hectares (23% of the total commercial plantations in these regions), resulting from the clearing of plantations for agricultural purposes or from reclassification as non-commercial plantations and therefore Other forest.

The difference in forest area in RFA regions since 2018 by tenure class varies from region to region.

- In RFA regions in Victoria, updated tenure information drives the decrease in the extent of forest on Other Crown land (109 thousand hectares less than 2018) and on Private forest tenure (63 thousand hectares less), and an increase of forest reported on Multiple-use public forest tenure (104 thousand hectares more).
- In the South West Forest Region of Western Australia, most of the reported difference in forest area is on Private forest tenure (109 thousand hectares less than reported in SOFR 2018).
- In the Upper and Lower North East regions of the North East New South Wales RFA, an increase in 33 thousand hectares of forest on Nature conservation reserve tenure results from an increase in the area of national parks and other conservation reserves.

Difference in forest areas in RFA regions in other reporting

Information on forest areas in RFA regions in this Indicator is derived from the <u>Forests of Australia (2023)</u> dataset held in Australia's National Forest Inventory. This dataset is assembled using a Multiple Lines of Evidence (MLE) (Mutendeudzi et al. 2013) approach that incorporates the most up-to-date versions of suitable regional and national spatial forest cover datasets.

Other reporting on forest areas in RFA regions may use different approaches to identify forest coverage, and thus may show different forest area figures for RFA regions. At signing, the RFAs used forest ecosystem mapping units that were derived from state-based forest mapping programs. Continued use of these forest ecosystems is an approach that provides a consistent baseline figure for reporting against RFA values over time, but does not take account of forest losses (such as through clearing or bushfires) or gains (such as through regrowth or re-establishment) that have occurred since signing the RFAs, and thus gives areas that differ from the current forest areas identified through the MLE approach and reported here.

A compilation of data on forests in RFA regions according to the original forest ecosystem mapping units is provided in Jacobsen et al. (2020).

References

Davey SM (2018). Regional forest agreements: origins, development and contributions, Australian Forestry **81**: 64–88.

Jacobsen R, Davey SM, Read SM (2020). <u>Regional forest agreements: compilation of reservation and resource</u> availability outcomes, ABARES Technical report 20.11, Canberra, December.

Mutendeudzi M, Read S, Howell C, Davey S, Clancy T (2013). <u>Improving Australia's forest area estimate using a Multiple Lines of Evidence approach</u>, ABARES Technical report 13.07, Canberra, November 2013.

More information

Learn more about the Criterion 1 of Australia's State of the Forest Report.

Web agriculture.gov.au/abares/forestsaustralia/sofr/

Download a Microsoft Excel workbook of the data for Indicator 1.1a.iii.

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Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.

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