

Indicator 1.1c: Area of forest in protected area categories (2024)



This indicator uses the area and proportion of forest ecosystems reserved through formal and informal processes as a measure of the emphasis placed by society on the preservation of representative ecosystems as a strategy to conserve biodiversity.

Context and definitions

This indicator reports on the area of Australia's forests reserved in protected areas or otherwise managed for the protection of biological diversity.

Protected Area: a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values (Dudley 2008).

National Reserve System: Australia's network of protected areas, comprising dedicated Commonwealth, state and territory reserves, as well as certain protected areas on private land, Indigenous land, and land managed by conservation organisations.

Other effective area-based conservation measure (OECM): a geographically defined area other than a protected area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity.

Mechanisms for protection of forest biodiversity

A range of formal and informal mechanisms are used to protect the biological diversity of forests on public and private land in Australia. This indicator reports on those mechanisms in which protection of biodiversity is a stated management intent, and on the area of forest subject to those mechanisms. Table 1.1c-1 lists the various applicable mechanisms that provide for the protection of forests in Australia.

Many forest areas are protected by more than one mechanism, and spatial intersection of these areas is needed to determine the total area of forest, and the mechanisms by which they are protected or managed for protection in Australia.

Table 1.1c-1: List of protection mechanisms

Protection mechanism	Description
Australia's National Reserve System	The National Reserve System (NRS) is Australia's network of protected areas, comprising dedicated Commonwealth, state and territory reserves, as well as certain protected areas on private land, Indigenous land, and land managed by conservation organisations.
Nature conservation reserve (tenure class)	The National Forest Inventory national tenure class 'Nature conservation reserve' comprises Crown land that is formally reserved for environmental, conservation and recreational purposes, including national parks, nature reserves, state and territory recreation and conservation areas. Not all such areas of nature conservation reserve tenure are captured in the National Reserve System.
CAR reserve system	The comprehensive, adequate and representative (CAR) reserve system is a reserve system on public and private land. On public land the CAR reserve system comprises dedicated formal reserves, informal reserves, and areas where forest values are protected by management prescriptions. There are also some CAR reserves on private land.
World Heritage areas	Areas deemed to have outstanding universal value for humankind under the Convention Concerning the Protection of the World Cultural and Natural Heritage (the World Heritage Convention) to which Australia is a signatory.
Ramsar List of Wetlands of International Importance	The Convention on Wetlands of International Importance (the Ramsar Convention) is an international treaty that aims to prevent worldwide loss of wetlands, and to achieve conservation and wise use of wetlands through cooperation and responsible national land management.
Defence estate	Land held by the Australian Government Department of Defence and subject to strategies and management practices that aim to maintain an environmentally sustainable estate.
Forest on conservation covenants and equivalent schemes	A land protection mechanism that is a voluntary, permanent and legally binding agreement between a landholder and a scheme provider to protect natural values. The scheme provider can include not-for-profit organisations, government agencies or local councils and typically occurs on privately managed land. Some state- and territory-based private land conservation covenant and equivalent programs are captured by the National Reserve System.
Multiple-use public forest (tenure class)	Areas of multiple-use public forests are included where biodiversity conservation is a specified management intent alongside multiple other values (e.g. timber production, water supply, recreation etc.), either through state or territory legislation, or regulation or management through a management planning instrument.

Forest protected in Australia's National Reserve System

The National Reserve System (NRS) is Australia's formal network of protected areas. It is underpinned by a [scientific framework](#) and has the objective of developing a comprehensive, adequate and representative system of protected areas. To be protected and included in the NRS, an area of land must meet the International Union for Conservation of Nature (IUCN) definition of a protected area (Dudley and Phillips 2006).

National information on the NRS is reported in the [Collaborative Australian Protected Areas Database](#) (CAPAD), published every two years by the Australian Government Department of Climate Change, Energy, the Environment and Water. Analysis for this indicator used the CAPAD terrestrial spatial dataset, and included small areas of the CAPAD marine spatial dataset that occur over land.

A total of 34.6 million hectares of Australia's native forest is protected in the NRS (26% of Australia's native forest area) (Table 1.1c-2). Small areas of Commercial plantation and Other forest are also mapped within the NRS, largely due to historic changes in land tenure. The distribution of forest in the NRS across all land tenure classes in Australia is shown in Figure 1.1c-1, together with the distribution of forest managed for protection of biodiversity by other mechanisms.

The listing of an area in the NRS reflects formal declaration and management intent rather than any particular underlying land tenure. Of the area of native forest in the NRS:

- 20.3 million hectares of native forest are on the tenure class Nature conservation reserve (representing 92% of all native forest that is on Nature conservation reserve tenure)
- 9.06 million hectares of native forest are on Private tenure (representing 22% of total native forest on Private tenure)
- 3.33 million hectares of native forest are on Leasehold tenure (representing 6.9% of total native forest on Leasehold tenure).

The largest areas of native forest in the NRS, by state and territory, are:

- 8.89 million hectares in Queensland
- 6.74 million hectares in the Northern Territory
- 5.82 million hectares in New South Wales.

The highest proportions of native forest area in the NRS, by state and territory, are in:

- the Australian Capital Territory (87%)
- South Australia (55%)
- Tasmania (48%)
- Victoria (43%).

Table 1.1c-2 shows the area of forest in the NRS by forest category, tenure and jurisdiction.

Areas in the NRS are allocated to one of seven protection categories established by the IUCN (see [Supporting information for Indicator 1.1c – Forest in the National Reserve System by IUCN protected area category](#)).

Table 1.1c-2: Area of forest in the National Reserve System, by national forest category, tenure and jurisdiction

Forest category Tenure class	Forest in the National Reserve System									Total forest	
	Area ('000 hectares)									Area (^{'000} hectares)	Proportion in the NRS (%)
	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Australia		
Native forest											
Leasehold	0.3	144	824	1,703	405	0	0	254	3,330	47,926	6.9
Multiple-use public forest	0.2	49	0	56	13	3	66	6	193	9,927	1.9
Nature conservation reserve	113	5,531	2	4,198	1,753	1,521	3,267	3,891	20,275	22,037	92
Other Crown land	0	5	377	122	7	6	6	1,155	1,678	9,763	17
Private	0	92	5,539	2,725	500	84	21	101	9,062	41,631	22
Unresolved tenure	0	0	0.8	86	3	0	0	0	90	218	41
Total native forest	114	5,821	6,743	8,891	2,681	1,614	3,360	5,406	34,629	131,501	26
Commercial plantation	0	0.2	0	0	0.2	0.3	0.1	0.4	1.2	1,821	0.1
Other forest	0.3	0.3	0	0.4	6	0.3	0.7	10	18	236	7.7
Total forest in the NRS	114	5,821	6,743	8,891	2,688	1,615	3,360	5,417	34,648	133,565	26

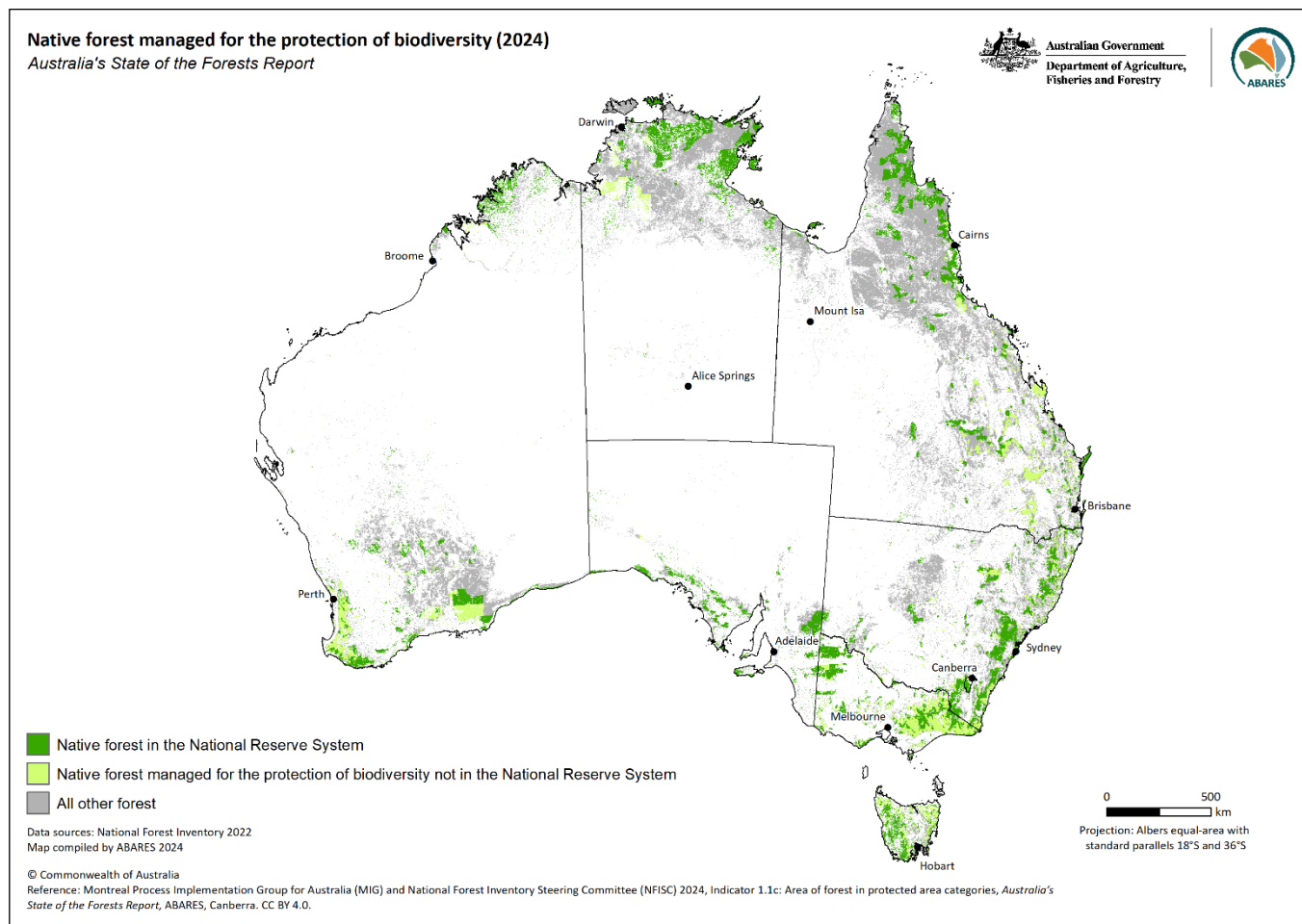
Total native forest area (^{'000} hectares)	130	19,882	23,280	51,750	4,866	3,393	7,790	20,409	131,501
Proportion of native forest area in the NRS (%)	87	29	29	17	55	48	43	26	26
Total forest area (^{'000} hectares)	143	20,284	23,333	51,977	5,131	3,707	8,224	20,766	133,565
Proportion of forest area in the NRS (%)	80	29	29	17	52	44	41	26	26

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; Collaborative Australian Protected Areas Database 2020, Australian Government Department of Climate Change, Energy, the Environment and Water.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-2.](#)

Figure 1.1c-1: Native forest managed for protection of biodiversity, in the NRS and outside the NRS



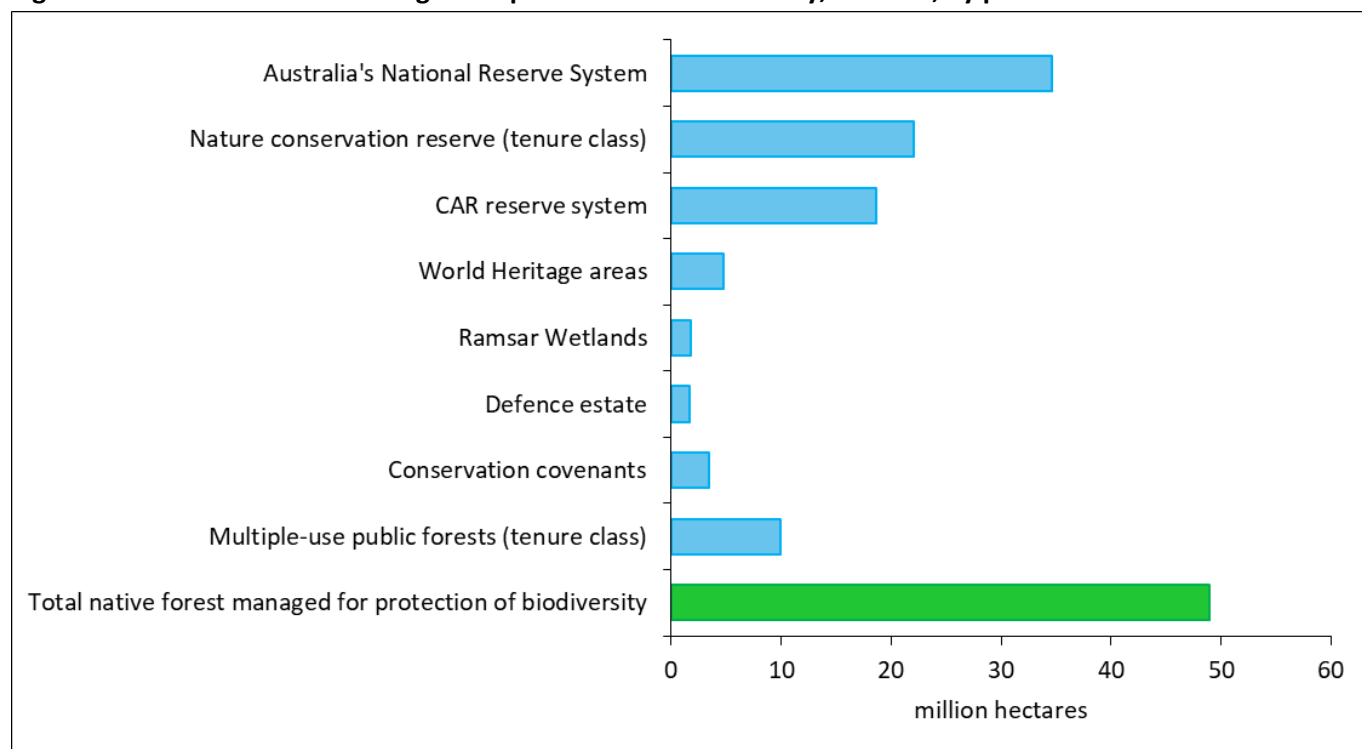
[Click here for high-definition copy of Figure 1.1c-1.](#)

Native forest managed for protection of biodiversity

The National Reserve System (NRS) contains Australia’s formal reserves, but additional areas of forest outside of the NRS are managed under one or more of a range of other mechanisms that have protection of biodiversity as a management intent. These mechanisms are described in Table 1.1c-1.

Figure 1.1c-2 shows the area of native forest covered by each protection mechanism. The total area of native forest managed for protection of biodiversity, on land that is protected or where protection of biodiversity is a specified management intent, is 48.9 million hectares and 37% of Australia’s native forest estate (see footnote to Figure 1.1c-2).

Figure 1.1c-2: Native forest managed for protection of biodiversity, 2020-21, by protection mechanism



The total area of native forest managed for protection of biodiversity is less than the sum of the areas protected by individual mechanisms as some forest areas are protected by more than one mechanism.

[Click here for a Microsoft Excel workbook of the data for Figure 1.1c-2.](#)

Table 1.1c-3 shows the areas of native forest managed for protection of biodiversity, in the NRS and under other mechanisms, by jurisdiction. The distribution of native forest in the NRS, and native forest managed for protection of biodiversity outside the NRS, is shown in Figure 1.1c-1. Details of areas protected by different mechanisms are provided in [Supporting information for Indicator 1.1c](#).

The largest areas of native forest managed for protection of biodiversity are in:

- Queensland (12.5 million hectares, 24% of total native forest in Queensland)
- Western Australia (8.33 million hectares, 41% of total native forest in Western Australia)
- New South Wales (8.15 million hectares, 41% of total native forest in New South Wales).

The highest proportions of total native forest area managed for protection of biodiversity are in:

- the Australian Capital territory (95%)
- Victoria (86%)
- Tasmania (78%).

Table 1.1c-3: Native forest managed for protection of biodiversity, by protection mechanism and jurisdiction

Jurisdiction	Area ('000 hectares)									Total native forest managed for protection of biodiversity	Total native forest	Proportion of native forest managed for protection of biodiversity (%)
	Native forest area, by protection mechanism								Multiple-use public native forest			
	National Reserve System	Nature conservation reserve tenure	CAR reserve system	World Heritage sites	Ramsar Wetland sites	Defence estate	Conservation covenants					
ACT	114	117	120	0	0.3	1	1	5	124	130	95	
NSW	5,821	5,637	6,113	1,349	120	40	245	1,857	8,154	19,882	41	
NT	6,743	11	n.r.	1,213	1,407	898	0	0	7,649	23,280	33	
Qld	8,891	4,236	n.r.	1,270	143	507	2,072	2,948	12,511	51,750	24	
SA	2,681	1,756	n.r.	0.2	9	37	784	16	2,731	4,866	56	
Tas.	1,614	1,532	2,095	854	1	24	103	645	2,661	3,393	78	
Vic.	3,360	3,456	4,849	8	79	26	44	3,162	6,732	7,790	86	
WA	5,406	5,292	5,502	13	48	116	203	1,294	8,334	20,409	41	
Australia	34,629	22,037	18,678	4,707	1,808	1,648	3,451	9,927	48,895	131,501	37	

CAR, Comprehensive, Adequate, Representative; n.r., not reported.

The total area of native forest managed for protection of biodiversity is less than the sum of the areas protected by individual mechanisms as some forest areas are protected by more than one mechanism.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; Australian Government Department of Climate Change, Energy, the Environment and Water and Department of Defence.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-3.](#)

The Convention on Biological Diversity and Australia's '30 by 30' target

In December 2022 the [Kunming-Montreal Global Biodiversity Framework](#) was adopted by parties to the Convention on Biological Diversity (CBD), including Australia. This replaces the CBD Strategic Plan for Biodiversity 2011-20 and associated Aichi Biodiversity Targets and outlines a set of global biodiversity goals for 2050 and targets for 2030 (UNEP CBD 2018).

Of these targets, Target 3 aims to ensure that 30% of land and 30% of marine environments are effectively conserved and managed within protected areas or other effective area-based conservation measures (OECMs) (See Box 1.1c-1). OECMs are areas (other than Protected Areas) that have biodiversity conservation as a management goal, but not necessarily the sole or primary management goal. A [National OECM Framework](#) for recognising land-based OECMs in Australia was released in June 2024.

A total of 37% of Australia's native forest is managed for the protection of biodiversity, either in the National Reserve System (NRS) or where protection of biodiversity is a specified management intent, and represents the contribution of native forests towards the Kunming-Montreal Global Diversity Framework Target 3. A total of 26% of both Australia's total forest area and total native forest area is protected in the NRS. An additional 11% of Australia's total forest area is outside the NRS but managed for the protection of biodiversity under other protection mechanisms.

Box 1.1c-1: Kunming-Montreal Global Biodiversity Framework

Target 3: Conserve 30% of Land, Waters and Seas

Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing Indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of Indigenous peoples and local communities, including over their traditional territories.

Source: cbd.int/gbf/targets/3

Supporting information for Indicator 1.1c: Area of forest in protected area categories

Forest in the National Reserve System by IUCN protected area category

To be protected and included in Australia's National Reserve System (NRS), an area of land must meet the International Union for Conservation of Nature (IUCN) definition of a protected area. These areas are assigned to an IUCN protected area management category (NRMMC 2009).

The categories used by the IUCN for protected areas are:

- **Ia Strict nature reserve** – protected area managed mainly for science
- **Ib Wilderness area** – protected area managed mainly for wilderness protection
- **II National park** – protected area managed mainly for ecosystem conservation and recreation
- **III Natural monument** – protected area managed for the conservation of specific natural features
- **IV Habitat/species management area** – protected area managed mainly for conservation through management intervention
- **V Protected landscape/seascape** – protected area managed mainly for landscape/seascape conservation and recreation
- **VI Managed resource protected area** – protected area managed mainly for the sustainable use of natural ecosystems.

The 34.6 million hectares of Australia's forest protected in the NRS is shown by IUCN protected area category and jurisdiction in Table 1.1c-4, and forest type in Table 1.1c-5, and tenure class in Table 1.1c-6.

A total of 8.31 million hectares of native forest is in IUCN category VI, which covers areas where the sustainable use of natural resources is managed so that long-term protection and maintenance of biodiversity is assured (Dudley and Phillips 2006). This includes native forest managed privately, with 3.90 million hectares on Private forest and 1.88 million hectares on Leasehold forest (Table 1.1c-6). Examples include Indigenous Protected Areas where sustainable use of resources is permitted; and Nature Refuges in Queensland that protect conservation values, while allowing [compatible and sustainable land uses to continue](#).

Areas of native forest on the Multiple-use public forest tenure class are included in the NRS if they are principally managed for the conservation of biodiversity. A total of 72 thousand hectares of Multiple-use public native forest is in IUCN category VI and includes areas of native forest on Forest Reserves in Queensland and Remote and Natural Areas in Victoria (Table 1.1c-6).

Table 1.1c-4: Forest in the National Reserve System by IUCN protected area category, forest category and jurisdiction

Forest category Jurisdiction	Area ('000 hectares)									Total forest	Proportion of forest in all IUCN categories ^b (%)
	Forest by IUCN protected area category										
	Ia	Ib	II	III	IV	V	VI	ND ^a	Total I–VI, ND		
Native forest											
ACT	0	28	77	0	9	0	0	0	114	130	87
NSW	789	1,735	3,118	6	134	24	6	9	5,821	19,882	29
NT	9	0	1,613	1	52	1,377	3,690	0	6,743	23,280	29
Qld	56	0	5,732	279	74	335	2,308	107	8,891	51,750	17
SA	241	488	104	810	25	115	899	0	2,681	4,866	55
Tas.	11	5	847	26	269	73	382	2	1,614	3,393	48
Vic.	297	241	2,584	63	31	75	68	0	3,360	7,790	43
WA	1,814	1	2,278	0.5	37	312	956	9	5,406	20,409	26
Total native forest	3,216	2,497	16,354	1,185	630	2,311	8,310	126	34,629	131,501	26
Commercial plantation	0.1	0	0.3	0.1	0.3	0.1	0.3	0	1	1,821	0.1
Other forest	2	0.1	2	4	2	1	7	0	18	243	7.5
Total forest	3,218	2,497	16,356	1,190	632	2,312	8,317	126	34,648	133,565	26

IUCN, International Union for Conservation of Nature; NRS, National Reserve System.

^a 'ND' signifies areas protected in the National Reserve System but not classified into an IUCN category.

^b Includes protected forest areas with an IUCN listing of ND.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory for forest area; Collaborative Australian Protected Areas Database Terrestrial and Marine 2020, Australian Government Department of Climate Change, Energy, the Environment and Water.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-4.](#)

Table 1.1c-5: Forest in IUCN protected area categories, by forest type

Forest category Forest type	Area ('000 hectares)									Total forest	Proportion of forest in all IUCN categories ^b (%)
	Forest by IUCN protected area category										
	Ia	Ib	II	III	IV	V	VI	ND ^a	Total I–VI, ND		
Native forest											
Acacia	66	6	627	11	9	30	303	2	1,053	10,895	9.7
Callitris	89	1	119	2	14	0	22	2	249	1,993	12
Casuarina	59	64	107	7	12	50	30	0.1	330	1,086	30
Eucalypt	2,873	2,192	12,514	1,031	445	1,899	6,939	116	28,007	101,081	28
Eucalypt closed	2	10	34	0	0.1	0.5	3	0	50	122	41
Eucalypt open	480	1,168	4,841	185	113	562	2,030	7	9,385	25,993	36
Eucalypt woodland	2,390	1,014	859	846	332	1,337	4,906	109	11,793	74,966	16
Mangrove	38	0	177	14	64	45	215	0	553	1,110	50
Melaleuca	13	6	769	11	10	170	302	3	1,283	7,193	18
Rainforest	26	178	1,428	81	67	64	357	4	2,205	3,442	64
Other native forest	53	49	612	29	9	52	143	0.8	949	4,701	20
Total native forest	3,216	2,497	16,354	1,185	630	2,311	8,310	126	34,629	131,501	26
Commercial plantation	0.1	0	0.3	0.1	0.3	0.1	0.3	0	1	1,821	0.1
Other forest	2	0.1	2	4	2	0.8	7	0	18	243	7.5
Total forest	3,218	2,497	16,356	1,190	632	2,312	8,317	126	34,648	133,565	26

IUCN, International Union for Conservation of Nature.

^a 'ND' areas are protected in the National Reserve System but are not classified into an IUCN category.

^b Includes protected forest areas with an IUCN listing of ND.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; Collaborative Australian Protected Areas Database Terrestrial and Marine 2020, Australian Government Department of Climate Change, Energy, the Environment and Water.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-5.](#)

Table 1.1c-6: Forest in IUCN protected area categories, by tenure class

Forest category Tenure class	Area ('000 hectares)										Proportion of forest in all IUCN categories ^b (%)	
	Forest by IUCN protected area category									Total I–VI, ND		Total forest
	Ia	Ib	II	III	IV	V	VI	ND ^a				
Native forest												
Leasehold forest	21	0.4	364	401	89	551	1,883	21	3,330	47,926	6.9	
Multiple-use public forest	67	2	20	2	15	15	72	0	193	9,927	1.9	
Nature conservation reserve	3,083	2,484	12,222	401	298	158	1,628	1	20,275	22,037	92	
Other Crown land	15	0.9	475	2	35	371	776	2	1,678	9,763	17	
Private forest	29	9	3,255	380	176	1,215	3,897	102	9,062	41,631	22	
Unresolved tenure	0	0	18	0	17	2	53	0	90	218	41	
Total native forest	3,216	2,497	16,354	1,185	630	2,311	8,310	126	34,629	131,501	26	
Commercial plantation	0.1	0	0.3	0.1	0.3	0.1	0.3	0	1	1,821	0.1	
Other forest	2	0.1	2	4	2	0.8	7	0	18	243	7.5	
Total forest	3,218	2,497	16,356	1,190	632	2,312	8,317	126	34,648	133,565	26	

IUCN, International Union for Conservation of Nature.

^a 'ND' signifies areas protected in the National Reserve System but not classified into an IUCN category.

^b Includes protected forest areas with an IUCN listing of ND.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; Collaborative Australian Protected Areas Database Terrestrial and Marine 2020, Australian Government Department of Climate Change, Energy, the Environment and Water.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-6.](#)

Forest on Nature conservation reserve land tenure

The national land tenure class of Nature conservation reserve comprises publicly owned lands formally reserved for environmental, conservation and recreational purposes that are managed by state and territory governments. Conservation reserves on land held by Indigenous communities, including those with joint-management arrangements with the Australian Government, are included in the national land tenure class of Private forest (see [Indicator 1.1a.ii Forest area by tenure](#)).

A total of 22.0 million hectares of Australia's forest is in the national land tenure class of Nature conservation reserve, which is 17% of Australia's total forest area (Table 1.1c-7). This is 0.3 million hectares more than reported in [Australia's State of the Forest Report 2018](#) (SOFR 2018), due to a combination of more accurate tenure data for Western Australia, and transfer of land on other tenures to conservation reserves in New South Wales, Queensland and Victoria.

Information on Australia's forest area by tenure class, and differences over time, is presented in [Indicator 1.1a.ii Forest area by tenure](#).

Table 1.1c-7: Forest on Nature conservation reserve tenure

Data date	Area (million hectares)					
	Native forest			Total forest		
	Area in public nature conservation reserves ^a	Total native forest area	Proportion in public nature conservation reserves (%)	Area in public nature conservation reserves ^a	Total forest area	Proportion in public nature conservation reserves (%)
2021	22.0	131.5	16.8	22.1	133.6	16.5
2016	21.7	131.6	16.5	21.8	134.0	16.2

^a Nature conservation reserve tenure, as described in [Indicator 1.1a.ii Forest area by tenure](#). Does not include formal or informal reserves in other tenure classes.

Data for 2016 from *Australia's State of the Forests Report 2018* Indicator 1.1c.

Values may differ from those reported in state, territory or regional reports, such as Regional Forest Agreement reports, due to different input datasets.

Source: ABARES, National Forest Inventory.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-7.](#)

Native forest in the CAR reserve system

An objective in the [National Forest Policy Statement](#) is the dedication of parts of the forest estate for conservation based on the principles of comprehensiveness, adequacy and representativeness (CAR). The CAR reserve system that was developed was built on nationally agreed criteria (ANZECC and MCFFA 1997) and forms the scientific basis for the National Reserve System (see 1.1c Key information – Forest protected in Australia's National Reserve System).

States that signed Regional Forest Agreements (RFAs; see [Indicator 1.1a.iii Forest area in Regional Forest Agreement regions](#)) (New South Wales, Tasmania, Victoria and Western Australia) as well as the Australian Capital Territory report their protected areas by the four CAR reserve system components:

- **Formal (dedicated) reserves:** areas, such as a national park, legally dedicated for protection in a reserve.
- **Informal reserves:** reserves on public land protected through an administrative instrument by a public land management agency, such as special protection zones in state forests.
- **Values protected by prescription:** areas of public production forests in which protection of values is prescribed through management prescriptions in codes of practice or management plans. These values are typically not mappable in advance of their detection, and/or inclusion in dedicated or informal reserves is impractical, such as riparian vegetation or rare, dispersed or fragmented values.
- **Private CAR reserves:** areas of private land that are managed in the long term for the protection of CAR values under secure arrangements, including under legislation and contractual agreements such as conservation covenant and management agreements for conservation.

The extent of native forest on components of the CAR reserve system both inside and outside RFA regions are reported for the Australian Capital Territory, New South Wales, Tasmania, Victoria and Western Australia in Tables 1.1c-8 to 1.1c-12. The areas of native forest in the CAR reserve system are:

- Australian Capital Territory: 120 thousand hectares (92% of total native forest in jurisdiction)
- New South Wales: 6.11 million hectares (31%)
- Tasmania: 2.09 million hectares (62%)
- Victoria: 4.85 million hectares (62%)
- Western Australia: 5.50 million hectares (27%).

The total area of native forest in the CAR reserve system across Australia is 18.7 million hectares (14% of the total area of native forest in Australia) (Table 1.1c-3).

Table 1.1c-8: Native forest in the CAR reserve system on public and private land in the Australian Capital Territory, by CAR reserve type

Forest area		Public CAR reserve system			Private CAR reserves	Total CAR reserve system
		Formal reserves ^a	Informal CAR reserves	Values protected by prescription		
Unit						
Native forest	'000 hectares	113	6	1.4	0	120
Proportion of native forest on public land ^b	%	86	4.5	1.0	n.a.	92
Proportion of total native forest ^c	%	86	4.5	1.0	0	92

CAR, Comprehensive, Adequate and Representative; n.a., not applicable.

^a Native forest in the Nature conservation reserve tenure class ([Indicator 1.1a.ii Forest area by tenure](#)).

^b Calculated based on total native forest area for the ACT on public land (Leasehold forest, Multiple-use public forest, Nature conservation reserve, Other Crown land) of 130 thousand hectares (Indicator 1.1a.ii Forest area by tenure).

^c Calculated based on total native forest area for the ACT of 130 thousand hectares ([Indicator 1.1a.i Forest area by forest type](#)).

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory (NFI) for forest area; ACT Environment, Planning and Sustainable Development Directorate.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-8.](#)

Table 1.1c-9: Native forest in the CAR reserve system on public and private land in New South Wales, by CAR reserve type

Forest area		Public CAR reserve system			Private CAR reserves	Total CAR reserve system
		Formal reserves ^a	Informal CAR reserves ^b	Values protected by prescription		
Unit						
Native forest	'000 hectares	5,357	172	339	245	6,113
Proportion of native forest on public land ^c	%	44	1.4	2.8	n.a.	48
Proportion of total native forest ^d	%	27	0.9	1.7	1.2	31

CAR, Comprehensive, Adequate and Representative; n.a., not applicable.

^a Native forest in the Nature conservation reserve tenure class ([Indicator 1.1a.ii Forest area by tenure](#)), plus native forest in Special Protection Zones in the Multiple-use public forest tenure class.

^b Includes native forest areas managed by the Australian Government Department of Defence.

^c Calculated based on native forest area for New South Wales on public land (Leasehold forest, Multiple-use public forest, Nature conservation reserve, Other Crown land) of 12.2 million hectares (Indicator 1.1a.ii Forest area by tenure).

^d Calculated based on total native forest area for New South Wales of 19.9 million hectares ([Indicator 1.1a.i Forest area by forest type](#)).

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory (NFI) for forest area; Forestry Corporation of NSW; Australian Government Department of Defence.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-9.](#)

Table 1.1c-10: Native forest in the CAR reserve system on public and private land in Tasmania, by CAR reserve type

Forest area	Unit	Public CAR reserve system			Private CAR reserves ^c	Total CAR reserve system ^d
		Dedicated formal reserves	Other formal reserves ^a	Informal CAR reserves ^b		
Native forest	'000 hectares	873	661	458	103	2,095
Proportion of native forest on public land ^e	%	34	26	18	n.a.	78
Proportion of total native forest ^f	%	26	19	13	3.0	62

CAR, Comprehensive, Adequate and Representative; n.a., not applicable.

^a Areas subject to the *Mineral Resources Development Act 1995* (Tas.).

^b Includes native forest areas managed by the Australian Government Department of Defence.

^c Includes reserves with an unspecified term length.

^d Total does not include areas with values protected by prescription because these are not reported by the state in this format.

^e Calculated based on native forest area in Tasmania on public land (Leasehold forest, Multiple-use public forest, Nature conservation reserve, Other Crown land) of 2.56 million hectares ([Indicator 1.1a.ii Forest area by tenure](#)).

^f Calculated based on total native forest area in Tasmania of 3.39 million hectares ([Indicator 1.1a.i Forest area by forest type](#)).

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory (NFI) for forest area; Tasmanian government; Australian Government Department of Defence.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-10.](#)

Table 1.1c-11: Native forest in the CAR reserve system on public and private land in Victoria, by CAR reserve type

Forest area	Unit	Public CAR reserve system ^a			Private CAR reserves	Total CAR reserve system
		Dedicated formal reserves	Informal CAR reserves ^b	Values protected by prescription		
Native forest	'000 hectares	3,404	755	649	41	4,849
Proportion of native forest on public land ^c	%	50	11	9.6	n.a.	71
Proportion of total native forest ^d	%	44	9.7	8.3	0.5	62

CAR, Comprehensive, Adequate and Representative; n.a., not applicable.

^a Areas for Dedicated formal reserves and Informal CAR reserves are derived from spatial data for Victoria's CAR reserve system. Areas for values protected by prescription are derived from tabular data supplied by Victoria.

^b Includes native forest areas managed by the Australian Government Department of Defence.

^c Calculated based on native forest area in Victoria on public land (Multiple-use public forest, Nature conservation reserve, Other Crown land) of 6.75 million hectares ([Indicator 1.1a.ii Forest area by tenure](#)).

^d Calculated based on total native forest area in Victoria of 7.79 million hectares ([Indicator 1.1a.i Forest area by forest type](#)).

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory (NFI) for forest area; Victorian Department of Energy, Environment and Climate Action; Australian Government Department of Defence.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-11.](#)

Table 1.1c-12: Native forest in the CAR reserve system on public and private land in Western Australia, by CAR reserve type

Forest area	Unit	Public CAR reserve system			Private CAR reserves	Total CAR reserve system
		Dedicated formal reserves ^a	Informal CAR reserves ^b	Values protected by prescription ^c		
Native forest	'000 hectares	5,266	92	144	n.d.	5,502
Proportion of native forest on public land ^{d,e}	%	28	0.5	0.8	n.a.	29
Proportion of total native forest ^e	%	26	0.4	0.7	n.d.	27

CAR, Comprehensive, Adequate and Representative; n.d., data not available; n.a., not applicable.

^a Calculated from the total native forest area values in the 'Existing formal reserve' category inside the WA RFA region and native forest area in tenure type 'Nature conservation reserve' ([Indicator 1.1a.ii Forest area by tenure](#)) outside the WA RFA region.

^b Includes some native forest areas managed by the Australian Government Department of Defence.

^c Includes forest in other informal reserves and fauna habitat zones from the *Assessment of matters pertaining to renewal of the Regional Forest Agreement for the South-West Region of Western Australia, 2018*.

^d Calculated from the reported total forest area on public land (Leasehold forest, Multiple-use public forest, Nature conservation reserve, Other Crown land) in Western Australia of 18.9 million hectares ([Indicator 1.1a.ii Forest area by tenure](#))

^e Calculated from the reported total native forest area in Western Australia of 20.4 million hectares ([Indicator 1.1a.i Forest area by forest type](#)).

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory (NFI) for forest area; Western Australian Department of Biodiversity, Conservation and Attractions; Australian Government Department of Defence.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-12.](#)

Native forest in the CAR reserve system in RFA regions

A key outcome from the RFA process was the development and implementation of the CAR reserve system within RFA regions. A total of 10.8 million hectares of native forest is in the CAR reserve system in the 10 RFAs (Table 1.1c-13). This is 53% of native forest in RFA regions (Table 1.1c-13). The RFA regions with the highest proportion of native forest in the CAR reserve system are the:

- Tasmanian RFA region (62% of RFA region native forest is in the CAR reserve system)
- West Victoria RFA region (56%)
- Southern NSW RFA region (55%).

Table 1.1c-13: Native forest in the CAR reserve system in RFA regions

RFA region	Area ('000 hectares)								Proportion of native forest in CAR reserve system (%)
	Native forest in public CAR reserve system					Native forest in private CAR reserves	Total native forest in CAR reserve system	Total native forest	
	Dedicated formal reserve	Informal CAR reserve	Values protected by prescription	Other formal reserve	Total public CAR reserves				
Eden	271	4	18	n.a.	292	3	295	556	53
Upper North East	646	57	90	n.a.	792	19	811	2,326	35
Lower North East	1,363	66	79	n.a.	1,507	35	1,542	3,411	45
Southern New South Wales	1,291	25	43	n.a.	1,358	17	1,376	2,521	55
Total RFA regions in NSW	3,569	151	229	n.a.	3,950	74	4,024	8,815	46
Tasmanian	873	458	n.a.	661	1,992	103	2,095	3,393	62
Total RFA region in Tasmania^a	873	458	n.a.	661	1,992	103	2,095	3,393	62
Central Highlands ^b	180	95	n.d.	n.a.	275	2	277	708	39
East Gippsland ^b	451	109	n.d.	n.a.	560	1	561	1,101	51
Gippsland ^b	489	251	n.d.	n.a.	739	7	746	1,491	50
North East ^b	415	172	n.d.	n.a.	586	4	590	1,293	46
West Victoria ^b	472	124	n.d.	n.a.	596	11	606	1,087	56
Total RFA regions in Victoria^c	2,006	749	649	n.a.	3,405	26	3,430	5,681	60^d
South-West Forest Region of Western Australia	899	91	244	n.a.	1,234	n.d.	1,234	2,617	47
Total RFA region in WA	899	91	244	n.a.	1,234	n.d.	1,234	2,617	47
Total RFA regions	7,347	1,449	1,123	661	10,580	203	10,783	20,506	53

RFA, Regional Forest Agreement. In NSW, the Upper North East and Lower North East regions are covered by a single RFA. n.a., not applicable to this state; n.d., data not available.

^a 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 other tables.

^b Areas for values protected by prescription are not available by RFA region in Victoria and are therefore not included in subsequent proportion calculations. Areas and proportions for native forest in the CAR reserve system in individual RFA regions in Victoria include dedicated formal reserves, informal CAR reserves and private CAR reserves only.

^c The total areas of native forest with values protected by prescription are derived from tabular data supplied by Victoria. This tabular data covers all of Victoria and includes all areas in RFA regions as well as a small area outside of RFA regions in Victoria.

^d Proportion value includes the total area in Victoria with values protected by prescription.

Forest areas are derived from National Forest Inventory forest cover mapping and may differ from reporting that uses other forest area mapping units, including state-based forest ecosystem mapping units that informed the development of the RFAs.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; state and territory data.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-13.](#)

Native forest in World Heritage and Ramsar Wetland sites

UNESCO World Heritage sites

The [World Heritage Convention](#) establishes a list of places that have natural and/or cultural values of outstanding global significance. As at 2021, Australia had a total of 20 sites inscribed on the World Heritage List. The most recent addition of an Australian site on the list was the [Budj Bim Cultural Landscape](#) that was inscribed in 2019.

World Heritage sites on mainland Australia include a total of 7.72 million hectares, including 4.71 million hectares of native forest. A total of 3.6% of Australia’s native forest area is in World Heritage sites; this includes 33% of Australia’s rainforests (Table 1.1c-14).

The largest areas of native forest in World Heritage sites are in:

- New South Wales (1.35 million hectares)
- Queensland (1.27 million hectares)
- the Northern Territory (1.21 million hectares) (Table 1.1c-14).

Table 1.1c-14: Native forest in World Heritage sites, by forest type and jurisdiction

Native forest type	Area ('000 hectares)									Total native forest	Proportion of native forest type in World Heritage sites (%)
	Native forest in World Heritage sites										
	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Australia		
Acacia	0	0.2	0	19	0	5	0	1	25	10,895	0.2
Callitris	0	1	0	0	0	0	0	0	1	1,993	0.1
Casuarina	0	48	0	22	0	0	0	0	70	1,086	6.4
Eucalypt	0	1,134	1,030	390	0.2	522	8	6	3,090	101,081	3.1
Eucalypt closed	0	4	0.5	0	0	2	0	0	6	122	5.0
Eucalypt open	0	742	367	292	0	319	0	0	1,719	25,993	6.6
Eucalypt woodland	0	389	663	98	0.2	201	8	6	1,365	74,966	1.8
Mangrove	0	0	12	69	0	0	0	1	82	1,110	7.4
Melaleuca	0	0.3	102	17	0	9	0	1	129	7,193	1.8
Rainforest	0	142	46	657	0	289	0	0	1,134	3,442	33
Other native forest	0	23	23	97	0	29	0	4	175	4,701	3.7
Total native forest in World Heritage sites	0	1,349	1,213	1,270	0.2	854	8	13	4,707	131,501	3.6
Total native forest in jurisdiction	130	19,882	23,280	51,750	4,866	3,393	7,790	20,409	131,501		

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; Australian Government Department of Climate Change, Energy, the Environment and Water.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-14.](#)

Ramsar Wetlands of International Importance

The Convention on Wetlands of International Importance ([the Ramsar Convention](#)) is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. Australia is a member state of the Convention and as at 2021 has 67 Ramsar sites.

Ramsar Wetland sites cover a total of 1.81 million hectares of native forest (1.4% of Australia’s the total native forest area), of which 1.41 million occurs in the Northern Territory.

By forest type, the largest area in Ramsar Wetland sites is Eucalypt forest (1.43 million hectares), while the Mangrove forest type has the greatest proportion of its total area in Ramsar Wetland sites (11%) (Table 1.1c-15).

Table 1.1c-15: Native forest in Ramsar Wetland sites, by forest type and jurisdiction

Native forest type	Area ('000 hectares)										Proportion of native forest type in Ramsar Wetland sites (%)
	Native forest in Ramsar Wetland sites									Total native forest	
	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Australia		
Acacia	0	1	0	18	0	0	2	0	21	10,895	0.2
Callitris	0	0.4	0	0	0	0	0	0	0.4	1,993	0.0
Casuarina	0	1	0	2	0	0.2	0.1	0	3	1,086	0.3
Eucalypt	0.3	111	1,192	44	8	0.6	63	14	1,434	101,081	1.4
Eucalypt closed	0	0	0.5	7	0	0	0	0	8	122	6.5
Eucalypt open	0	32	515	21	3	0.2	29	2	601	25,993	2.3
Eucalypt woodland	0.2	80	676	16	6	0.5	35	13	826	74,966	1.1
Mangrove	0	0.4	31	57	0	0	2	31	122	1,110	11
Melaleuca	0	3	106	13	0.4	0.4	3	2	127	7,193	1.8
Rainforest	0	1	54	2	0	0	0	0	58	3,442	1.7
Other native forest	0	3	23	6	0.2	0	8	2	42	4,701	0.9
Total native forest in Ramsar Wetland sites	0.3	120	1,407	143	9	1	79	48	1,808	131,501	1.4
Total native forest in jurisdiction	130	19,882	23,280	51,750	4,866	3,393	7,790	20,409	131,501		

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; Australian Government Department of Climate Change, Energy, the Environment and Water.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-15.](#)

Native forest on the Defence estate

The Australian Government Department of Defence manages a large area of land across all jurisdictions, including Defence bases, establishments and training facilities. The [Defence Environmental Strategy](#) specifies biodiversity conservation as a management intent as part of a suite of strategic aims to deliver sustainable environmental management for all land managed by Defence.

A total of 1.65 million hectares of native forest is on the Defence estate, and all is managed for the protection of biodiversity. Of that area a total of 58 thousand hectares of native forest is also within a Regional Forest Agreement (RFA) region through the RFA process, this area is identified as Informal CAR reserve on Commonwealth land (Table 1.1c-16).

Table 1.1c-16: Native forest in Australia's Defence estate managed for protection of biodiversity

Jurisdiction	Area of native forest in Defence estate ('000 hectares)		
	Informal CAR reserves	Managed for protection of biodiversity, but not in Informal CAR reserves	Total managed for protection of biodiversity
ACT	0	1.4	1.4
NSW	18	22	40
NT	0	898	898
Qld	0	507	507
SA	0	37	37
Tas.	24	0	24
Vic.	0.8	25	26
WA	15	101	116
Australia	58	1,590	1,648

CAR, Comprehensive, Adequate and Representative.

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; Australian Government Department of Defence.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-16.](#)

Native forest on conservation covenants and equivalent schemes

A conservation covenant is a voluntary agreement made between a landholder and an authorised entity (such as a covenant scheme provider) that aims to protect and enhance the natural, cultural and/or scientific values of an area of land. Reserves established under a conservation covenant and equivalent schemes are important for the protection of rare or endangered species or other important values. Conservation covenants typically occur on privately managed land and complement protected areas on publicly managed land.

A total of 3.45 million hectares of native forest is on land subject to a conservation covenant or equivalent scheme. A total of 2.91 million hectares of this native forest is eucalypt forest, of which 2.60 million hectares is eucalypt woodland. Queensland has the largest area of native forest on land under a conservation covenant, with 2.07 million hectares (Table 1.1c-17).

A number of state and territory organisations undertake conservation covenanting programs. Information presented here uses data from the New South Wales Biodiversity Conservation Trust, Queensland Trust for Nature, Trust for Nature (Victoria) and National Trust of Western Australia, and additional data from state and territory governments on other equivalent schemes with privately managed protected areas.

Information on areas managed by national conservancy organisations such as the Australian Wildlife Conservancy and Bush Heritage Australia are not reported here, but are included in the National Reserve System and thus captured in the [Key information for Indicator 1.1c – Forest protected in Australia's National Reserve System](#).

Table 1.1c-17: Native forest on private land protected by conservation covenants and equivalent schemes

Forest type	Area ('000 hectares)								Australia
	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	
Acacia	0	0.4	0	184	1	2	0.1	2	190
Callitris	0	27	0	19	2	0	0	0	49
Casuarina	0	9	0	8	3	1	1	0.1	21
Eucalypt	1	195	0.1	1,616	773	92	40	195	2,911
Eucalypt woodland	0.1	105	0.1	1,491	720	73	22	192	2,603
Eucalypt open	0.6	89	0	125	53	19	19	3	308
Eucalypt closed	0	1	0	0	0	0	0	0	1
Mangrove	0	0	0	3	0	0	0	3	6
Melaleuca	0	1	0	123	2	1	0.2	0	127
Rainforest	0	4	0	75	0	6	0.1	0	85
Other native forest	0	8	0	44	4	0.5	3	4	62
Total native forest	1	245	0.1	2,072	784	103	44	203	3,451

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-17.](#)

Multiple-use public forest (tenure class)

The national land tenure class of Multiple-use public forest comprises publicly owned forests that provide a range of services such as wood harvesting, supply of water, protection of biodiversity, and recreation. The principles of ecologically sustainable forest management (ESFM), including protection of biodiversity, are specified for multiple-use public forests by all states and the ACT (there is no multiple-use public forest in the Northern Territory), either in legal frameworks that prescribe their sustainable management, or in management planning instruments that provide operational guidance for sustainable forest management practices. Further information on legal frameworks and management planning instruments that support sustainable forest management are reported in [Indicator 7.1a](#).

All native forest on multiple-use public forest tenure is protected or otherwise managed with protection of biodiversity as one of several goals. A total of 193 thousand hectares of Multiple-use public native forest managed principally for the protection of biodiversity is included as protected areas in the National Reserve System (Dudley and Phillips 2006). Management of the balance of multiple-use public forest (9.73 million hectares) (Table 1.1c-18) is regulated by codes of forest practice in order that of a range of forest values are maintained, including protection of biodiversity.

Table 1.1c-18: Multiple-use public native forest managed for protection of biodiversity

Jurisdiction	Area of multiple-use public native forest ('000 hectares)		
	In the National Reserve System	Managed for values including the protection of biodiversity, but not in the National Reserve System	Total managed for protection of biodiversity
ACT	0.2	5	5
NSW	49	1,808	1,857
NT	0	0	0
Qld	56	2,892	2,948
SA	13	3	16
Tas.	3	642	645
Vic.	66	3,096	3,162
WA	6	1,288	1,294
Australia	193	9,733	9,927

Totals may not tally due to rounding.

Source: ABARES, National Forest Inventory; Collaborative Australian Protected Area Database Terrestrial and Marine 2020, Australian Government Department of Climate Change, Energy, the Environment and Water.

[Click here for a Microsoft Excel workbook of the data for Table 1.1c-18.](#)

References

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

Department of Defence (2016). *Environmental Strategy 2016 – 2036*. Australian Government, Canberra.

Dudley N (ed) (2008). *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN.

Dudley and Phillips (2006). *Forests and Protected Areas: Guidance on the Use of the IUCN Protected Area Management Categories*. International Union for Conservation of Nature, Gland, Switzerland, and Cambridge, UK.

NRMCC (Natural Resource Management Ministerial Council) (2009). *Australia's Strategy for the National Reserve System 2009–2030*. Australian Government, Canberra.

UNEP CBD (United National Environment Programme Convention on Biological Diversity) (2018). *14/8 – Protected areas and other effective area-based conservation measures*. Decision adopted by the Conference of the Parties to the Convention on Biological Diversity Fourteenth meeting, Sharm El-Sheikh, Egypt, 17 to 29 November 2018.

More information

Learn more about [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 presented in Indicator 1.1c.](#)

Email Info.ABARES@aff.gov.au

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.

© Commonwealth of Australia 2024

Unless otherwise noted, copyright (and any other intellectual property rights) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

All material in this publication is licensed under a [Creative Commons Attribution 4.0 International Licence](#) except content supplied by third parties, logos and the Commonwealth Coat of Arms.

Citation and cataloguing data

This publication (and any material sourced from it) should be attributed as Montreal Process Implementation Group for Australia (MIG) and National Forest Inventory Steering Committee (NFISC) 2024, Indicator 1.1c: Area of forest in protected area categories, *Australia's State of the Forests Report*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, July. CC BY 4.0.

The Australian Government acting through the Department of Agriculture, Fisheries and Forestry, represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture, Fisheries and Forestry, ABARES, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.