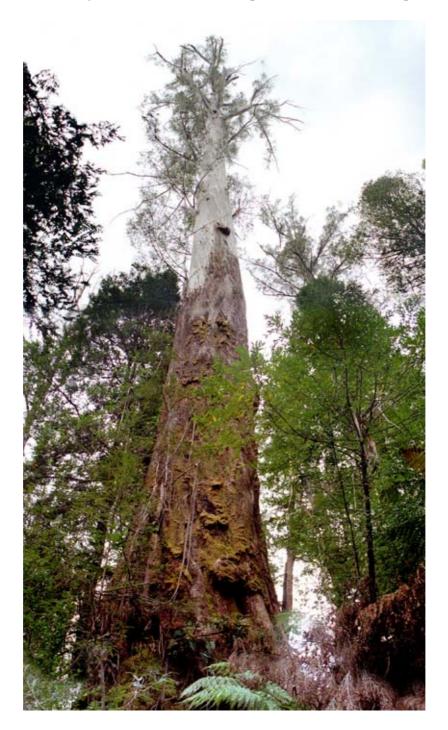
Finalising Formal and Informal Reserve Boundaries for the

Supplementary Tasmanian Regional Forest Agreement



Prepared by: Forestry Tasmania

Date: May 2006

Preamble

The Australian and Tasmanian Governments signed the Supplementary Tasmanian Regional Forest Agreement (also known as the Tasmanian Community Forest Agreement or TCFA) on 13 May 2005. The two Governments agreed, among other things, to augment the CAR Reserve System through the inclusion of additional oldgrowth forest in formal and informal reserves on public land. Provisional boundaries for the new reserves were identified by the two Governments prior to signing the Agreement. Forestry Tasmania was asked, on behalf of the State Government, to finalise the boundaries by identifying the best management boundaries to protect the identified values and by taking account of field verification of values being protected.

This report has been prepared to give a full accounting of differences in area between provisional and final TCFA reserves. It also shows the final reserve levels achieved by the enhanced CAR Reserve system on public land for forest communities and oldgrowth forest communities. Maps are attached which show the new reserves according to the following categories: areas confirmed since May 2005; areas added since May 2005; and, areas not included in final reserves.

Forestry Tasmania believes the full intent of the augmented CAR Reserve System identified by the TCFA is met by the final reserve boundaries. It also notes that any subsequent changes to those elements of the CAR Reserve System in informal reserves will only occur in accordance with the Regional Forest Agreement; will maintain the level of protection of identified values at the regional scale; and that information on all such changes will be publicly available.

New Reserves Agreed in the Supplementary Tasmanian Regional Forest Agreement

On 13 May 2005 the State of Tasmania and the Commonwealth of Australia agreed to:

1) The protection of one million hectares of oldgrowth forest. The Supplementary Agreement provides for the additional protection of oldgrowth forest, resulting in a total of 977,000 hectares of oldgrowth forest reserved on public land. From private land, the Commonwealth will protect a minimum additional area of 25,000 hectares of oldgrowth forest.

Outcome: Boundary lines for new formal and informal reserves have now been finalised on public land. This will result in the total oldgrowth forest reserved in Tasmania on public land being 978,000 hectares.

2) Adding 141,000 hectares to the Comprehensive, Adequate and Representative (CAR) Reserve System, including 1,300 hectares of Hydro Tasmania freehold land.

Outcome: Boundary lines for new formal and informal reserves have now been finalised on public land. This will result in 148,000 hectares being added to the CAR Reserve system, including 1,300 hectares of Hydro Tasmania freehold land.

3) 58,000 hectares of new Formal Reserves in the Tarkine, Styx Valley and eastern Tasmania.

Outcome: Boundary lines for new formal reserves have now been finalised. This will result in 58,200 hectares being added to formal reserves.

4) The State undertakes to finalise the boundaries of the new reserves, with the exception of Commonwealth-owned land, at a scale of 1:25,000 by June 2006, identifying the best management boundaries to protect the identified values and taking account of field verification of the values being protected.

Outcome: Boundary lines for formal and informal reserves have now been finalised using the guidelines set out above and the method for achieving these boundaries can be seen in Attachment 1. Maps showing changes to the provisional boundaries are attached below and are called Map 1, Map 2 and Map 3.

Summary of Final Reserve Totals

The final reservation figures for the Supplementary Tasmanian Regional Forest Agreement can be summarised in various ways. These are listed below (but note that the areas are not additive):

- 146,800 hectares of new formal and informal reserve on State forest (Table 1)
- 121,200 hectares of additional oldgrowth forest reservation on public land (Tables 1 and 3)
- 139,500 hectares of additional forest reservation (Table 1)
- 58,200 hectares of new formal reserve including 8,200 ha of existing informal reserved land and 50,000 hectares of new reserves (Table 2)
- 156,200 hectares of new reserves on State forest, Crown land, Commonwealth land, Hydro vested land and Hydro private land (Table 2)

The new reserves include 16,700 ha of non-forest (Table 3).

Table 1. Difference between the provisional May 2005 figures and the final figures. The *Oldgrowth forest*, *Forest (all ages)* and *Total new reserved land* categories includes State forest, Crown land, Commonwealth land, Hydro-vested land and Hydro-private land. Areas have been rounded to the nearest 100 hectares.

Description	Provisional area	Final Area	Difference
State forest	139,100	146,800	7,700
Oldgrowth forest	120,500	121,200	700
Forest (all ages)	135,500	139,500	4,000
Total new reserved land	148,400	156,200	7,800

Table 2. New reservation totals by tenure and reservation type (formal or informal reserve). *Existing informal* is land that was previously an informal reserve and now forms part of a new formal reserve. This increases the total of new formal reserves. It does not contribute to the total of new reserved area. Areas have been rounded to the nearest 100 hectares.

Tenure Type	New Formal	Total Formal	New Informal	Total New Reserves
State forest	50,000	50,000	96,800	146,800
Hydro -vested	-	-	3,500	3,500
Hydro-private	-	-	1,400	1,400
Commonwealth	-	-	500	500
land				
Crown land	-	-	4,000	4,000
Existing informal	-	8,200	-	-
Total	50,000	58,200	106,200	156,200

Table 3. New reservation totals tenure and forest type. Other forest reservation includes those forest communities not classified as oldgrowth forest. Non-forest reservation includes areas of button grass or other non-forest communities that were logical to include in reservation areas. Areas have been rounded to the nearest 100 hectares.

Tenure Type	Oldgrowth Forest Reservation	Other Forest Reservation	Non-forest Reservation	Total Area
State forest	112,600	17,600	16,600	146,800
Hydro vested	3,400	0	100	3,500
Hydro private	800	600	-	1,400
Crown land	3,900	100	-	4,000
Commonwealth land	500	0	-	500

Grand Total	121,200	18,300	16,700	156,200
Granu Total	121,200	10,500	10,700	130,200

Informal Reserves on State Forest

Informal reserves are areas of State forest, other than a Forest Reserve, that are managed as a Protection Zone under the Management Decision Classification System (MDC). An informal reserve can also be an administrative reserve on public land that is managed to protect CAR values.

The informal reserve areas were finalised using methods described in Attachment 1. Many minor boundary changes were made to provisional informal reserves announced in May 2005. These changes were made for the following reasons:

- 1. Boundaries were made to follow physical features such as roads or rivers.
- 2. Some areas were removed or trimmed because of the size or shape of the reserve. These reserves would have been unmanageable in their provisional shape.
- 3. A more detailed investigation found that a provisional area or part of a provisional reserve had been harvested sometime prior to the provisional informal reserves being announced in May 2005.

Formal Reserves

Formal reserves are reserves equivalent to the International Union for the Conservation of Nature and Natural Resources (IUCN) Protected Area Management Categories I, II, III, IV, or VI as defined by the IUCN Commission for National Parks and Protected Areas (1994). Formal reserves require action by the Tasmanian Parliament for dedication or revocation.

Formal reserves created for the Supplementary Tasmania Regional Forest Agreement include those to be dedicated under the Nature Conservation Act 2002 (*Table 4*) and the Forestry Act 1920 (*Table 5*).

Table 4. New formal reserves to be dedicated under the Nature Conservation Act 2002 to be revoked from State forest and managed by the Parks and Wildlife Service. Differences in area are due to the mapping resolution of the provisional boundaries. The names of some formal reserves are different to those listed in the Supplementary Regional Forest Agreement. However, the areas are essentially the same and can be cross-referenced according to their Reserve ID.

Location	Reserve ID	Provisional May 2005 Area (hectares)	Final Area (hectares)	Difference
Great Western Tiers extension	33	365	367	2
Meredith Range extension	3,4,6,8	4,634	4,638	4
Mt Heemskirk extension	13	326	326	0
Mt Murchison extension	12	1,738	1,739	1
Pieman River extension	7	355	356	1
Reynolds Falls extension	11	1,605	1,609	4
Savage River extension	2	1,415	1,417	2
Wye River	20,21	428	430	2
Total New Nature Conservation		10,866	10,882	16
Act Reserves		·		

Table 5. New formal Forest Reserves to be dedicated under the Forestry Act 1920. Differences in area are due to the mapping resolution of the provisional boundaries unless otherwise stated. The names of some formal reserves are different to those listed in the Supplementary Regional Forest Agreement. However the areas are essentially the same and can be cross-referenced according to their Reserve ID.

Location	Reserve ID	Provisional May 2005 Area (hectares)	Final Area (hectares)	Difference
A	1	` ′		1
Arthur River extension	1	447	448	1
Big Tree	27	113	111	-2
Blue Tier extension	22	247	248	1
Deep Gully extension	5	846	845	-1
Eastern Tiers extension	16,17,19	496	498	2
Hardings Falls extension	30	927	929	2
Hatfield River extension	9	412	416	4
John Lynch extension ¹	10	4,068	4,102	34
Mount Maurice extension	23	681	681	0
North Styx	29	4,210	4,219	9
Savage River Pipeline	25	30,936	31,041	105
Snaky Creek ²	18	1,267	1,274	7
South Esk extension	24	281	284	3
Styx Tall Trees	28	336	338	2
Tooms Lake extension	15	193	192	-1
Trowutta extension	32	325	325	0
Waratah Creek	31	522	522	0
Wielangta	14	848	852	4
Total New Forest Reserve	S	47,155	47,324	169

- 1. Included a small piece of informal reserve that would have been enclosed within the Forest Reserve.
- 2. Boundary change to a coupe that had been harvested prior to May 2005. The boundary was reshaped to include a similar area as the original proposed reserve.

Reservation Levels for Forest and Old Growth Forest Communities

The reservation levels achieved in the CAR Reserve System on public land for forest communities are listed in Table 6 for forest communities and Table 7 for oldgrowth forest communities. Tables 6 and 7 also show differences in reservation with that based on the provisional areas announced in May 2005.

Table 6. Reservation levels of forest communities in the CAR Reserve System on Public Land. Differences in reservation with that based on the provisional areas announced in May 2005 are listed. Forest communities that have had decreases in reserve area have brackets () around the number in the change in forest area column.

	Forest Community	Forest Community			May-05				
	Forest Community	1996 area corrected	Existing reservation	Additional reservation on State forest	Additional reservation all Public land	New reservation level	% reservation	Forest reservation	Change in forest area
BF	Acacia melanoxylon forest on flats	9,010	2,650	State forest 0	- rublic land	2,650	29%	-	area -
BR	Acacia melanoxylon forest on rises	13,310	3,840	768	768	4,610	35%	679	89
AV	Allocasuarina verticillata	1,430	650	-	-	650	45%	-	-
BS	Banksia serrata woodland	160	120	-	-	120	75%	-	-
M+	Callidendrous and thamnic rainforest on fertile sites	192,010	103,940	37,545	37,932	141,870	74%	37,484	448
CR	Callitris rhomboidea forests	790	480	19	19	500	63%	14	5
AC	Coastal E. amygdalina dry sclerophyll forest	190,210	68,280	1,687	2,052	70,330	37%	1,861	191
D	Dry E. delegatensis forest	289,590	93,080	6,147	6,864	99,940	35%	6,519	345
N	Dry E. nitida forest	159,860	137,170	5,306	5,680	142,850	89%	5,373	307
O	Dry E. obliqua forest	164,140	52,370	4,486	5,660	58,030	35%	5,375	285
AD	E. amygdalina forest on dolerite	178,310	29,350	4,057	4,078	33,430	19%	4,004	74
AS	E. amygdalina forest on sandstone	30,110	5,540	2,330	2,816	8,360	28%	2,783	33
BA	E. brookeriana wet forest	4,560	1,410	7	9	1,420	31%	5	3
C	E. coccifera dry forest	54,550	42,320	334	1,871	44,190	81%	1,865	6
MO	E. morrisbyi forest	20	20	-	-	20	100%	-	-
OV	E. ovata/E. viminalis forest	7,200	550	10	19	570	8%	17	2
PJ	E. pauciflora on Jurassic dolerite	18,820	2,930	69	77	3,010	16%	42	34
PS	E. pauciflora on sediments	16,210	5,220	89	89	5,310	33%	91	(2)
P	E. pulchella - E. globulus - E. viminalis grassy shrubby dry sclerophyll forest	151,300	42,790	3,212	3,293	46,080	30%	3,246	47
R	E. regnans forest	76,050	16,840	1,552	1,552	18,390	24%	1,444	108
RI	E. risdoni forest	380	180	1,332	1,332	180	47%	1,444	100
	· ·			- 2	- 2	420		0	-
	E. rodwayi forest	8,670	420	2	2		5%		2
SG	E. sieberi on granite	17,660	5,390	67	68	5,460	31%	67	1
SO	E. sieberi on other substrates	46,020	12,000	151	158	12,160	26%	125	33
SU	E. subcrenulata forest	10,240	8,730	92	92	8,820	86%	71	20
TD	E. tenuiramis on dolerite	8,430	5,900	456	461	6,360	75%	416	45
Т	E. tenuiramis on granite	3,020	2,820	-	2	2,820	93%	2	0
G	E. viminalis and/or E. globulus coastal shrubby forest on Holocene sand	1,220	450	-	-	450	37%	-	-
V	E. viminalis grassy forest	113,320	4,440	59	83	4,520	4%	83	0
DSC	E. viminalis/E. ovata/E. amygdalina/E. obliqua damp sclerophyll forest	40,630	12,220	42	93	12,310	30%	87	6
NF	Furneaux E. nitida forest	29,820	18,830	-	-	18,830	63%	-	-
	Furneaux E. viminalis forest	140	120	-	-	120	86%	-	-
GG	Grassy E. globulus forest	14,450	6,530	4	46	6,580	46%	46	0
Н	Huon Pine	8,930	7,650	7	21	7,670	86%	22	0
AI	Inland E. amygdalina forest	25,810	4,520	17	23	4,540	18%	23	0
TI	Inland E. tenuiramis forest	55,020	10,350	128	205	10,560	19%	204	1
X	King Billy Pine	20,140	17,120	1,045	1,390	18,510	92%	1,393	(4)
F	King Billy Pine with deciduous beech	840	770	21	32	800	95%	39	(7)
KG	King Island E. globulus/E. brookeriana/E. viminalis forest	2,430	570	-	-	570	23%	-	-
L	Leptospermum sp./Melaleuca squarrosa swamp forest	18,960	10,280	763	781	11,060	58%	768	13
ME	Melaleuca ericifolia forest	600	400	-	0	400	67%	0	-
NP	Notelaea ligustrina and/or Pomaderris apetala forest	290	200	20	20	220	76%	20	0
PP	Pencil Pine	350	350	-	-	350	100%	-	-
PD	Pencil Pine with deciduous beech	190	190	-	-	190	100%	-	-
SI	Silver wattle (Acacia dealbata) forest	54,090	13,830	676	676	14,510	27%	510	166
DT	Tall E. delegatensis forest	285,750	90,400	6,017	6,148	96,550	34%	5,820	328
NT	Tall E. nitida forest	74,420	67,040	1,659	1,673	68,710	92%	1,594	79
OT	Tall E. obliqua forest	425,630	113,680	10,189	11,022	124,700	29%	10,338	685
M-	Thamnic rainforest on less fertile sites	377,980	281,460	41,189	43,741	325,200	86%	43,041	700
VW	Wet E. viminalis forest on basalt	4,180	600	0	0	600	14%	0	0
Total		3,207,250	1,306,990	130,222	139,516	1,446,500	45%	135,470	4,046

Table 7. Reservation levels of oldgrowth forest communities in the CAR Reserve System on Public Land. Differences in reservation with that based on the provisional areas announced in May 2005 are listed. Oldgrowth forest communities that have had decreases in reserve area have brackets () around the number in the change in forest area column.

	Forest Community	Old (Growth					May-05	
	Forest Community	1996 area corrected	Existing reservation	Additional reservation on State forest	Additional reservation all Public land	New reservation level	% reservation	Oldgrowth reservation	Change OG
BF	Acacia melanoxylon forest on flats	-	-	-	-	-	0%	-	-
BR	Acacia melanoxylon forest on rises	-	-	0	0	-	0%	0	-
AV	Allocasuarina verticillata	970	540	-	-	540	56%	-	-
BS	Banksia serrata woodland	160	120	-	-	120	75%	-	-
M+	Callidendrous and thamnic rainforest on fertile sites	159,640	95,240	35,595	35,982	131,220	82%	35,872	109
CR	Callitris rhomboidea forests	600	330	19	19	350	58%	14	5
AC	Coastal E. amygdalina dry sclerophyll forest	40,080	24,900	1,350	1,715	26,610	66%	1,693	22
D	Dry E. delegatensis forest	79,820	48,620	4,779	5,497	54,120	68%	5,480	17
N	Dry E. nitida forest	107,370	95,330	4,438	4,738	100,070	93%	4,655	83
О	Dry E. obliqua forest	46,960	26,870	3,702	4,873	31,740	68%	4,776	96
AD	E. amygdalina forest on dolerite	30,490	15,190	3,753	3,774	18,960	62%	3,767	6
AS	E. amygdalina forest on sandstone	6,600	2,190	2,005	2,491	4,680	71%	2,486	5
BA	E. brookeriana wet forest	690	230	0	2	230	33%	2	-
С	E. coccifera dry forest	32,630	28,380	299	1,240	29,620	91%	1,235	6
МО	E. morrisbyi forest	-	-	-	-	-	0%	-	-
OV	E. ovata/E. viminalis forest	470	160	10	19	180	38%	17	2
PJ	E. pauciflora on Jurassic dolerite	1,870	1,070	69	77	1,150	61%	42	34
PS	E. pauciflora on sediments	4,300	3,050	88	88	3,140	73%	88	0
P	E. pulchella - E. globulus - E. viminalis grassy shrubby dry sclerophyll forest	63,840	29,920	2,923	3,005	32,920	52%	2,993	11
R	E. regnans forest	13,290	6,510	986	986	7,500	56%	966	20
RI	E. risdoni forest	10	-	-	-	-	0%	-	-
RO	E. rodwayi forest	730	140	2	2	140	19%		2
SG	E. sieberi on granite	960	760	33	34	790	82%	35	(1)
SO	E. sieberi on other substrates	1,660	790	30		830	50%	36	1
SU	E. subcrenulata forest	7,420	6,580	77	77	6,660	90%	64	14
TD	E. tenuiramis on dolerite	5,490	4,470	388		4,860	89%	383	11
T	E. tenuiramis on granite	2,900	2,730	-	2	2,730	94%	2	0
G	E. viminalis and/or E. globulus coastal shrubby forest on Holocene sand	870	170	-	-	170	20%	-	-
V	E. viminalis grassy forest	8,500	930	52	76	1,010	12%	76	0
DSC	E. viminalis/E. ovata/E. amygdalina/E. obliqua damp sclerophyll forest	2,500	1,680	37	87	1,770	71%	81	6
NF	Furneaux E. nitida forest	-	-	-	-	-	0%	-	-
VF	Furneaux E. viminalis forest	_	-	_	_	_	0%	-	-
GG	Grassy E. globulus forest	4,910	4,060	4	46	4,110	84%	46	0
Н	Huon Pine	7,570	7,340	7	21	7,360	97%	22	
AI	Inland E. amygdalina forest	2,860	850	15		870	30%		_
TI	Inland E. tenuiramis forest	7,970	2,650	115	192	2,840	36%	21 191	
X	King Billy Pine	17,300	15,840	1,020	1,363	17,200	99%	1,362	1
F	King Billy Pine with deciduous beech	370	340	20		370	100%	31	0
	King Island E. globulus/E. brookeriana/E. viminalis forest	3/0	340	20	31	370	0%	31	
L	Leptospermum sp./Melaleuca squarrosa swamp forest	9,950	9 420	609	628	9,050	91%	628	0
ME	Leptospermum sp./metateuca squarrosa swamp jorest Metaleuca ericifolia forest	310	8,420 200		028	200	65%	028	, v
ME NP		270	200	20		200	65% 81%	20	-
	Notelaea ligustrina and/or Pomaderris apetala forest			20	20			20	0
PP	Pencil Pine	340	340	-	-	340	100%		
PD	Pencil Pine with deciduous beech	170	170	-	_	170	100%	1	
SI	Silver wattle (Acacia dealbata) forest	104 (22	50.030	0	0	- C2 C00	0%	0	0
DT	Tall E. delegatensis forest	104,420	58,920	4,546		63,600	61%	4,585	91
NT	Tall E. nitida forest	49,600	47,190	1,047	1,061	48,250	97%	1,038	23
OT	Tall E. obliqua forest	83,490	46,170	5,899	6,731	52,900	63%	6,668	63
M-	Thamnic rainforest on less fertile sites	335,790	267,300	38,683	41,232	308,530	92%	41,118	114
VW	Wet E. viminalis forest on basalt	140	100	-	-	100	71%		
Total		1,246,280	856,990	112,620	121,235	978,220	78%	120,494	741

Attachment 1

Method for Assessing Provisional Reserve Areas

The process of finalising the reserve boundaries is stated in the Supplementary Tasmanian Regional Forest Agreement document as follows:

The State undertakes to finalise the boundaries of the new reserves, with the exception of Commonwealth owned land, at a scale of 1:25,000 by June 2006, identifying the best management boundaries to protect the identified values and taking account of field verification of the values being protected.

Each area identified in the Supplementary Regional Forest Agreement was assessed according to the following criteria:

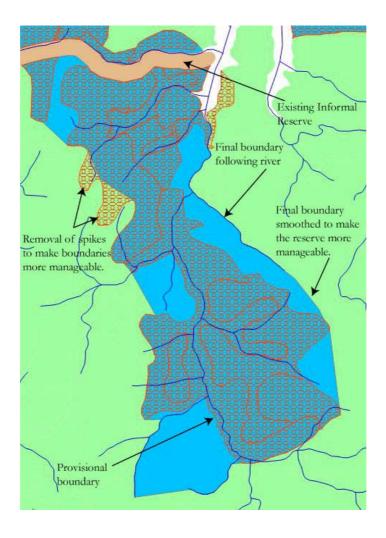
- 1. Are the intended values present in the provisional area indicated?
- 2. Has there been any harvesting that was not identified in the provisional boundary identification that has disturbed the values in the provisional reserve?
- 3. Are there any known issues that would seriously compromise the reserved values? For example major roads or other major disturbances such as fire.
- 4. Is the boundary appropriate?
- 5. Should the boundary follow a river or road or some other feature?

Figure 1 shows a typical assessed area. Where practical the final boundaries followed features such as roads or rivers.

Once this analysis was undertaken, Old Growth forest communities were tallied and compared with the provisional areas identified in the Supplementary Agreement. If any Old Growth forest community was in deficit, other suitable areas of that Old Growth community were found within the same region.

Figure 1. The figure shows a typical assessed area. The hatched red outline was the provisional boundary. The solid blue area forms the final boundary.

The green area is State Forest and blue lines are rivers. Notice that where practical the final boundaries follow features such as roads or rivers. Each reserve area was assessed using this method.



Maps of north west, north east and southern Tasmania showing changes between the provisional boundaries and the final boundaries can be seen on maps 1, 2 and 3 attached.

