



APPENDIX 2 – DATA TABLES

sustainable forest management



Forestry Tasmania

CONTENTS

The tables in this section support the statements made in the main report and provide a more detailed view of long-term trends.

CHANGES TO THE FOREST ESTATE DURING 2011/12

- 1.1 Changes to the forest estate during 2012/13..... 2

SUSTAINING BIODIVERSITY AND HABITAT

- 2.1. Area of forest type by protection classification on State forest (hectares) 3
 2.2. Area protected on State forest (hectares)..... 4
 2.3. Strategic threatened species management..... 4

SUSTAINING JOBS FOR CURRENT AND FUTURE GENERATIONS

- 3.1. Wood production by district 2011/12 5
 3.2. Wood volume and value summary 6
 3.3. Forestry estate value summary 7
 3.4. Pulpwood audit summary 7
 3.5. Merchantable residue assessment summary 7
 3.6. Native forest harvesting and regeneration treatment (hectares)..... 7
 3.7. Plantation establishment (hectares)..... 8
 3.8. Plantation established on previously cleared native forest (hectares)..... 9
 3.9. Native forest regeneration success (hectares) 9
 3.10. Special timbers sawlog and craftwood production (tonnes) 10
 3.11. Non-chemical browsing control summary..... 10

SUSTAINING CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

- 4.1. Soil conservation 11
 4.2. Geomorphology conservation 11
 4.3. Area of plantation identified as having moderate or severe damage (hectares)..... 12
 4.4. Leaf beetle IPM system results 12
 4.5. Pesticide usage on forestry operations – by schedule 12
 4.6. Pesticide usage on forestry operations – by chemical type 12
 4.7. Fertiliser usage on forestry operations – by nutrient type 13
 4.8. Pesticide usage at Perth nursery and seed orchards – by schedule 13
 4.9. Pesticide usage at Perth nursery and seed orchards – by chemical type 13
 4.10. Fertiliser usage at Perth nursery and seed orchards – by nutrient type 13

SUSTAINING SAFETY, COMMUNITY ACCESS AND HERITAGE

- 5.1. Summary of Aboriginal cultural heritage surveys 14
 5.2. Non-Aboriginal cultural heritage management..... 14
 5.3. Community forums attended by our staff..... 15
 5.4. District sponsorship (cash and in-kind) 16
 5.5. Corporate sponsorship 16

SUSTAINING SCIENCE-BASED STEWARDSHIP

- 6.1. Summary of compliance with *Forest Practices Act 1985* 17
 6.2. Summary of compliance with *Workplace Health and Safety Act 1995* 17
 6.3. Audits of SFM systems 18
 6.4. Research expenditure summary 18

changes TO THE FOREST ESTATE DURING 2012/13

1.1 Changes to the forest estate during 2012/13

State forest ¹ - changes during 2012/13 (hectares):	
State forest created by land purchase	0
Net decrease of State forest resulting from gazetted changes to public land classifications	-33
State forest status removed through land sale	0
Net decrease in the area of State forest	-33
Total area of State forest at 30 Jun 2013 ^{1,2}	1,490,000

Forest Reserves - changes during 2012/13 (hectares):	
Net increase in Forest Reserves	0
Total area of Forest Reserves at 30 Jun 2013 ²	222,000

Multiple-Use Forest (MUF) - changes during 2012/13 (hectares):	
Net decrease in MUF	-24
Total area listed on the Register of Multiple Use Forest Land at 30 Jun 2013 ²	1,247,000

AFS Defined Forest Area (DFA) - Extent of forested land that is managed by Forestry Tasmania and certified to the Australian Forestry Standard (AS4708). ³	
Defined Forest Area at 30 Jun 2013 ^{2,3}	1,505,000

Notes:

1. Excludes land managed by Forestry Tasmania in the Buckland Military Training Area.
2. Figures in the total rows are not the sum of the columns but the rounded actual totals.
3. This area excludes some leases over State forest, and joint venture and leasehold plantations that are not managed by Forestry Tasmania, but may be separately certified. It also includes waterbodies outside State forest from which FT is licensed to collect and salvage floating and beached native softwood special timbers.

sustaining BIODIVERSITY AND HABITAT

2.1 Forest type by land classification - whole of Tasmania

Forest type ('000's hectares)	State forest (excl. Forest Reserves)	Forest Reserves	Conservation Reserves (Nature Conservation Act 2002)	Public Reserves (Crown Lands Act 1976)	Other publicly managed land ²	Other private land ³	Total area
Tall native Eucalypt forest: Eucalypt forest with current or potential height of 34m or more	481	50	178	5	12	160	886
Short native Eucalypt forest: Eucalypt forest with current or potential height of less than 34m	323	71	404	12	45	646	1,501
Rainforest: Cool temperate rainforest with no significant <i>Eucalypt</i> or <i>Acacia spp.</i>	135	67	330	0	5	17	555
Other native forest: Including <i>Acacia</i> , <i>Melaleuca spp.</i> etc.	56	12	49	1	4	31	153
Softwood plantation	51	0	0	0	0	21	72
Hardwood plantation	54	0	0	0	1	173	228
Non forest ¹: Including scrub, moorland, farmland, rock and lakes	168	22	1,375	23	155	1,672	3,416
Total	1,268	2,219	2,337	43	221	2,720	6,811

Notes:

- All areas are rounded to thousands of hectares as at 30 June 2013. Figures in the Total rows are not the sum of the columns but the rounded actual totals.
 - The areas for forest are derived from detailed forest type mapping, which is continually updated. Generally, State forest mapping is updated annually, but remapping of other tenures is less frequent.
 - Areas reported in this table include land, inland waterbodies and islands. Sea and marine estuaries are excluded.
- Because this table is derived from the spatial integration of several independently compiled datasets, some spatial discrepancies have been inherited. Areas where neither PFT nor FT forest data extends to the DPIWWE coastline are recorded as Non Forest.
 - 'Other publicly managed land' includes land owned by, or vested in, the HEC and Commonwealth; municipal reserves; and private and municipal lands managed by the Wellington Park Management Trust.
 - Private property forest areas are as advised by Private Forests Tasmania, and generally reflect forest mapping as at December 2011.

sustaining BIODIVERSITY AND HABITAT

2.2 Area of forest type by protection classification on State forest ¹ (hectares)

Forest type	2008/09		2009/10		2010/11		2011/12		2012/13	
	Formal reserves	Informal reserves	Formal reserves	Informal reserves	Formal reserves	Informal reserves	Formal reserves	Informal reserves	Formal reserves	Informal reserves
Tall eucalypt forest	49,200	86,100	49,900	87,100	50,000	88,100	50,000	88,700	50,200	205,600
Short eucalypt forest	71,600	89,500	70,900	89,300	71,100	89,400	71,200	89,900	71,200	176,600
Rainforest	67,400	61,800	66,900	61,800	66,800	62,000	66,900	61,900	66,500	90,800
Other native forest	10,900	14,800	11,500	15,500	11,700	15,600	11,700	15,600	11,700	26,400
Non forest	23,000	45,400	22,500	45,100	22,300	45,500	22,100	45,100	22,300	88,900
Softwood plantation	100	100	100	100	0	100	0	0	0	100
Hardwood plantation	100	200	100	200	0	100	0	100	0	100
Total ²	222,100	298,000	221,900	299,100	221,900	300,700	221,900	301,300	221,900	588,400

Notes:

- Change in forest type occurs due to continuous remapping as photo re-interpretation is undertaken, and increases in the extent of reserves.
1. Areas include crown land managed by Forestry Tasmania in the Buckland Military Training Area.
 2. Figures in totals row are not the sum of the columns, but the rounded actual totals.

2.3 Area of MDC special management zones on land available for wood production on State forest

Special value	Area (ha)
Biodiversity	54,490
Cultural heritage	16,520
Geoconservation values	58,830
Landscape	64,790

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.1 Wood production by District 2012/13

Native forest	Bass	Derwent	Huon	Murchison	Total
Sawlog Cat. 1 & 3 (m ³)	25,723	51,216	35,136	8,110	120,185
Sawlog Cat. 2 & 8 (m ³)	19,724	5,591	376	11,840	37,531
Sliced Veneer (m ³)	11	736	0	0	747
Low grade export log (tonnes)	0	34,041	37,894	17,221	89,156
High grade domestic peeler log (tonnes)	12,879	21,704	46,967	61,172	142,722
Special species (m ³)	252	491	529	9,155	10,427
Pulpwood (tonnes)	191,036	75,730	31,482	65,161	363,409
Fuel & firewood (m ³)	2,893	436	3,764	3,080	10,173
Posts & poles (units)	779	688	674	161	2,302
Craftwood (units)	0	96	0	189	285
Minor Products	29	8,080	10,672	435	19,216
Native Forest Total	253,326	198,809	167,494	176,524	796,153

Plantation	Bass	Derwent	Huon	Murchison	Total
Softwood sawlog (m ³)	194	4,733	0	58	4,985
Softwood export log (m ³)	0	14,846	0	0	14,846
Softwood roundwood (m ³)	0	0	0	0	0
Posts & poles (units)	0	0	0	0	0
Young Eucalypt Sawlog (m ³)	0	0	0	0	0
Softwood pulpwood (tonnes)	3,439	96,144	0	0	99,583
Eucalypt pulpwood (tonnes)	99,650	18,658	2,505	23,293	144,106
Plantation Total	103,283	134,381	2,505	23,351	263,520

Note:

- The softwood volumes reported no longer include those generated from the former Taswood growing venture as FT divested its 50% stake in these plantations in December 2011.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.2 Wood volume and value summary

	2008/09		2009/10		2010/11		2011/12		2012/13	
Eucalypt wood production	Quantity	Estimated MDLV (\$)	Quantity	Estimated MDLV (\$)	Quantity	Estimated MDLV (\$)	Quantity	Estimated MDLV (\$)	Quantity	Estimated MDLV (\$)
Sawlog Cat. 1 & 3 (m ³)	238,925	23,175,725	205,422	20,542,200	189,915	19,561,245	107,606	11,083,418	120,185	12,619,425
Sawlog Cat. 2 & 8 (m ³)	60,689	4,308,919	37,897	2,766,481	48,532	3,639,900	42,011	3,108,814	37,531	2,927,418
Sliced Veneer (m ³)	6,229	822,228	5,117	695,912	6,787	950,180	2,340	339,300	747	108,315
Low grade export peeler log (tonnes)	22,235	1,778,800	74,669	6,197,527	112,795	9,587,575	157,321	6,292,840	89,156	5,349,360
High grade domestic peeler log (m ³)	193,429	13,153,172	224,432	15,710,240	318,597	19,115,820	282,077 ²	17,488,774 ²	142,722	8,848,764
Special species log (m ³)	12,496	1,449,536	12,350	1,482,000	14,477	1,795,148	12,486	1,598,208	10,427	1,334,656
Pulpwood (tonnes)	2,004,226	118,249,334	1,388,986	84,728,146	1,376,553	71,580,756	315,037	17,011,998	363,409	16,353,405
Hardwood plantation production	Quantity	Estimated MDLV (\$)	Quantity	Estimated MDLV (\$)	Quantity	Estimated MDLV(\$)	Quantity	Estimated MDLV(\$)	Quantity	Estimated MDLV(\$)
Sawlog (tonnes)	7,754	581,550	0	0	137	10,275	0	0	0	0
Pulpwood (tonnes)	135,549	8,946,234	179,495	12,205,660	171,205	11,984,350	61,303	4,107,301	144,106	8,645,360
Softwood plantation production¹	Quantity	Estimated MDLV (\$)	Quantity	Estimated MDLV (\$)	Quantity	Estimated MDLV(\$)	Quantity	Estimated MDLV(\$)	Quantity	Estimated MDLV(\$)
Sawlog (tonnes)	68,185	5,318,439	54,203	4,336,254	66,184	5,427,109	18,930	1,097,940	4,985	289,130
Export logs (tonnes)	0	0	7,519	601,544	34,460	2,825,722	17,266	776,970	14,846	668,070
Roundwood (tonnes)	2,480	163,691	1,101	74,874	243	17,035	352	30,272	-	-
Pulpwood (tonnes)	138,406	9,134,808	191,974	13,054,252	240,274	16,819,174	255,543	18,399,096	99,583	7,169,976
Total MDLP (\$)	3,274,111	210,767,527	2,890,603	187,082,436	2,383,166	162,395,090	2,580,160	163,314,288	1,027,697	64,314,879

Note:

MDLV = Mill Door Landed Value, i.e. the estimated value of logs at mill door or, for export logs, "at wharf".

1. Data for softwood plantations for the current and last three years does not include production from the former softwood joint venture (Taswood Growers).

2. These values were incorrectly reported last year and have been adjusted to the correct value for this report.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.3 Forestry estate value summary

Forest Estate ¹	2008/09 (\$ million)	2009/10 (\$ million)	2010/11 (\$ million)	2011/12 (\$ million)	2012/13 (\$ million)
Standing timber wholly owned	274.37	247.85	145.93	147.86	104.96
Standing timber joint ventures	110.92	70.89	91.10	0 ²	0
Roads and structures	115.29	114.65	116.75	116.14	86.24
Non-commercial zones		-65.8	-57.10	-55.30	-7.3
Tourist infrastructure	4.98	4.81	4.80	4.80	4.8
TOTAL	505.56	372.40	301.48	213.50	188.7

Note:

1. A different valuation methodology has been used since 2009/10, based on advice from Forestry Tasmania's independent international valuer. In particular, a liability has been recorded for forests managed predominantly for their non commercial uses.
2. The change reported reflects the sale of Forestry Tasmania's interest in the former softwood joint venture (Taswood Growers) during the period.

3.4 Segregation audits summary

Year	Number of audits
2012/13	820

Note:

The range of product types we now have has led to our previous pulpwood-focussed reporting not reflecting the comprehensive nature of our segregation audit program. This new measure will be reported on in future years.

3.5 Merchantable residue assessment summary

Year	Number of coupes audited	Mean residues (m ³ /ha)	Median residues (m ³ /ha)
2008/09	95	2.28	2.00
2009/10	82	2.06	2.00
2010/11	69	2.15	1.57
2011/12	45	24.77	5.49
2012/13	27	10.76	9.40

3.6 Native forest harvesting and regeneration treatment (hectares)

Native forest	2008/09	2009/10	2010/11	2011/12	2012/13
Area clearfelled	4,060	3,460	3,360	1,010	2,190
Area of partial harvesting ¹	8,080	5,070	6,980	1,540	2,010
Total	12,100	8,500	10,300	2,500	4,200
Area regenerated ^{2,3}	11,400	9,200	8,100	4,400	3,500

Notes:

- Areas include land managed by Forestry Tasmania in Buckland Military Training Area.
1. Excludes thinning.
 2. Regeneration treatments may not necessarily be undertaken in the year in which harvesting was completed.
 3. Refer to Table 3.9 for summary of regeneration success monitoring.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.7 Plantation establishment (hectares)

SW: softwood HW: hardwood ¹ Ownership	New area planted ⁵ 2012/13		Area replanted ⁶ 2012/13		Net area of plantation at 30/6/2013		FT equity ⁸ at 30/6/2013	
	SW	HW	SW	HW	SW	HW	SW	HW
Forestry Tasmania (FT) plantation on State forest & Crown land	0	0	178	361	4,350	31,816	4,350	31,816
FT joint venture plantation on State forest & Crown land ²	0	0	0	0	7,085	7,231	7,085	7,231
FT joint venture plantation on private land	0	0	0	0	97	195	97	195
Tassie Trees Trust plantation on State forest ³	0	0	0	0	303	1,361	303	1,361
FT plantation on private land	0	0	0	0	0	753	0	753
Private plantation on State forest ⁷	0	0	711	28	41,199	14,405	0	0
Total 2012/13 ⁴	0	0	888	389	53,034	55,762	11,835	41,357
(Total 2011/12) ⁴	50	30	1,060	900	52,470	55,590	11,880	40,170

Notes:

- Planting period for mapping and reporting purposes is from 1st July 2012 to 30th June 2013.
 - Figures exclude plantation areas clearfelled but not yet re-planted.
 - Excludes former plantations which are now managed for recreation within Forest Reserves.
1. The majority of mixed hardwood/softwood plantations are reported as hardwood.
 2. Includes softwood plantations jointly owned with Norske-Skog, for which data is supplied by Norske-Skog as at 1st June 2013.
 3. Tassie Trees Trust plantations are mainly jointly-owned with private growers, but include small proportions owned solely by FT.
 4. Figures in the Total rows are not the sum of the columns but the rounded actual totals.
 6. Includes some areas planted to a different crop than the previous crop.
 7. Includes softwood plantations which are owned by New Forests P/L, for which data is supplied by Timberlands Limited as at 30th June 2013.
 8. Includes the total area of plantation in which FT has a financial equity in the trees.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.8 Plantation established on previously cleared native forest on State forest (hectares)

State forest ¹	2008/09	2009/10	2010/11	2011/12	2012/13
Annual conversion	2,190	700	30	10 ³	0
Cumulative NF converted since 1996	48,520	49,220	49,250	49,320	49,320
Proportion of 1996 baseline statewide native forest ²	1.5%	1.5%	1.5%	1.5%	1.5%

Notes:

1. Areas include land managed by Forestry Tasmania in Buckland Military Training Area.
2. Native forest on all tenures, as mapped in 1996 (3.21 million ha baseline).
3. Degraded land planted with pine by Norske Skog.

3.9 Native forest regeneration success (hectares)

Forest Type	0-9% (not stocked)	10-39% (ecological stocking)	40-64% (low wood quality)	65-84% (optimum)	85-100% (maximum)	Total
Dry eucalypt ¹		0	987	1,519	286	2,791
Wet eucalypt ¹		0	291	2,212	1,177	3,680
High altitude <i>E. delegatensis</i> ¹		0	287	2,027	278	2,592
Fenced intensive blackwood ¹		0	0	48	49	97
Swamp blackwood ²		0	0	30	0	30
Rainforest ²		0	0	0	0	0
Huon pine forest ²		0	0	0	0	0
Total		0	1,564	5,836	1,790	9,190
				% Area met standard		94

Notes:

1. Reported three years after regeneration treatment.
2. Reported five years after regeneration treatment.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.10 Special timbers sawlog and craftwood production (tonnes)

	2008/09	2009/10	2010/11	2011/12	2012/13
Blackheart sassafras	500	90	277	109	221
Blackwood	8,901	7,962	11,259	11,201	9,178
Celery-top pine	881	882	2,181	305	158
Eucalypt/mixed species	1,735	2,883	534	267	99
Huon pine	354	423	613	637	460
King Billy pine	0	3	0	0	0
Myrtle	896	518	250	283	543
Silver wattle	262	92	19	94	17
White sassafras	15	34	9	42	36
Total	13,543	12,887	15,142	12,938	10,712

Note:

- Only includes special species grown in native forests.

3.11 Non-chemical browsing control summary

Treatment Type	2008/09	2009/10	2010/11	2011/12	2012/13
Number of control operations (number of coupes)	419	411	402	259	241
Number of coupes monitored ¹		489	420	433	469
Length of fencing (km)	32	17	1.4	18.7	19.9
Tree guards (number of coupes)	28	2	4	3	2
Stockings/sleeves (ha)	1,000	180	143	155	54

Note:

1. 2009/10 was the first year in which this number was recorded and reported.

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

4.1 Area of plantation identified as having moderate or severe damage (hectares)

Eucalyptus plantations:	2008/09		2009/10		2010/11		2011/12		2012/13	
	Moderate	Severe	Moderate	Severe	Moderate	Severe	Moderate	Severe	Moderate	Severe
Soil fertility/site issues	284	1,347	267	1,672	305	1,126	201	600	15	984
Insect damage	1,746	599	2,954	158	2,596	794	2,774	238	4,479	1,117
Multiple causes	247	1,038	150	1,078	832	2,238	787	3,728	873	1,844
Climate / environmental	58	47	309	303	307	390	178	41	0	83
Unknown	72	112	49	59	44	139	68	436	0	45
Silvicultural	14	28	0	25	32	135	0	42	0	24
Mammal damage	0	68	10	8	0	7	0	142	72	0
Fungal diseases	77	63	268	0	1,057	909	115	102	0	0.1
Weeds	99	48	0.5	19	31	2	0	52	19	9

4.2 Leaf beetle IPM system results

Leaf Beetle IPM System	2008/09 ¹	2009/10 ¹	2010/11 ¹	2011/12 ²	2012/13 ^{2,3}
Area monitored (ha)	20,515	25,690	28,912	19,333	14,530
Area monitored that is above threshold (ha)	5,712	7,713	9,571	3,525	6,1372
Area monitored above threshold treated with alpha-cypermethrin (ha)	3,526	5,939	5,576	2,361	4,741
Area monitored above threshold treated with spinosad (ha)	635	0	208	172	0
Total area treated (ha)	4,161	5,939	5,784	2,533	4,741
Area monitored above threshold-natural controls (ha)		1,269	1,313	892	341
Area monitored above threshold not treated (ha)	1,550	505	2,786	992	1396
% monitored area sprayed	20%	23%	20%	13%	33%
Proportion area sprayed with spinosad: cypermethrin	0.18	0.00	0.04	0.07	0

Notes:

- Operations include private forest located on State forest (Gunns Lease Plantations).
- Operations do not include private forest located on State forest (Gunns Lease Plantations).
- The population threshold for initiating control operations was lowered to "population-present" for 2719 ha of plantations on high altitude sites in northern Tasmania that were suffering from chronically thin crowns.

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

4.3 Pesticide usage on forestry operations¹ - by schedule

	2008/09	2009/10	2010/11	2011/12	2012/13
SUSDP Category ²	Amount of active ingredient (kg)				
Unscheduled	563.7	2,708	276.1	138.4	90.7
Schedule 5	3,802.5	737.4	1,305.2	1,137.0	995.8
Schedule 6	479.6	244.4	1,123.6	534.2	951.9
Total chemical used	4,845.8	3,689.8	2,704.9	1,809.6	2,038.4
Area treated (ha)	5,494	5,083	5,858	3,374	5,270

Notes:

1. On Forestry Tasmania's Defined Forest Area.
2. SUSDP = Standard for the uniform scheduling of drugs and poisons.

4.5 Fertiliser usage on forestry operations¹ - by nutrient type

	2008/09	2009/10	2010/11	2011/12	2012/13
Nutrient Type	Amount of active ingredient (t)				
Nitrogen	438.8	567	315.9	47.6	18.2
Phosphorus	150.9	148.3	78.6	15.3	7.9
Potassium	11.5	0.03	0.65	0.90	0.5
Copper	3.9	1.6	0.03	0.00	0
Total chemical used	605.1	716.93	395.18	63.8	26.6
Area treated (ha)	8,872	8,543	5,589	1,589	517

Note:

1. On Forestry Tasmania's Defined Forest Area.

4.4 Pesticide usage on forestry operations¹ - by chemical type

	2008/09	2009/10	2010/11	2011/12	2012/13
Pesticide type	Amount of active ingredient (kg)				
Herbicide	3,831.9	2,444.4	1,355.7	1,127.7	934.1
Herbicide additive	505.1	206	226.6	138.9	58.3
Herbicide carrier	3.2	291.1	57	11.5	81.4
Insecticide	473.2	736	1,035	515.7	939.8
Pesticide additive	32.2	12.3	30.5	15.8	24.8
Total chemical used	4,845.6	3,689.8	2,704.8	1,809.6	2,038.4
Area treated (ha)	5,494	5,083	5,858	3,374	5,270

Note:

1. On Forestry Tasmania's Defined Forest Area.

4.6 Pesticide usage at Perth nursery & seed orchards¹ - by schedule

	2008/09	2009/10	2010/11	2011/12	2012/13
SUSDP Category ²	Amount of active ingredient (kg)				
Unscheduled	8.6	144.6	10.6	6.4	4.2
Schedule 5	134.2	127.9	84.3	24.6	38.9
Schedule 6	34.8	22	27.5	1.6	13.6
Schedule 7	4.5	0.03	0.03	0.0	0
Total chemical used	182.1	294.53	122.43	32.6	56.7

Note:

1. Perth nursery & seed orchards are within Forestry Tasmania's Defined Forest Area.
2. SUSDP = Standard for the uniform scheduling of drugs and poisons.

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

4.7 Pesticide usage at Perth nursery & seed orchards¹ - by chemical type

	2008/09	2009/10	2010/11	2011/12	2012/13
Pesticide Type	Amount of active ingredient (kg)				
Fungicide	49.3	59.2	20	13.1	14.5
Herbicide	124.8	87	90.2	15.5	38.9
Herbicide additive	0.03	90.6	0.8	3.9	1.9
Insecticide	8	4	2.2	0.0	0
Pesticide additive	0.03	51.7	9.1	0.1	1.3
Total chemical used	182.16	292.5	122.3	32.6	56.7

Note:

1. Perth nursery & seed orchards are within Forestry Tasmania's Defined Forest Area.

4.9 Water testing associated with spray operations

	2008/09	2009/10	2010/11	2011/12	2012/13
Number of sites sampled ¹	-	-	-	-	18
Number of samples taken associated with chemical spraying operations	196	99	81	56	51
Number of detections and percentage of no chemical detections against ADWG Health Value ² for chemical residues ³	(0) 100%	(0) 100%	(1) 100%	(0) 100%	(0) 100%

Notes:

1. Reporting of this statistic began in 2012/13
2. Australian Drinking Water Guidelines Health Value or any detection where no value indicated.
3. Measured by DPIPWE testing laboratory.

4.10 Air quality particulate monitoring stations summary

Station type	2008/09		2009/10		2010/11		2011/12		2012/13	
	Exceeded	FT Contributed	Exceeded	FT Contributed	Exceeded	FT Contributed	Exceeded	FT Contributed	Exceeded	FT Contributed
Reference station	3	0	21	3	14	0	1	0	Not available ¹	Not available ¹
Real time indicative monitoring stations ^{2,3}	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	90 ⁴	2

Note: This table provides a summary of PM2.5 & PM10 exceedences recorded by the EPA each year.

1. Reference station data was not analysed by EPA at time of publication.
2. Analysis of real time monitoring exceedences began in 2012/13.
3. Exceedence data is indicative only due to measuring technique employed at station.
4. Data from between 15th March to 11th June, 2013 only.

4.8 Fertiliser usage¹ at Perth nursery & seed orchards² - by nutrient type

	2008/09	2009/10	2010/11	2011/12	2012/13
Nutrient Type	Amount of active ingredient (kg)				
Nitrogen	565.2	718.7	543.9	540.1	91.0
Phosphorus	189.6	499.8	317.4	29.4	25.0
Potassium	372.5	180.5	308.4	112.5	50.9
Calcium	311.7	103.4	76.7	26.5	25.8
Total chemical used	1,439.0	1,502.4	1,246.4	708.5	192.6

Notes:

1. Includes sales of potting mix to external customers.
2. Perth nursery & seed orchards are within Forestry Tasmania's Defined Forest Area.

sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

5.1 Summary of Aboriginal cultural heritage surveys

Year	Area surveyed (ha)	Number of new sites detected	Number of old sites redetected
2008/09	211	1	0
2009/10	2,457	10	1
2010/11	756	5	2
2011/12	612	1	2
2012/13	23	1	0

Note: The survey does not include desktop survey assessment

5.2 Non-Aboriginal cultural heritage management

Year	Area surveyed (ha)	Number of new sites detected	Number of old sites redetected
2008/09	570	26	17
2009/10	875	91	25
2010/11	1163	33	12
2011/12	568	16	14
2012/13	404	20	6

sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

5.3. Stakeholder groups on which Forestry Tasmania had formal representation in 2012/13

Names of the stakeholder committees, working groups or forums on which FT was formally represented	
All Northern Councils – Annual Wood Production Forum	Murchison District Apiary Management Committee
Australasian Fire and Emergency Services Council	Nile Catchment Management Group
Australian Forest Products Association	North East Mountain Bike Project
Biodiversity Landscape Planning Working Group	North East Tas Tourism Inc
Break O’Day NRM	Northern Regional Emergency Management
Bruny Island Community Forest Group	NRM Derwent Catchment
Central Highlands Emergency Management Committee	NRM Glamorgan Spring Bay
Channel Area Fire Management Committee	NRM North
Community Conversations (Economic Development)	NRM South
Cooperate Relations & Tourism	Orange Hawkweed Discussion Group
Derwent Catchment NRM Committee	Ringarooma Water management plan
Derwent Valley Autumn Festival	Rubicon Coast & Land Care
Design Forum Tasmania	Rural Land Management Group
Dorset NRM	Scottsdale High School Farm Board
East Coast Interagency Weed Management Group	Smoke Taint Workshop
Fine Timbers Tasmania	State Fire Management Council
Forest and Fire Management Group	Tarkine Discussion Group
Forest Education Foundation	Tasmanian Tourism Forum
Forest Practices Advisory Council	Three Year Plan Consultation Meeting with local councils. DIER, Southern Water and other industry groups
Forest Stewardship Council Group Chain of Custody Scheme	Upper Natone Reserve Committee
Forestry and Forest Products Committee	Wellington Multiday Recreation Track
Forestry Tasmania Consultative Committee	Western Districts Bush Watch
Forests and Forest Industry Council Residues Working Group	World Heritage Area Technical Workshop
Forests and Wood Products Australia	World Heritage Senior Officials Meeting
Huon Valley Emergency Management Committee	

sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

5.4 Corporate sponsorship

Cooperate Sponsorships and grants (2012/13)	Value (\$)
Community Assist Program 2012/13	
Football Federation Tasmania	44,000
Schools Triathlon Challenge	10,000
Derwent Valley Autumn Festival	8,000
Rotary Club of Hobart Charity Art Show	4,000
Tamar Canoe Club - Ben Lomond Descent	3,000
L'ton Mountain Bike Club - Ben Lomond MTB Festival	1,000
Other Corporate Sponsorships	
Tourism Council Tasmania	8,800
Australian Communities Foundation	1,000
Mothers Day Classic	664
Lions Club of Hobart - Circus Quirkus	500
Rainbow Communities Tasmania	500
The Institute of Foresters Australia	500
RHH Research Foundation	400
District Sponsorships	
Carnivals/Championships/Exhibitions/Shows	2,398
General Community Sponsorship	12,242
Schools	490
Other community service grants	
Design Forum Tasmania	22,000
University of Tasmania	2,727
Gottstein Trust	1,400
Research funding	
TFS (CRC Bushfire Program)	50,000
University of Tasmania	44,295
University of Sunshine Coast	11,000
University of Tasmania (Warra)	3,465
University of Melbourne (Warra)	1,001
Warra (beetle extraction)	1,000
Contributions to forest education	
Forest Education Foundation	204,000
TOTAL	438,995

Note: Figures are GST exclusive

5.5 Safety statistics

	2008/09	2009/10	2010/11	2011/12	2012/13
Number of direct employees ¹	547	513	424	383	351
Number of workers compensation claims	33	19	19	16	15
% of gross wages spent on claims ²	0.10	0.15	0.19	0.10	0.07
Lost time injury frequency rate (LTIFR)	12.54	8.56	9.5	5.68	4.46
All claims frequency rate	34.49	20.33	22.56	22.73	22.31
Lost time injury severity rate	9.98	14.88	10.45	6.66	1.97
Harvesting contractors LTIFR	17.92	7.37	6.9	2.82	11.60

Notes:

1. Number of staff employed, including Adventure Forests staff, not the number of full-time equivalents.
2. Claims recorded in respective financial year only.

sustaining SCIENCE-BASED STEWARDSHIP

6.1 Summary of compliance with *Forest Practices Act 1985*

	2008/09	2009/10	2010/11	2011/12	2012/13
Number of certified Forest Practices Plans (FPPs) in operation ³	1,732	2384	1,614	2020	Not available
Number of FPPs certified in 2012/13	Not collected	Not collected	Not collected	Not collected	137
Written S41 notices issued to FT	7	0	0	2	1
S41 notices issued to contractors on State forest	3	1	0	2	2
Fines or prosecutions issued to FT by Forest Practices Authority	0	1(\$1500)	1 (\$3,000)	0	0
Compliance certificates outstanding as reported by Forest Practices Authority (August) ¹	0 (100%)	0(100%)	0 (100%)	0 (100%)	0 (100%)
Number of breaches of EMPCA ²	0	0	0	0	0

Note:

1. Total percentage of certificates lodged, as reported in the FPA Annual Report.

6.2 Summary of compliance with *Workplace Health and Safety Act 1995*

	2008/09	2009/10	2010/11	2011/12	2012/13
S 38 Notices issued to Forestry Tasmania under Workplace Health and Safety Act ¹	1	0	1	0	0
S 36 Notices issued to Forestry Tasmania under Workplace Health and Safety Act ²	0	1	1	1	0

Note:

1. A Section 38 notice is a direction for an employer to take steps to remedy or alleviate a situation where the safety or health of persons in the workplace is endangered.
2. A Section 36 notice is a request from Workplace Standards for further information relating to the health and safety of persons at any workplace.
3. As of 1 January 2013, the new Work Health and Safety Act commenced. Section 36 and Section 38 notices became obsolete. New enforcement measures are: Section 191 Improvement Notice; Section 195 Prohibition Notice; and Section 198 Non-disturbance Notice. Forestry Tasmania has not been issued with any notices under the new Act.

sustaining SCIENCE-BASED STEWARDSHIP

6.3 Audits of SFM systems

Year	Internal Audit program	External audit program
	Number of audits	Number of audits
2008/09	8	3
2009/10	5	1
2010/11	9	1
2011/12	8	1
2012/13	6	1

6.4 Research expenditure summary

	2008/09	2009/10	2010/11	2011/12	2012/13
Total spent on research (\$'000)	4,208	4,060	4,030	3,013	2,562
Net operating costs (\$'000)	140,527	136,143	146,677	131,566	98,275
As a % of forest management operational cost	3.0%	3.0%	2.7%	2.3%	2.6%
Number of staff employed	35	32	30	31	19