



APPENDIX 2 – DATA TABLES

sustainable forest management



Forestry Tasmania

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

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changes TO THE FOREST ESTATE DURING 2013/14

1.1 Changes to the forest estate during 2013/14

| Gazetted changes from State forest/Forest Reserves to Permanent Timber Production Zone land ¹ (<i>Forest Management Act, 2013</i>) (hectares): | |
|--|------------------|
| Net decrease of State forest resulting from gazetted changes to public land classifications | - 1,490,000 |
| Net decrease in Multiple Use Forest (MUF) resulting from revocation of MUF | - 1,247,000 |
| Net decrease of Forest Reserves resulting from gazetted changes to public land classifications | - 222,000 |
| Net increase of Permanent Timber Production Zone land (PTPZL) resulting from gazetted changes to public land classifications | +1,172,000 |
| Total area of Permanent Timber Production Zone land at 30 Jun 2014 ¹ | 1,172,000 |

Notes:

1. PTPZ land includes proposed Future Reserved land at 30th June 2014.

sustaining BIODIVERSITY AND HABITAT

2.1 Land reservation in Tasmania by Forest Type

| Forest type ¹ ('000's hectares) | Tasmania | | | Publicly managed land ³ | | | PTPZ ⁴ land | | | | |
|--|----------------|---------------|------------|------------------------------------|---------------|------------|------------------------|---------------|------------|----------------|------------|
| | Total Tasmania | Area reserved | | Total publicly managed land | Area reserved | | Total PTPZ land | Area reserved | | Non-production | Production |
| | (ha) | (ha) | % | (ha) | (ha) | % | (ha) | (ha) | % | (ha) | (ha) |
| Tall native Eucalypt forest: Eucalypt forest with current or potential height of 34 metres or more | 889 | 459 | 52% | 732 | 441 | 60% | 431 | 149 | 35% | 64 | 217 |
| Short native Eucalypt forest: Eucalypt forest with current or potential height of less than 34 metres | 1,499 | 741 | 49% | 857 | 673 | 79% | 308 | 154 | 50% | 45 | 109 |
| Rainforest: Cool temperate rainforest with no significant <i>Eucalypt</i> or <i>Acacia</i> spp. | 554 | 497 | 90% | 537 | 490 | 91% | 125 | 81 | 65% | 24 | 20 |
| Other native forest: Including <i>Acacia</i> , <i>Melaleuca</i> spp. etc. | 154 | 94 | 61% | 124 | 90 | 73% | 55 | 24 | 44% | 18 | 13 |
| Hardwood plantation | 234 | 0 | 0% | 58 | 0 | 1% | 57 | 0 | 0% | 1 | 56 |
| Softwood plantation | 76 | 0 | 0% | 54 | 0 | 0% | 53 | 0 | 0% | 1 | 52 |
| Non forest ²: Including scrub, moorland, farmland, rock and lakes | 3,393 | 1,590 | 47% | 1,733 | 1,533 | 88% | 143 | 73 | 51% | 52 | 18 |
| Total | 6,799 | 3,381 | 50% | 4,095 | 3,228 | 79% | 1,172 | 482 | 41% | 205 | 485 |

Notes:

- All areas are rounded to thousands of hectares as at 30 June 2014. 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, mapping on PTPZ land is updated annually, but remapping of other tenures is less frequent.
 - Areas reported in this table include land, inland waterbodies and islands. Macquarie Island, sea and marine estuaries are excluded.
1. Private property forest areas are as advised by Private Forests Tasmania, and generally reflect forest mapping as at December 2011.
 2. 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 DPIPW coastline are recorded as Non forest.
 3. '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.
 4. Permanent Timber Production land as defined under the *Forest Management Act, 2013*. This includes approximately 400,000 hectares of Future Reserve Land.

sustaining BIODIVERSITY AND HABITAT

2.2 Area of MDC special management zones on land available for wood production¹ on PTPZ land

| Special Value | Area (ha) |
|------------------------|-----------|
| Biodiversity | 24,280 |
| Cultural heritage | 10,580 |
| Geoconservation values | 43,050 |
| Landscape | 43,190 |

Notes:

1. Area with special values reduced from 2012/13 reflecting transfer of lands to DPIPW in accordance with legislative requirements.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.1 Wood production

| Source | Product | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|---|---|------------------|------------------|------------------|------------------|------------------|
| High quality sawlog (from native forest) | Appearance Grade Sawlog Cat 1 & 3 (m ³) | 193,179 | 179,399 | 99,789 | 109,198 | 114,054 |
| | Construction Grade Sawlog Cat 1 & 3 (m ³) | 12,026 | 10,333 | 7,817 | 10,987 | 13,123 |
| | Sliced Veneer Grade (m ³) | 5,117 | 6,787 | 2,340 | 747 | 1,082 |
| | Total | 210,322 | 196,519 | 109,946 | 120,932 | 128,259 |
| Native forest products | Native forest Sawlog Cat. 2 & 8 (m ³) | 37,897 | 48,532 | 42,011 | 37,531 | 39,936 |
| | Native forest Posts & poles (units) | 6,672 | 6,090 | 4,339 | 2,302 | 4,584 |
| | Native forest high grade domestic peeler (tonnes) | 224,432 | 318,597 | 372,466 | 142,722 | 163,147 |
| | Native forest low grade export peeler (tonnes) | 74,669 | 112,795 | 157,321 | 89,156 | 17,470 |
| | Native forest pulpwood (tonnes) | 1,388,986 | 1,376,553 | 315,037 | 363,409 | 643,175 |
| | Firewood (m ³) | 49,943 | 20,117 | 10,935 | 10,173 | 9,686 |
| | Total | 1,782,599 | 1,882,684 | 902,109 | 645,293 | 877,997 |
| Hardwood plantation | Plantation Eucalypt Sawlog (tonnes) | 0 | 138 | 0 | 0 | 0 |
| | Plantation pulpwood (tonnes) | 179,495 | 171,205 | 61,303 | 144,106 | 261,874 |
| | Total | 179,495 | 171,343 | 61,303 | 144,106 | 261,874 |
| Softwood plantation | Softwood sawlogs | 63,281 | 100,724 | 36,196 | 19,831 | 26,761 |
| | Softwood pulpwood | 193,583 | 244,380 | 255,895 | 99,583 | 69,595 |
| | Total | 256,864 | 345,104 | 292,091 | 119,414 | 96,356 |
| Special timbers | Special timbers | 12,879 | 15,142 | 12,953 | 10,712 | 9,199 |
| Other products | (e.g. bark, sawdust) | 2,909 | 3,086 | 5,372 | 19,216 | 12,324 |
| Grand Total (tonnes) | | 2,445,068 | 2,613,878 | 1,383,775 | 1,059,673 | 1,386,010 |

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.
- Softwood volumes include volumes produced by private growers on Permanent Timber Production Zone land where Forestry Tasmania receives stumpage royalties.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.2 Merchantable residue assessment summary

| Year | Number of coupes audited | Mean residues (m ³ /ha) | Median residues (m ³ /ha) |
|---------|--------------------------|------------------------------------|--------------------------------------|
| 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 |
| 2013/14 | 39 | 4.4 | 3.23 |

3.3 Native forest harvesting and regeneration summary (hectares)

| Native forest | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|---|--------------|---------------|--------------|--------------|--------------|
| Area clearfelled | 3,460 | 3,360 | 1,010 | 2,190 | 1,020 |
| Area of partial harvesting ¹ | 5,070 | 6,980 | 1,540 | 2,010 | 1,350 |
| Total area harvested⁴ | 8,500 | 10,300 | 2,500 | 4,200 | 2,380 |
| Area regenerated ^{2,3} | 9,200 | 8,100 | 4,400 | 3,500 | 4,820 |

Notes:

1. Excludes thinning.
2. Regeneration treatments are often undertaken in the year following the year in which harvesting was completed.
3. Refer to Table 3.6 for summary of regeneration success monitoring.
4. Totals are the rounded actual totals.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.4 Plantation area (hectares)

| SW: softwood HW: hardwood ¹ Ownership | Net area of plantation | | FT equity ⁶ | |
|---|---------------------------|---------------|------------------------|---------------|
| | SW | HW | SW | HW |
| Forestry Tasmania (FT) plantation on PTPZ land ¹ | 2,836 | 32,093 | 2,832 | 32,058 |
| FT joint venture plantation on PTPZ land ^{1,2} | 7,512 | 7,109 | 7,512 | 7,109 |
| FT joint venture plantation on private land | 98 | 197 | 98 | 197 |
| Tassie Trees Trust plantation on PTPZ land ³ | 305 | 1,293 | 305 | 1,293 |
| FT plantation on private land | 0 | 756 | 0 | 756 |
| Private plantation on PTPZ land ⁴ | 42,510 | 16,640 | 0 | 0 |
| Total 2013/14 | 53,262 | 58,088 | 10,748 | 41,413 |
| (Total 2012/13) ⁵ | 53,034 | 55,762 | 11,835 | 41,357 |

Notes:

- Figures exclude plantation areas clearfelled but not yet re-planted.
 - The majority of mixed hardwood/softwood plantations are reported as hardwood.
1. Includes small areas of plantations on other Crown land (BMTA).
 2. Includes softwood plantations jointly owned with Norske-Skog, for which data is supplied by Norske-Skog as at 1st June 2014.
 3. Tassie Trees Trust plantations are mainly jointly-owned with private growers, but include small proportions owned solely by FT.
 4. Includes softwood plantations which are owned by New Forests P/L, for which data is supplied by Timberlands Limited as at 30th June 2014.
 5. Figures in the Total rows are not the sum of the columns but the rounded actual totals.
 6. Includes the total area of plantation in which FT has a financial equity in the trees.

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.5 Plantation established on previously cleared native forest (i.e. where harvesting was initiated prior to 31/12/2006) (hectares)

| State forest ¹ | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|--|---------|---------|-----------------|---------|---------|
| Annual conversion | 702 | 32 | 10 ³ | 0 | 0 |
| Cumulative NF converted since 1996 | 49,220 | 49,250 | 49,320 | 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.

3.6 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 | | 14 | 846 | 767 | 94 | 1,721 |
| Wet eucalypt ¹ | | 54 | 78 | 1,488 | 653 | 2,273 |
| High altitude <i>E. delegatensis</i> ¹ | | 0 | 42 | 2,649 | 728 | 3,420 |
| Fenced intensive blackwood ¹ | | 0 | 0 | 0 | 0 | 0 |
| Swamp blackwood ² | | 0 | 0 | 0 | 0 | 0 |
| Rainforest ² | | 0 | 0 | 0 | 0 | 0 |
| Huon pine forest ² | | 0 | 0 | 0 | 0 | 0 |
| Total | | 68 | 966 | 4,904 | 1,476 | 7,414 |
| | | | | % Area met standard | | 97% |

Notes:

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

sustaining JOBS FOR CURRENT AND FUTURE GENERATIONS

3.7 Special timbers sawlog and craftwood production (m³)

| | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|------------------------|---------------|---------------|---------------|---------------|--------------|
| Blackheart Sassafras | 90 | 277 | 109 | 221 | 174 |
| Blackwood | 7,962 | 11,259 | 11,201 | 9,178 | 8,124 |
| Celery Top Pine | 882 | 2,181 | 305 | 158 | 552 |
| Eucalypt/Mixed Species | 2,883 | 534 | 267 | 99 | 48 |
| Huon Pine | 423 | 613 | 637 | 460 | 0 |
| King Billy Pine | 3 | 0 | 0 | 0 | 0 |
| Myrtle | 518 | 250 | 283 | 543 | 30 |
| Silver Wattle | 92 | 19 | 94 | 17 | 85 |
| White Sassafras | 34 | 9 | 42 | 36 | 44 |
| Craft Wood | - | - | - | - | 142 |
| Total | 12,887 | 15,142 | 12,938 | 10,712 | 9,199 |

Note:

- Only includes special species grown in native forests.

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

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

| Eucalyptus plantations: | 2009/10 | | 2010/11 | | 2011/12 | | 2012/13 | | 2013/14 | |
|----------------------------|----------|--------|----------|--------|----------|--------|----------|--------|--------------------|------------------|
| | Moderate | Severe | Moderate | Severe | Moderate | Severe | Moderate | Severe | Moderate | Severe |
| Soil fertility/site issues | 267 | 1,672 | 305 | 1,126 | 201 | 600 | 15 | 984 | 52 | 529 |
| Insect damage | 2,954 | 158 | 2,596 | 794 | 2,774 | 238 | 4,479 | 1,117 | 3,866 ³ | 967 ³ |
| Multiple causes | 150 | 1,078 | 832 | 2,238 | 787 | 3,728 | 873 | 1,844 | 274 | 688 ² |
| Climate / environmental | 309 | 303 | 307 | 390 | 178 | 41 | 0 | 83 | 101 | 51 |
| Unknown | 49 | 59 | 44 | 139 | 68 | 436 | 0 | 45 | 43 | 457 ¹ |
| Silvicultural | 0 | 25 | 32 | 135 | 0 | 42 | 0 | 24 | 0 | 88 |
| Mammal damage | 10 | 8 | 0 | 7 | 0 | 142 | 72 | 0 | 0 | 88 |
| Fungal diseases | 268 | 0 | 1,057 | 909 | 115 | 102 | 0 | 0.1 | 43 | 0 |
| Weeds | 0.5 | 19 | 31 | 2 | 0 | 52 | 19 | 9 | 27 | 1 |

Notes:

1. The severe damage of unknown cause was primarily due to an emerging problem in mid rotation Eucalyptus globulus plantations. This is currently under investigation.
2. The continuing decrease in the "Multiple causes" category reflects the successful remediation of poor crown density caused by an interaction of leaf beetle and fungal defoliation, primarily in the northeast highlands.
3. This year's surveillance incorporated a proportion of private plantations on Permanent Timber Production Zone land. Around 27% of the area of insect damage was in these plantations including 31% of the severe damage. If these plantations are removed 2,849 ha of moderate damage and 665 ha of severe damage was recorded.

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

4.2 Leaf beetle IPM system results

| Leaf Beetle IPM System | 2009/10 | 2010/11 ¹ | 2011/12 ¹ | 2012/13 | 2013/14 |
|---|---------|----------------------|----------------------|--------------------|--------------------|
| Area monitored (ha) | 25,690 | 28,912 | 19,333 | 14,530 | 13,454 |
| Area monitored that is above threshold (ha) | 7,713 | 9,571 | 3,525 | 6,137 ² | 1,543 ³ |
| Area monitored above threshold treated with alpha-cypermethrin (ha) | 5,939 | 5,576 | 2,361 | 4,741 | 887 |
| Area monitored above threshold treated with spinosad (ha) | 0 | 208 | 172 | 0 | 0 |
| Total area treated (ha) | 5,939 | 5,784 | 2,533 | 4,741 | 1,402 ⁴ |
| Area monitored above threshold-natural controls (ha) | 1,269 | 1,313 | 892 | 341 | 0 |
| Area monitored above threshold not treated (ha) | 505 | 2,786 | 992 | 1,396 | 696 |
| % monitored area sprayed | 23% | 20% | 13% | 33% | 10% |
| Proportion area sprayed with spinosad: cypermethrin | 0.00 | 0.04 | 0.07 | 0 | 0 |

Notes:

1. Results for years prior to 2011/12 also included Gunns Lease Project plantations on State forest that were managed for leaf beetles concurrently with Forestry Tasmania plantations.
2. The population threshold for initiating control operations was lowered to 'population-present' for 2,719 ha of plantations on high altitude sites in northern Tasmania that were suffering from chronically thin crowns.
3. While the threshold for chronically thin crowned coupes in high altitude sites was lowered, the threshold for initiating control operations on the majority of the estate was raised, in order to concentrate the protection effort over the most vulnerable or damaged coupes, and reduce insecticide use overall.
4. Total includes 442 ha that was sprayed without the insect population having reached threshold. Spraying is permitted in coupes where the insect population is below-threshold if they are in close proximity to over-threshold coupes and it is deemed necessary as part of risk management to control the insect population.

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

4.3 Non-chemical browsing control summary

| Treatment Type | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|---|---------|---------|---------|---------|---------|
| Number of control operations (number of coupes) | 411 | 402 | 259 | 241 | 296 |
| Number of coupes monitored | 489 | 420 | 433 | 469 | 334 |
| Length of fencing (km) | 17 | 1.4 | 18.7 | 19.9 | 0 |
| Tree guards (number of coupes) | 2 | 4 | 3 | 2 | 0 |
| Stockings/sleeves (ha) | 180 | 143 | 155 | 54 | 76 |

4.4 Pesticide usage in forestry field operations

| Active ingredient | Type | kg applied |
|---------------------|-------------|----------------|
| Glyphosate | Herbicide | 1,183.1 |
| Triclopyr | Herbicide | 44.3 |
| Alpha cypermethrin | Insecticide | 32.1 |
| Clopyralid | Herbicide | 21.7 |
| Halixylop - methyl | Herbicide | 12.2 |
| Mesulfuron methyl | Herbicide | 7.9 |
| Terbacil | Herbicide | 7.0 |
| Sulfometuron methyl | Herbicide | 0.3 |
| Picloram | Herbicide | 0.2 |
| Aminopyralid | Herbicide | 0.1 |
| Hexazinone | Herbicide | <0.1 |
| Total active | | 1,309.0 |

4.5 Pesticide usage at FT nursery

| Active ingredient | Type | kg applied |
|------------------------|-----------|-------------|
| Copper Hydroxide | Fungicide | 1.33 |
| Copper Oxide | Fungicide | 0.30 |
| Dicamba | Herbicide | 0.90 |
| Dichlobenil | Herbicide | 0.001 |
| Didecyl Dimethyl NH4Cl | Fungicide | 0.41 |
| Diuron | Herbicide | 1.00 |
| Fenhexamid | Fungicide | 0.92 |
| Glyphosate | Herbicide | 17.70 |
| Iprodione | Fungicide | 0.91 |
| Liquid hydrocarbons | Fungicide | 1.21 |
| Mancozeb | Fungicide | 2.63 |
| MCPA | Herbicide | 4.35 |
| Propamocarb | Fungicide | 2.40 |
| Thiram | Fungicide | 1.44 |
| Total active | | 47.1 |

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

4.6 Fertiliser usage on forestry operations

| | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|----------------------|--|---------------|-------------|-------------|-------------|
| Nutrient Type | Amount of active ingredient (t) | | | | |
| Nitrogen | 567 | 315.9 | 47.6 | 18.2 | 56.9 |
| Phosphorus | 148.3 | 78.6 | 15.3 | 7.9 | 3.1 |
| Potassium | 0.03 | 0.65 | 0.90 | 0.5 | 0.5 |
| Copper | 1.6 | 0.03 | 0.00 | 0 | 0 |
| Total | 716.93 | 395.18 | 63.8 | 26.6 | 60.5 |
| Area treated (ha) | 8,543 | 5,589 | 1,589 | 517 | 1,172 |

4.7 Fertiliser usage at FT nursery & seed orchards

| | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|----------------------|---|----------------|--------------|--------------|------------|
| Nutrient Type | Amount of active ingredient (kg) | | | | |
| Nitrogen | 718.7 | 543.9 | 540.1 | 91.0 | 100.1 |
| Phosphorus | 499.8 | 317.4 | 29.4 | 25.0 | 35.3 |
| Potassium | 180.5 | 308.4 | 112.5 | 50.9 | 61.8 |
| Calcium | 103.4 | 76.7 | 26.5 | 25.8 | 42.8 |
| Total | 1,502.4 | 1,246.4 | 708.5 | 192.7 | 240 |

4.8 Water testing associated with pesticide spray operations

| | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|---|----------|----------|----------|----------|----------|
| Number of operations sampled ¹ | - | - | - | 18 | 9 |
| Number of samples taken associated with chemical spraying operations | 99 | 81 | 56 | 51 | 26 |
| Number of detections and percentage of no chemical detections against ADWG Health Value ² for chemical residues ³ | (0) 100% | (1) 100% | (0) 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 DPIPW testing laboratory.

sustaining CARBON STORES, CLEAN AIR, WATER AND HEALTHY FORESTS

4.9 Summary of energy usage and resulting CO₂-equivalent emissions as a result of fuel used for transport and electricity usage within our offices

| Source | Usage | CO ₂ -e ¹ |
|--------------|--------------------------|---------------------------------|
| Unleaded | 38,303 litres | 91,173 |
| Diesel | 577,047 litres | 1,556,954 |
| Oil | 7,772 litres | 22,697 |
| Electricity | 1,407,425 kilowatt hours | 281,485 |
| Total | | 1,952,309 |

Notes:

1. Calculated with Australian Government Department of Climate Change, 2014. National Greenhouse Accounts Factors, www.climatechange.gov.au

4.10 Air quality particulate monitoring stations summary⁴

| Station type | 2009/10 | | 2010/11 | | 2011/12 | | 2012/13 | | 2013/14 | |
|---|----------|----------------|----------|----------------|----------|----------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | Exceeded | FT Contributed | Exceeded | FT Contributed | Exceeded | FT Contributed | Exceeded | FT Contributed | Exceeded | FT Contributed |
| Reference station | 21 | 3 | 14 | 0 | 1 | 0 | Not available ¹ | Not available ¹ | 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 | 90 | 2 | 45 | 1 |

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 March to June 2014 only.

4.11 Smoke complaints issued to EPA

| Year | 2011/12 | 2012/13 | 2013/14 |
|--------------------------------------|---------|---------|---------|
| Number of Complaints received by EPA | 83 | 21 | 11 |
| Contributed to by FT | 42 | 11 | 6 |

sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

5.1 Safety statistics

| | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|---|---------|---------|---------|---------|---------|
| Number of direct employees ¹ | 513 | 424 | 383 | 351 | 295 |
| Number of workers compensation claims | 19 | 19 | 16 | 15 | 13 |
| % of gross wages spent on claims ² | 0.15 | 0.19 | 0.10 | 0.07 | 0.13 |
| Lost time injury frequency rate (LTIFR) | 8.56 | 9.5 | 5.68 | 4.46 | 5.1 |
| All claims frequency rate | 20.33 | 22.56 | 22.73 | 22.31 | 22.08 |
| Lost time injury severity rate | 14.88 | 10.45 | 6.66 | 1.97 | 5.27 |
| Harvesting contractors LTIFR | 7.37 | 6.9 | 2.82 | 11.60 | 14.33 |

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.

5.2 Forest activity assessments on Permanent Timber Production Zone land

| Activity type | Number of assessments 2013/14 |
|------------------|-------------------------------|
| Commercial | 2 |
| Community access | 2 |
| Fire management | 1 |
| Flora collection | 4 |
| Infrastructure | 10 |
| Land management | 6 |
| Leases | 6 |
| Recreation | 27 |
| Research | 16 |

5.3 Summary of Aboriginal cultural heritage surveys

| Year | Number of new sites detected | Number of old sites redetected |
|---------|------------------------------|--------------------------------|
| 2009/10 | 10 | 1 |
| 2010/11 | 5 | 2 |
| 2011/12 | 1 | 2 |
| 2012/13 | 1 | 0 |
| 2013/14 | 0 | 0 |

Note: The figures do not include desktop survey assessments.

5.4 Non-Aboriginal cultural heritage management

| Year | Number of new sites detected | Number of old sites redetected |
|---------|------------------------------|--------------------------------|
| 2009/10 | 91 | 25 |
| 2010/11 | 33 | 12 |
| 2011/12 | 16 | 14 |
| 2012/13 | 20 | 6 |
| 2013/14 | 4 | 2 |

sustaining SAFETY, COMMUNITY ACCESS AND HERITAGE

5.5 Stakeholder interaction summary

| Stakeholder Groups | Events | Stakeholders |
|--------------------|------------|--------------|
| Community | 258 | 340 |
| Neighbours | 119 | 168 |
| Commercial users | 111 | 76 |
| Environmental | 110 | 116 |
| State | 94 | 162 |
| Recreational | 94 | 99 |
| Industry | 81 | 92 |
| Tourism | 57 | 56 |
| Business | 57 | 78 |
| Scientific | 48 | 95 |
| Local | 46 | 343 |
| Customers | 39 | 149 |
| Aboriginal | 35 | 65 |
| Educational | 23 | 69 |
| Contractors | 21 | 40 |
| Media | 10 | 17 |
| Federal | 6 | 22 |
| Suppliers | 5 | 16 |
| Total | 799 | 1,670 |

Notes:
Does not include routine operational notifications.
Data collection commenced September 2013.

5.6 Corporate sponsorship

| Community Sponsorship | Value (\$) |
|---|----------------|
| Derwent Valley Autumn Festival | 8,000 |
| Timber Communities Australia | 20,000 |
| Australasian Fire and Emergency Service Authorities Council (FFMG Projects) | 5,000 |
| National Foresters Grove | 2,750 |
| Research Funding | |
| University of Tasmania | 10,000 |
| AFPA (Fuel Reduction Study) | 3,000 |
| University of Tasmania (Warra) | 2,000 |
| Contributions to Forest Education | |
| Forest Education Foundation | 204,000 |
| District Sponsorships | |
| Riverside Lions (Magic Show) | 100 |
| Rotary Club of Central Launceston (Circus Quirkus) | 100 |
| TOTAL | 254,950 |

Note: Figures are GST exclusive

sustaining SCIENCE-BASED STEWARDSHIP

6.1 Summary of compliance with Forest Practices Act 1985

| | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|---|---------------|---------------|---------------|----------|----------|
| Number of FPPs certified | Not collected | Not collected | Not collected | 137 | 208 |
| Written S41 notices issued to FT | 0(0%) | 0(0%) | 2 | 2 | 0 |
| S41 notices issued to contractors on State forest | 1 (0.04%) | 0(0%) | 2 | 2 | 2 |
| Fines or prosecutions issued to FT by Forest Practices Authority | 1(\$1500) | 1 (\$3,000) | 0 | 0 | 1(\$500) |
| 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.

2. Environmental Management and Pollution Control Act, 1994.

6.2 Summary of compliance with Work Health and Safety Act 2012

| Year | 2013/14 |
|------------------------------|---------|
| S.191 Improvement Notice | 1 |
| S.195 Prohibition Notice | 1 |
| S.198 Non-disturbance Notice | 0 |

6.3 Audits of Sustainable Forest Management Systems

| Year | Internal audit program | External audit program |
|---------|------------------------|------------------------|
| | Number of audits | Number of audits |
| 2009/10 | 5 | 1 |
| 2010/11 | 9 | 1 |
| 2011/12 | 8 | 1 |
| 2012/13 | 6 | 1 |
| 2013/14 | 7 | 2 |

6.4 Research expenditure summary

| | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 |
|--|---------|---------|---------|---------|---------|
| Total spent on research (\$'000) | 4,060 | 4,030 | 3,013 | 2,562 | 2,184 |
| Net operating costs (\$'000) | 136,143 | 146,677 | 131,566 | 98,275 | 145,694 |
| As a % of forest management operational cost | 3.0% | 2.7% | 2.3% | 2.6% | 1.5% |
| Number of staff employed | 32 | 30 | 31 | 19 | 17 |