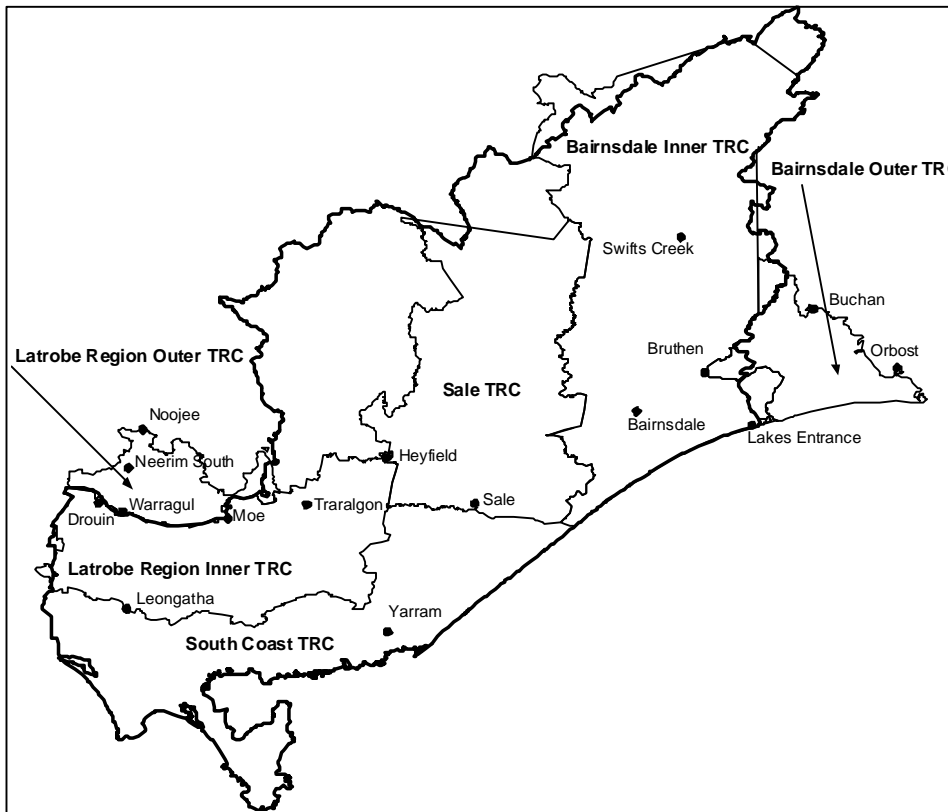


## GIPPSLAND REGIONAL FOREST AGREEMENT (RFA) SOCIAL IMPACT ANALYSIS

As noted earlier in Chapter 4, within the Gippsland region distinct areas or Town Resource Clusters (TRCs) were developed and linked to Forest Management Areas (FMAs).

Within the Gippsland RFA region the four TRCs identified were the Latrobe Region (inner) TRC, South Coast TRC, Sale TRC and Bairnsdale (inner) TRC. As several sawmills located in towns outside, but adjacent to the Gippsland RFA region, also receive resource from the Central Gippsland and Tambo FMAs (including 11 Blocks from Wodonga FMA) two other TRCs were also identified outside the Gippsland RFA region. These are the Latrobe Region (outer) TRC and the Bairnsdale (outer) TRC. The six TRCs are shown in Figure 4.B.

**Figure 4.B Town Resource Clusters**



### Changes in Mill Employment

The TRCs provide a mechanism to depict potential sub-regional impacts on employment, using the figures reported on a whole of region basis in Tables 4.6a and 4.6b (NB the m<sup>3</sup> volumes in Tables 4.6a and 4.6b should be expressed as '000m<sup>3</sup>). However, it needs to be recognised that the results are strongly influenced by the assumptions made in modelling the potential resource changes, which reflect only one of the possible ways of implementing a resource reduction if the Draft CAR reserve system were to be adopted.

As discussed earlier, it has been assumed that any change in resource availability will be evenly distributed across all mills receiving wood from the Central Gippsland and Tambo FMAs. However, actual changes would be determined by individual enterprise decisions and other economic factors affecting individual mills over time. For example it is also possible that a reduction in supply could be accommodated by rationalisation of mills, which would then result in significantly different impacts across TRCs than a pro-rata reduction for each. Under a scenario where mill closure(s) were used to implement a reduction in resource availability the impacts would be more pronounced where a closure occurred in a specific TRC than under this analysis. Conversely, under a mill closure scenario, the impacts would be less severe in TRCs where there were no mill closures or evenly distributed resource reductions. This may well be the case given that the scenarios examined tend to have greater implications for mixed species resources than ash.

Table 4.7 shows for each TRC the baseline and the potential changes in mill employment for two periods (1999-2008 and 2009-2018) against the scenarios reported in Tables 4.6a and 4.6b. The results for the Sale and South Coast TRCs are not reported as no mills are located in these areas.

**Table 4.7 Changes in Mill Employment by TRC against Baseline (Scenario 1) for Scenarios 2, 3 and 4**

	1999-2008	2009-2018
<b>1. Baseline</b>		
Latrobe (outer)	152	158
Latrobe (inner)	194	199
Bairnsdale (inner)	102	109
Bairnsdale (outer)	28	28
Outside RFA region	125	133
<b>Total</b>	<b>601</b>	<b>627</b>
Employment numbers for Scenarios 2,3&4 are reported as changes against the Baseline.		
<b>2. Draft CAR reserve</b>		
Latrobe (outer)	-17	-4
Latrobe (inner)	-23	-15
Bairnsdale (inner)	0	-7
Bairnsdale (outer)	0	0
Outside RFA region	-6	-3
<b>Total</b>	<b>-46</b>	<b>-29</b>
<b>3. Baseline and value-adding</b>		
Latrobe (outer)	0	1
Latrobe (inner)	-21	-20
Bairnsdale (inner)	0	0
Bairnsdale (outer)	0	0
Outside RFA region	20	22
<b>Total</b>	<b>-1</b>	<b>3</b>
<b>4. Draft CAR reserve and value-adding</b>		
Latrobe (outer)	-9	-4
Latrobe (inner)	-38	-29
Bairnsdale (inner)	0	-5
Bairnsdale (outer)	0	0
Outside RFA region	14	17
<b>Total</b>	<b>-33</b>	<b>-21</b>

Note: "Outside RFA region" includes all mills sourcing wood from the region but located outside the Gippsland TRCs. Due to rounding differences these figures vary slightly to the figures in Tables 4.6a and 4.6b.

Source: ABARE (1999)

Prepared by: EBC (2000).

Earlier in Chapter 4 it was noted that differences in employment levels between the Baseline and scenarios 2, 3 and 4 during the second 10 year period (2009-2018) need to be considered as potential employment foregone rather than actual impacts on employment. This is because the "Baseline" employment level for the second period has been projected by including the employment effect of potential resource increases in that period.

Under an evenly distributed resource impact, a comparison of the "Draft CAR reserve" scenario with the "Baseline" scenario shows a greater impact in mill employment within the Latrobe (inner) TRC, with some impact in the Latrobe (outer) TRC and outside the RFA region. This effect reflects the concentration of mill employment in the Latrobe (inner) TRC.

Under the "Baseline and value-adding" scenario there appears to be employment gain outside the Gippsland region, with potential employment losses within the Latrobe (inner) TRC. This effectively constitutes a shift of employment in processing as part of the modelled value-adding changes. The net result of the value-adding intentions across the region, as described earlier, are marginal in terms of direct employment because of the existing high level of kilns and further processing facilities already there. The effect on TRCs would vary depending upon the actual location and configuration of future additional value-adding facilities.

The "Draft CAR reserve and value-adding" scenario integrates the impacts of establishing the Draft CAR reserve system in conjunction with implementing the value-adding intentions of the industry. Particular care needs to be taken in adopting these figures as fact given the assumption of an evenly distributed resource reduction and the potential for industry's response to any supply reduction to include changes to value-adding plans.

Nevertheless, the analysis provides a demonstration of the potential use of the economic and social modelling which can be used to examine more specific industry responses to changes in available resource. The first stage analysis can then be used to examine potential flow-on implications for regional communities.

The following analysis and descriptions are provided to illustrate the implications of adopting an evenly distributed reduction in available volume across all mills. It is based on a review of timber industry employment and population characteristics for the TRCs of Latrobe (inner), Latrobe (outer) and Bairnsdale (inner) undertaken as part of the social assessment for the CRA. While the following tables are based on surveys across all timber processing industries in the region, the trends and conclusions are relevant to the hardwood sawmilling sector.

### **Latrobe (inner) TRC**

Under each of the scenarios described in Table 4.7 an evenly distributed reduction would have the highest relative impact on the Latrobe (inner) TRC.

Mills located within the Latrobe (inner) TRC draw the highest percentage of their resource from the Central Gippsland FMA, and it is changes in resource supply and availability from this FMA which primarily affects mill employment within the Latrobe (inner) TRC. While the potential reduction in resource as a percentage is greater in the Tambo FMA, the higher level of employment in the Latrobe (inner)

TRC means that a reduction in Central Gippsland FMA has a greater employment impact in absolute terms than in other TRCs.

Table 4.8 shows the towns of residence for mill employees within the Latrobe (inner) TRC. Although Traralgon, Heyfield and Morwell are the most common residential locations of mill employees within this TRC, what is also apparent from Table 4.8 is that approximately one third of mill employees live in small towns located throughout the TRC. While changes in mill employment within this TRC (under an evenly distributed resource reduction) would be likely to impact on the towns of Traralgon, Heyfield and Morwell, there would also be potential for several smaller towns within the TRC to be impacted by changes in mill employment.

**Table 4.8 Mill Employees Place of Residence: Latrobe (inner) TRC**

<b>Town</b>	<b>Percent</b>
Traralgon	43.6
Heyfield	12.9
Morwell	10.2
Hazelwood North	3.2
Moe	2.8
Tyers	2.8
Glengarry	2.4
Other towns with less than 2% (33 towns)	22.1
<b>Total</b>	<b>100.0</b>

Table 4.9 shows the town locations from which mill employees within the Latrobe (inner) TRC purchase household goods and services. The towns of Traralgon, Morwell and Heyfield are primary locations from which goods and services are sourced within this TRC, suggesting that changes in mill employment and incomes within this TRC could have indirect impacts on these three towns.

**Table 4.9 Mill Employees Source of Household Expenditure: Latrobe (inner) TRC**

<b>Town</b>	<b>Percent</b>
Traralgon	50.2
Morwell	19.8
Heyfield	8.2
Sale	4.3
Moe	4.1
Melbourne	2.0
Other towns with less than 2% (27)	11.4
<b>Total</b>	<b>100.0</b>

In addition to the effect of changes in mill employment, there may also be further implications from changes to business expenditure by mills on goods and services. The town locations from which mills within the Latrobe (inner) TRC source goods and services are shown in Table 4.10. In addition to Melbourne, the towns of Traralgon, Leongatha and Heyfield are the primary locations from which mills within this TRC source goods and services. Any change to expenditure by mills within this TRC is likely to have indirect impacts on other businesses and industries within these towns.

**Table 4.10 Location of Timber Processing Industry Expenditure: Latrobe (inner) TRC**

Goods and services	Catchments		
	Primary	Secondary	Tertiary
Frequent business expenses A	Traralgon	Leongatha	Warragul
Other business expenses B	Melbourne	Leongatha	Traralgon
Repairs and maintenance	Heyfield	Leongatha*	Traralgon*
Major equipment purchases	Melbourne	Traralgon	Morwell
Building or land purchases/extensions	Leongatha	Heyfield*	Traralgon*
Log costs (royalties and levies)	Traralgon	Melbourne	Heyfield

\*Indicates equal importance to the secondary and tertiary catchment locations.

Note: Frequent business expenses A includes frequent business expenses such as power, fuel, freight, banking and office supplies. Other business expenses B includes less frequent expenses such as accounting, legal expenses, insurance, advertising and printing.

### Latrobe (outer) TRC

After the Latrobe (inner) TRC, the Latrobe (outer) TRC would be most affected by the "Draft CAR reserve" and "Draft CAR reserve and value-adding" scenarios. Employment impact under both these scenarios would be greater in the first ten-year period than in the longer term. Employment remains stable under the "Base and value-adding" scenario.

Mills located within the Latrobe (outer) TRC also draw the highest percentage of their resource from the Central Gippsland FMA, and it is changes in resource supply and availability from this FMA which primarily affects mill employment within the Latrobe (outer) TRC.

Table 4.11 shows the towns of residence for mill employees within the Latrobe (outer) TRC. The most common residential locations for the majority of mill employees within this TRC are Warragul, Beaconsfield, Buln Buln and Longwarry.

**Table 4.11 Mill Employees Place of Residence: Latrobe (outer) TRC**

Town	Percent
Warragul	26.1
Beaconsfield	14.5
Buln Buln	14.5
Longwarry	14.5
Noojee	8.7
Drouin	7.1
Erica	4.1
Moe	4.1
Rawson	2.9
Neerim South	1.7
Traralgon	1.7
Total	100.0

Table 4.12 shows the town locations from which mill employees within the Latrobe (outer) TRC purchase household goods and services. The town of Warragul is clearly the primary location from which employees source household goods and services, suggesting any change to employment and employee incomes within this TRC would impact on the town of Warragul through changes in expenditure on household goods and services.

**Table 4.12 Mill Employees Source of Household Expenditure: Latrobe (outer) TRC**

<b>Town</b>	<b>Percent</b>
Warragul	82.1
Erica	4.1
Narre Warren	3.3
Neerim South	2.6
Traralgon	2.4
Rokeby	2.0
Noojee	1.7
Other towns	1.9
Total	100.0

Mills within the Latrobe (outer) TRC that are affected by the three scenarios may also have changes to mill expenditure on goods and services. The town locations from which mills within the Latrobe (outer) TRC source goods and services are shown in Table 4.13. In addition to Melbourne, the towns of Warragul and to a lesser extent Drouin, Traralgon and Moe are most likely to be impacted by any changes in industry expenditure by mills within the Latrobe (outer) TRC.

**Table 4.13 Location of Timber Processing Industry Expenditure: Latrobe (outer) TRC**

	<b>Catchments</b>		
<b>Goods and services</b>	<b>Primary</b>	<b>Secondary</b>	<b>Tertiary</b>
Frequent business expenses A	Warragul	Moe	Drouin
Other business expenses B	Melbourne	Warragul	Drouin
Repairs and maintenance	Warragul	Moe*	Drouin*
Major equipment purchases	Warragul	Melbourne*	Traralgon*
Building or land purchases/extensions	Warragul	Trafalgar*	Drouin*
Log costs (royalties and levies)	Traralgon	Noojee	Warragul

\*Indicates equal importance to the secondary and tertiary catchment locations.

Note: Frequent business expenses A includes frequent business expenses such as power, fuel, freight, banking and office supplies. Other business expenses B includes less frequent expenses such as accounting, legal expenses, insurance, advertising and printing.

### **Bairnsdale (inner) TRC**

While the Bairnsdale (inner) TRC has no predicted short-term employment loss under the "Draft CAR reserve" and "Draft CAR reserve and value-adding" scenarios, the TRC may forego some employment potential in the longer term. However, as discussed earlier, these scenarios assume that any change in resource availability will be evenly distributed across all mills receiving wood from the Central Gippsland and Tambo FMA. The impacts may vary if a mill closure occurs in a specific TRC. Employment remains stable under the "Base and value-adding" scenario.

Mills located within the Bairnsdale (inner) TRC draw the highest percentage of their resource from the Tambo FMAs, and changes in resource supply and availability from this FMA which primarily affects mill employment within the Bairnsdale (inner) TRC.

Table 4.14 shows the towns of residence for mill employees within the Bairnsdale (inner) TRC. The most common residential locations for the majority of mill employees within this TRC are Bairnsdale and Bruthen.

**Table 4.14 Mill Employees Place of Residence: Bairnsdale (inner) TRC**

<b>Town</b>	<b>Percent</b>
Bairnsdale	62.0
Bruthen	22.0
Swifts Creek	16.0
Total	100.0

*Note:* Since this data was collected the mill at Swifts Creek is no longer operating and as such there may be fewer mill employees resident at Swifts Creek. The Victorian Government has indicated its intention to reopen the sawmill.

Table 4.15 shows the town locations from which mill employees within the Bairnsdale (inner) TRC purchase household goods and services. The town of Bairnsdale is the primary location from which employees source household goods and services, suggesting any change to employment and employee incomes within this TRC would impact most in Bairnsdale.

**Table 4.15 Mill Employees Source of Household Expenditure: Bairnsdale (inner) TRC**

<b>Town</b>	<b>Percent</b>
Bairnsdale	41.0
Swifts Creek	21.5
Mt Taylor	21.0
Ensay North	16.5
Total	100.0

*Note:* Since this data was collected the mill at Swifts Creek is no longer operating and as such there may be significantly less expenditure on household goods and services at Swifts Creek. The Victorian Government has indicated its intention to reopen the sawmill.

Mills within the Bairnsdale (inner) TRC that are affected by the scenarios may also have changes to mill expenditure on goods and services. The town locations from which mills within the Bairnsdale (inner) TRC source goods and services are shown in Table 4.16. The towns of Bairnsdale and to a lesser extent Bruthen are most likely to be impacted by any changes in industry expenditure by mills within the Bairnsdale (inner) TRC.

**Table 4.16 Location of Timber Processing Industry Expenditure**

<b>Goods and services</b>	<b>Primary</b>	<b>Catchments</b>	
		<b>Secondary</b>	<b>Tertiary</b>
Frequent business expenses A	Bairnsdale	Bruthen	
Other business expenses B	Bairnsdale	Melbourne	Morwell
Repairs and maintenance	Bairnsdale	Bruthen	
Major equipment purchases	Bairnsdale	Bruthen	
Building or land purchases/extensions	Bairnsdale	Bruthen	
Log costs (royalties and levies)	Bairnsdale		

*Note:* Frequent business expenses A includes frequent business expenses such as power, fuel, freight, banking and office supplies. Other business expenses B includes less frequent expenses such as accounting, legal expenses, insurance, advertising and printing.

## UNEMPLOYMENT RATES AND TOWNS WITHIN TRCS

Table 4.17 shows the unemployment rate for the general population and the unemployment rate for males 15-64 years of age for specific towns located within the three TRCs in which employment may be affected if an evenly distributed resource reduction was applied. The unemployment rate is one indicator of how sensitive communities are to employment changes in the timber industry. In Table 4.17, towns in which mill employees are resident are shown in italics.

Within the Latrobe (inner) TRC all towns in which the majority of mill employees are resident (*Morwell*, *Heyfield* and *Traralgon*) show unemployment rates for the population and for males 15-64 years to be above the unemployment rates found in the Gippsland region and rural Victoria. This suggests these towns to be sensitive to significant direct changes in timber industry employment.

In contrast, and with the exception of *Noojee*, towns in the Latrobe (outer) TRC in which employees reside have unemployment rates that are lower than that found in the Gippsland region and rural Victoria. This suggests that relative to the Latrobe (inner) TRC, these towns are more robust in relation to employment and better able to withstand changes in timber employment within the timber industry.

In the Bairnsdale (inner) TRC, both *Bairnsdale* and *Bruthen* which are the main towns of residence for mill employees have unemployment rates which exceed those for the Gippsland region and rural Victoria. This again suggests these towns to be sensitive to significant direct changes in timber industry employment.

**Table 4.17 Unemployment Rates for Towns within TRCs**

	Unemployment Rate	Unemployment Rate (Males 15-64 years)
<b>Latrobe (inner) TRC</b>		
<i>Morwell</i>	19.71	22.23
<i>Heyfield</i>	14.07	15.38
<i>Traralgon</i>	12.55	13.74
Longwarry	10.45	9.02
Moe	20.58	23.68
Drouin	12.35	11.64
Leongatha	6.80	6.27
<b>Latrobe (outer) TRC</b>		
<i>Noojee</i>	21.95	24.00
<i>Warragul</i>	9.18	10.10
<i>Buln Buln</i>	5.77	5.69
<i>Beaconsfield</i>	3.65	4.14
Drouin West	10.19	12.78
Neerim South	7.69	7.96
<b>Bairnsdale (inner) TRC</b>		
<i>Bairnsdale</i>	12.72	14.05
<i>Bruthen</i>	25.59	27.61
Lakes Entrance	15.29	18.08
Mt Taylor	7.85	9.43
<b>Gippsland RFA</b>	<b>12.20</b>	<b>13.40</b>
<b>Rural Victoria</b>	<b>10.20</b>	<b>10.80</b>

Note: Towns in italics represent primary towns of residence for mill employees. All unemployment values based on ABS urban centres. Unemployment values for the towns of *Buln Buln*, *Noojee*, *Neerim South*, *Drouin West* and *Mt Taylor* based on the Census Collector Districts (CCD) in which the town is located. Source: EBC (2000).



### **Mill Employee Characteristics**

Table 4.18 shows the employee profile for timber industry employees within the Gippsland region. This profile shows the mean age of employees to be 40 years, with employees having lived in their town of residence for an average of 20 years, and having worked in the timber industry for an average of 11 years with an average of 9 years working for their current employer.

Ninety-six percent of employees surveyed indicated they were in full time employment, with 52 per cent of employees having partners in either full-time or part-time employment.

Fifty-one per cent of employees had an educational level of year 10 or less, with approximately equal proportions currently renting, owning or having a mortgage on their home.

These indicators suggest that employees have strong attachments to community, town and their work environments and that it is likely that many employees if they were to lose their current employment, would seek further employment in the region. The relatively low educational levels, long term employment in the timber industry and the fact that many employees have only worked in this industry sector, may also reflect limited capacity to manage and adjust to significant changes in employment.

### **SUMMARY**

This analysis and discussion provides an indicative assessment of the potential sub-regional (TRC) employment impacts of implementing an evenly distributed reduction in resource availability across all mills sourcing wood from the two FMAs, as well as implementing value-adding proposals by industry. The significance of potential employment changes under the scenarios is examined using community profiles of the TRCs developed through the Social Assessment component of the CRA process. Further specific analysis could be undertaken to examine the implications of alternative scenarios.

**Table 4.18 Timber Industry Employee Profile**

<b>Profile</b>	<b>Value</b>
Mean age of employee (years)	40.1
Per cent males	84.3
Per cent females	15.7
<b>Employment</b>	
Per cent full-time employment	96.1
Per cent part-time employment	3.9
Average number of hours worked per week	20.9
Mean number of years working for current business	9.1
Mean number of years working in current industry sector	11.3
Per cent who have only worked in current industry sector	51.1
Per cent who have moved town to retain employment in industry	17.2
Median number of town moves to retain employment in industry	2.0
<b>Home ownership characteristics</b>	
Mean number of years resident in current town	19.4
Home ownership (per cent)	
Rent home	31.1
Have a mortgage	34.4
Own the home	34.4
<b>Highest level of education (per cent)</b>	
Primary school	6.5
Year 7	2.2
Year 8	4.3
Year 9	4.3
Year 10	33.3
Year 11	20.4
Year 12	10.8
A trade or TAFE certificate	15.1
Degree or diploma	3.2
<b>Marital status (per cent)</b>	
Married or defacto	62.4
Widowed	2.2
Single	24.7
Separated or divorced	10.8
<b>Partners employment characteristics (per cent)</b>	
Full-time	25.0
Part-time	27.1
Not employed	47.9
Per cent with partner employed in same industry as employee	22.4
<b>Family characteristics</b>	
Mean family size	3.0
Family lifecycle age profiles (per cent)	
0–4 years (pre-school)	7.3
5–12 years (primary school)	14.9
13–17 years (high school)	10.1
18–24 years (young singles/couples)	10.6
25–39 years (young/middle families)	24.7
40–49 years (mature families)	19.1
50–64 years (pre-retirement)	12.5
65+ years (elderly)	0.9

*Note:* Sample based on survey responses from 433 employees of timber processing industries. Sample has been aggregated from surveys undertaken as part of the Central Highlands, North East and Gippsland social assessment processes.

*Source:* EBC (1999).