

# Softwood forest industry business needs into the future

A short report for the Murray Region Forestry Hub

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## 1. Introduction

This report is part of a larger project examining the social and economic contribution of the softwood forest industry within the Murray Region Forestry Hub area (Mylek et al. 2023). It examines the challenges experienced by softwood forest businesses in recent years, lessons learnt from these experiences, business innovations, business needs moving forward and how businesses can be supported to achieve these needs.

### Project background

The Murray Region Forestry Hub (MRFH) extends from the NSW South West Slopes region around Gundagai/Tumut, to Mt Buller in Victoria. The region has significant competitive advantages in forestry, including large areas of plantation, integrated transport and processing infrastructure (Schirmer et al. 2018).

The MRFH region was severely impacted by large-scale bushfires during the summer of 2019-2020, with significant impacts on the standing plantation resource, communities, businesses and entire industries. Approximately 44,000 hectares (ha) of softwood plantation in NSW and 6,000 ha in NE Victoria was burnt, around 30% of the log resource in the region (Mylek et al. 2023).

In response to these bushfires, a number of State and Federal Government grants were made available to assist in the additional costs associated with storage and processing of burnt timber to allow for longer processing times, repairing infrastructure such as roads, long-distance haulage of burnt logs to processing facilities or storage sites further away, innovation and diversification for processing facilities, and expansion of nurseries to facilitate the rapid re-planting needs (State Government of Victoria 2020, DAFF 2022, NSW Government 2023). These grants assisted in a successful salvage operation that spanned almost two years and resulted in approximately 42% of the burnt area being successfully salvaged.

During the salvage period and through the second COVID-19 lockdown (financial year 2021/22) the softwood forest industry in the Murray Region Forestry Hub area was a significant contributor to the region's economy and workforce. The industry directly employed 2,189 people dependent on the region and generated a total of \$3,823 million of gross value of output for the region (Mylek et al. 2023).

However, four years after the fires, many businesses have new perspectives on their future business needs, with the immediate needs of salvage logging and replanting shifting to planning for the broader future. This report examines industry needs moving forward, based on interviews with a range of softwood forestry businesses operating in the region.

## 2. Methods

In 2023 a softwood forest business survey was conducted within the MRFH to examine the social and economic contribution of the softwood forest industry (Mylek et al. 2023). Of the 63 businesses estimated to be operating in the industry in the region, 23 businesses completed the survey in full and 16 businesses provided partial information or verbal information by phone. Information for the remaining businesses was estimated based on data provided by those who participated, whose reporting enabled estimation of the volume of activity.

Businesses who participated in the survey were asked if they were willing to be contacted subsequently with a request to participate in an interview to discuss future business needs. A total of 16 businesses agreed to be contacted about the interviews, including plantation managers, harvest and haulage contractors, wood and paper processors, silvicultural contractors and nurseries. Of the 16 businesses contacted, each of which was sent an invitation and up to three reminders, a total of six businesses were interviewed, including:

- Three plantation growing/management businesses
- One harvest and haulage contractor
- Two wood/paper processors

In addition to these six interviews, open-ended responses provided in the main survey by three silvicultural contracting businesses, four plantation managers, four wood and paper processors and three harvest and haulage contractors were analysed. These open-ended questions focused in particular on discussion of labour recruitment challenges, views about usefulness of bushfire recovery funding support received, and other comments about their business and future needs. Insights from these open-ended questions are included in this report.

The interviews were conducted as semi-structured conversations. These conversations were guided by pre-determined questions based on the overarching aims of the study, with opportunity to explore different themes or responses further. Interviews were audio recorded and transcribed. Descriptive codes were used to describe the cases, before responses were analysed into topics and themes. The themes explored are listed below (see Appendix 1 for the full interview guide):

- Overall experiences from the 2019-20 bushfires (Section 3)
- Other challenges experienced in recent years (Section 4)
- Lessons learned and innovative ideas generated as a result of these challenges (Section 5)
- Views about the usefulness of the government grants made available after the bushfires (Section 6)
- Workforce and resourcing needs and challenges (Section 7)
- Views about the future of the softwood forest industry (Section 8)
- Business needs into the future (Section 9)

### 3. Bushfire experiences

While there were significant challenges associated with the impacts from the 2019-20 bushfires for many softwood businesses, a clear sentiment was present in all interviews: one of shared comradery, resilience, strong community ties and established industry networks that enabled a coordinated, efficient and successful salvage operation. The businesses interviewed felt a strong sense of pride in what was achieved by the forest industry as a whole, and particularly in the effort of all staff during and after the bushfires, the willingness of the industry to work together towards a shared goal, and the innovations that came out of the salvage operation.

*“We're all close because we understand the importance of the community. Most of the people involved sit on different committees. Whether it be on the Softwood Working Group or the Murray Region Forestry Hub or the local Forest Industry Council. We all talk. We all have really good networking. We all have really good professional relationships. So it wasn't hard at all. And we all understood the importance of what this meant”* Business 4.

The 2019-20 bushfires resulted in a successful salvage operation with large volumes of timber salvaged over a longer period of time typically observed for salvage operations. While the salvage operation was a success, it was challenging, particularly the scaling-up of harvest and haulage operations, as well as processing operations, to salvage the volume required while the bushfires were still active. Significant effort, coordination, skill and human resources were required to achieve the extent of salvage that occurred.

*“The size of the salvage was nothing short of astounding”* Business 5.

*“It was highly successful and it did break a lot of records as far as the ability to go through after a forest fire and actually recover the wood fibre”* Business 6.

Some of this success can be attributed to the wet years following the bushfires, resulting in less deterioration of the affected timber in the field. However, most businesses interviewed attributed the success to effective coordination between all sectors of the industry and investment by individual businesses to identify and implement best practice salvage processes that maximised salvage volumes.

*“Previous experiences have been that you generally have about nine months, but given the wet years we had it lasted a lot longer”* Business 1.

This section describes some of the specific experiences of the 2019-20 bushfires, both positive and challenging.

#### Industry collaboration and cooperation

The businesses interviewed all suggested that the success of the salvage operation relied in a large part on effective industry cooperation across all sectors and levels. This cooperation in turn was dependent on a high level of trust between businesses within the industry.

The industry was described as *“extremely professional and fantastic”* (Business 4), and that *“as an industry I think the reaction to the fires was nothing short of astounding.... I have [a] very good industry”* (Business 5). Most businesses interviewed specifically mentioned the effort of all staff after the bushfires: *“I can't take my hat off more to the people on the team”* (Business 1).

*“All of those businesses, associations and entities, were all pushing in the one direction which was getting the fibre produced safely in the shortest amount of time we could” (Business 4).*

Multiple examples were given of the ways in which industry members cooperated to achieve positive outcomes, with these outcomes dependent on all the following types of collaboration being implemented:

- Harvesting and haulage contractors worked with plantation growers and processors to extract high volumes of burnt timber while the bushfires were still active, based on evidence from previous bushfires that time is critical. As part of this, roading crews worked quickly to enable access to burnt stands
- Processors worked with plantation growers to effectively time harvesting and processing operations to optimise the amount of timber that could be salvaged
- Processors worked with each other to reduce waste from the salvaged logs being processed while still achieving a high-quality product (for example pulp and paper processors using all chip possible from sawmills)
- Silvicultural businesses began site preparation and planting during the salvage period to ensure new plantations are ready for harvest as soon as possible into the future.

*“It was nothing short of amazing, it truly was, and to see everyone work together, you know for a common cause, we could never have got through it all” (Business 5).*

The cooperation between different industry members both maximised the use of burnt timber and improved business outcomes for many bushfire affected parts of the industry.

Cooperation extended to businesses not directly impacted by the bushfires. Several of these agreed to operate under a Memorandum of Understanding under which they assisted other businesses with salvage, delaying the other operations they had scheduled in order to successfully salvage the timber under very tight time constraints.

### Increased work

All businesses interviewed experienced a period of increased work after the bushfires, including organising salvage, harvesting and hauling the burnt timber, processing, site preparation and replanting. The time sensitive nature of a salvage operation resulted in a period of nearly two years of high workloads for many businesses. While rates of overwork are not able to be estimated, it was clear that some experienced long working hours and may have experienced stress and burnout as a result. However this increased workload was also seen as a positive. It provided high volumes of work through the COVID-19 pandemic when many other industries were struggling, and also allowed for a transition into the period of reduced work, particularly for many harvest and haulage businesses.

*“We actually did get a slight benefit in that we actually were very, very busy during COVID. .... we were actually very much insulated from the wider economy in that the salvage operations, because of their very nature, has to take place straight away. So whilst everybody else had the disruption of from COVID, we were actually relatively unscathed as far as our activities” Business 6.*

### Demand and value for volume produced during salvage

Three businesses interviewed commented on the positive outcomes from the COVID-19 residential construction stimulus. In an effort to boost economic recovery during and after the COVID-19

pandemic, the Australian Government announced a stimulus package to for the residential construction sector. This stimulus provided grants to eligible residents to build or significantly renovate their homes, in turn creating a large market for the volume of timber produced from the salvage operation, at a good price. In addition to this, there was a decrease in the market for hardwood timber, resulting in a high demand and price for the volume of softwood timber coming into the market as a result of the salvage operation.

*“With the housing stimulus that came out of the federal government, it just led to a boom in the housing construction. So that meant everything the sawmills could produce was moving. So it created an era of prosperity and everyone just, it kept the mood up, so everyone took everything..... we were also fortunate at the same time, as the hardwood plantation export market was taking a bit of a dip at the same time”*

Business 1

### Positive perceptions

Two businesses interviewed commented on the positive perceptions about the plantation management sector of the industry that came out of the bushfires, particularly around the management of land in general as well as the professionalism of the industry.

*“I think it showed how good big land managers like forest companies can be as land stewards in my view”* Business 2

*“The forest growers there are very professional”* Business 5

### Challenges associated with the bushfires

The scale of the salvage effort came with multiple challenges, and the reduced resource post salvage came with more. These included:

- **Challenges associated with processing the salvaged resource:** The scale of the salvage effort meant it was difficult to process the volume of salvaged resource coming to the processing sites. Processors needed to find innovative ways to process the resource within the timeframe needed, while keeping the product clean (keeping the carbon (charcoal) out of the product), not damaging the equipment with the carbon, and without creating too much waste - some of these innovative ideas are discussed later in Section 5).

*“One of the biggest issues for us was how we could process the actual burnt timber in a suitable time, to ensure that that product wasn't wasted”* Business 4.

- **High cost of replanting:** There was a high cost associated with the replanting effort after the bushfires, which started during the salvage period as soon as areas were cleared. While this created significant employment and revenue for the silviculture sector of the industry during the relatively short period of time in which the large volume of replanting was undertaken, this employment and revenue was an expense for plantation growers who were having to invest in replanting a large proportion of the plantation estate their businesses manage.

*“It's been, obviously, a very high cost for us over the last couple of years. That relates to replanting and resetting. We've had probably some of the biggest plant years we've ever had in the last couple of years”* Business 2

- **Terminated contracts:** For some businesses, particularly in the harvest and haulage sector, the biggest challenge associated with the bushfires was loss of contracts after the salvage was complete. However, one business commented that it could be considered a positive in that businesses were forced to innovate, make decisions and take more of a forward-thinking approach to business management.

- **Uncertain future:** Two businesses commented that while the salvage operation was underway it was difficult to stop and foresee or forecast the future, and that this made making decisions around applying for government grants for support difficult.
- **Managing staff:** all businesses identified that maintaining staff health and wellbeing during the salvage period was often challenging. Key issues included the impacts of long work hours, risk of staff burnout, and for some businesses the challenge of needing to terminate staff.  
*"I guess the major challenges for us was probably twofold, keeping people mentally safe. That was probably the main thing because there were some concerns around the longevity or the longevity of the industry and the business"* Business 4.
- **Maintaining staff:** Keeping staff in the softwood forest industry was also difficult after the bushfires for some businesses, because some work outside of the forest industry associated with the bushfires (for example clean up, bulldozing, fencing) paid more and some staff left. There was also a concern that the future of the industry was so uncertain that people left for more secure jobs.  
*"Maintaining staff was a challenge because people were concerned that the industry might not be here for the long term. So they were looking for bigger and brighter opportunities to jump to"* Business 4.
- **Recruitment of staff:** One of the biggest challenges across all sectors mentioned was the difficulty with recruiting staff. This is not a new challenge for the industry (ForestWorks 2023, Mylek et al. 2023), however since the bushfires some businesses commented that the contracting workforce available to recruit from has reduced significantly in recent years.
- **Reduced tree cover:** For some businesses, particularly silvicultural businesses, there was difficulty associated with the loss of protection from the elements (wind, UV exposure, heat etc) when working, for example when spraying.
- **Diversification:** Some businesses needed to diversify in order to continue operating after the bushfires, for example one silviculture business noted that they needed to diversify from primarily inventory related work to primarily planting work.

## 4. Other challenges experienced in recent years

The bushfires were not the only challenges experienced by many businesses in recent years, with some of the other challenges including COVID-19, sourcing enough timber, market challenges, supply chain issues and rising input costs:

- **COVID-19:** Most businesses were able to continue to work with relatively little impact from COVID-19 because many workers in the softwood forest industry have roles in which social distancing is easy to achieve, and because the work provided an essential service. However, there were some challenges experienced by some businesses interviewed, including:
  - Difficulty getting specialised parts for machinery
  - Difficulty in getting some supplies, including new trucks
  - Difficulty in working across state borders, particularly in the Murray Region Forestry Hub which spans NSW and Victoria
  - Challenges associated with labour continuity when staff were sick and/or isolating
  - Inability to properly debrief and counsel staff after the bushfires and during the salvage period.

- **Sourcing enough timber:** The processors interviewed described challenges associated with filling their timber needs even before the bushfires occurred, but the challenge in doing so is even more so now that there is a reduced local resource after the bushfires. The reduced resource of the next decade means processors are (i) in a highly competitive environment seeking to obtain sufficient resource to maintain a viable business, and (ii) incurring higher transport costs to transport logs from plantations much further away than would normally be sourced. Some see potential for logs currently exported to be instead used to support industry viability while the resource is regrowing, however there are significant transport cost challenges associated with this.
- **Market challenges:** Both processors and harvest and haulage businesses interviewed commented on a 'falling' or 'tight' market for many softwood products since early 2023, which was not anticipated by many after the high demand of previous years.
- **Supply chain issues:** The supply chain challenges highlighted in several of the points above interact with each other, creating compounding challenges. Furthermore, the ability to process the volume coming into a facility impacts ability to continue harvest and haulage. When viewed from the other direction, workforce challenges in the harvest and haulage sector impacts the ability to deliver the product to processors. However, Business 4 commented that *"the diversity of the customer mix really adds to the strength of the regions"*, so even with some supply chain issues the region is generally well set up to deal with them moving forward, particularly with a reduced resource available to harvest.
- **Rising input costs:** Ongoing increases in costs of inputs was a challenge for all businesses interviewed. Some discussed rising costs overall, while others focused on the challenge of increases in costs of one or more of fuel, transport, electricity, timber inputs, interest rates and labour.

*"Our wood fibre cost actually, both through what we've had to pay now with a huge demand and the tyranny of distance ... fuel cost and the inflationary pressures and it's quite eye-watering to see what our costs have done over that period of time"* Business 5.

*"Electricity has gone up, fuels gone up, consumers have gone up with inflation"* Business 4.

*"But labour costs is most probably the one that's hitting everyone at the moment. In that to try and hang on to people they are having to pay some extra, and to try and attract people into the industry as well is problematic"* Business 1.

## 5. Lessons learnt/innovative ideas

This section summarises key lessons identified from the experiences of both the bushfires and other challenges experienced in recent years, in addition to those documented in previous sections.

### Business management

Many businesses reported that some of the changed business management practices they had to implement during salvage operations and, for some, COVID-19, have had usefulness and relevance beyond their initial purpose for facilitating rapid action. In particular, increasing business flexibility, changing financial management, and improving coordination of key business operations, as well as managing labour, were areas in which lessons were learned:

- **Flexibility:** The ability to be flexible and adapt to a changing environment was key to survival for many businesses after the bushfires. Examples of business flexibility and adaptability were identified by businesses in all parts of the industry:

*“The fact that you have to deal with what's in front of you, you can't assume that what you're doing five years ago is gonna apply today. So you have to be fairly adaptable and you've gotta be reading what's in front of you” Business 6.*

For example, one processor identified that the experience forced some to design and implement processes enabling processing of a wider range of log sizes:

*“A sawmill, once all saw logs, for example, 27 centimetres in diameter and one after the other, that's their sweet spot. But when you have a major incident or catastrophe like the fires, they have to take big logs, small logs, burnt logs, dry logs and all sorts of things. I guess it opened their eyes as to when push comes to shove in terms of utilising the resource, it had to be placed into a market. How flexible and how responsive those customers were which was fantastic” Business 2.*

- **Timing:** Making key decisions at the right time was highlighted as critical to success, particularly for contracting businesses that forecasted less work in the future. For example, selling surplus equipment when the timing is right to get the best price. Moving quickly at the beginning to organise the salvage was also imperative.
- **Finances:** Managing cash flow and implementing improved financial management practices was considered something that two businesses commented on doing well to set themselves up for the post-salvage period.
- **People management:** Looking after the health and wellbeing and work conditions of staff as well as managing work opportunities for contractors was noted as an important lesson learnt by two businesses, particularly when some staff were looking elsewhere for jobs in an uncertain future.

*“We found it exceptionally important after the fires to make sure the contractors you have working for you, if you can, make sure there is enough work for them through the year so that their work pulse isn't going up and down like a yoyo” Business 2.*

### COVID-19

While most sectors of the industry were not overly impacted by COVID-19 restrictions, there were still some lessons learnt in terms of managing larger workplaces or worksites to reduce impacts of COVID-19. These included splitting sites where people worked and splitting shifts to minimise exposure to workers, increased hygiene and multiple entry points created for different work sites.

Some of these practices have continued post COVID-19 restrictions, as they were found to increase efficiency of operations.

### Industry technology and practices

Businesses typically described innovation in one or more aspects of the work practices and technology used, several of which are continuing beyond their use to increase efficiency and speed during salvage operations due to their broader benefits. Examples included:

- A need to rapidly replant much larger areas than is normally undertaken in the industry became a catalyst for trialling the use of mechanical planting using an excavator with the mechanical head on the front. This was identified as having benefits for safety on steeper slopes and reducing labour needs in what is a labour-intensive aspect of industry operations.
- The high volume of salvaged timber, together with a relatively long (6 month) wait time to receive a water licence for use of the water traditionally used to maintain logs in suitable condition until they can be processed, resulted in trialling of a new system to store processed wood rather than raw logs. This system worked well and some interviewees recommended use of this system again if/when another bushfire salvage operation is required.
- A number of processes were implemented that increased the volume of salvaged timber able to be salvaged and processed into saleable sawn timber and paper products, particularly in the arena of paper production.
- Changes in the way logs, sawn timber and woodchip is stored to enable use for a longer period of time.

## 6. Usefulness of government funding

All businesses interviewed felt that the government funding provided to support the industry after the bushfires showed confidence in the future of the industry, and improved confidence amongst those in the industry. This was identified by all those interviewed, regardless of whether they were eligible for a grant themselves. Government willingness to signal support for the industry and provide tangible support for recovery improved sense of future security for industry members and increased their confidence to also invest in the industry's future.

Those businesses interviewed who were recipients of government grants all reported that the grants had a significant positive impact that supported and enabled salvage operations and rapid replanting to occur. Interviewees felt that the government support provided was essential for the continued running of many businesses, and that the volume salvaged would not have been possible without that support.

*"If we didn't have these grants, I think I would have really struggled to keep the profitability of the site at a level that pleases the shareholders"* Business 4.

However, there were concerns that some sectors of the industry were not eligible for government support after the bushfires. In particular, contracting businesses were not eligible for many forms of support, despite their central role to the softwood forest industry's activities in both salvage and replanting:

*"Probably the hardest transition was the fact that our contracts were terminated prematurely and being a force majeure situation, there's no financial assistance.... very challenging for them, particularly when they've got millions of dollars in debt because we are a very capital intensive industry and our equipment is very expensive and look our labour is expensive as well. ....and it's not so much about financial support, it's more around maybe some of the operational side of it as well"* Business 6.

Of the grants available to contractors, some were of limited use. For example, one contracting business identified that training subsidies available that supported diversification of the skills of staff were useful, but not the most relevant type of support to help businesses adapt to the changed conditions they operate in since the bushfires:

*"It was nice to be able to send your staff to free training courses, but for that week the business still had to pay their wage but not have them actually working, so ultimately the businesses were at a loss."* Business survey response.

## 7. Workforce/resourcing

A recent study by Forest Works (ForestWorks 2023) examining current and future skills and training needs of the softwood forest industry found that the industry is currently struggling to fill essential skilled positions. Given this existing work, workforce and resourcing was not focused on as part of the interviews. However, when discussing challenges and future business needs, workforce issues were identified by almost all interviewees. This section summarises some of the workforce and resourcing issues identified, including challenges associated with an ageing workforce, retaining existing staff, and recruitment challenges for younger workers in particular and more broadly across the workforce.

### Resourcing after the bushfires and COVID-19

Identifying optimal staffing levels was a challenge for many businesses as they attempt to predict their long-term workforce needs in coming years. Some were primarily focused on retaining existing staff, with little recruitment anticipated for some time. However, for many there was concern that retaining staff may be difficult – and recruiting new staff to replace those who leave, or to expand operations if demand increases is a significant challenge.

*“We also know we need to retain the people we have because if any of those were to leave, it actually would be quite challenging finding replacements. So at the moment with falling market, we're probably staffed correctly, but if we rebound to where we should be, I think we'll find a few gaps there” Business 6.*

For some, existing staff numbers were insufficient, with their workforce having reduced for some years, including for some during the period before the bushfires and COVID-19. All businesses interviewed identified that retaining existing staff was a challenge immediately after the bushfire and through COVID-19. Loss of staff was a common experience, with workforce members exiting the industry for a range of reasons that included (i) concern about the future of the industry, (ii) higher income offered by businesses outside the industry involved in bushfire related cleanup (e.g. fencing, bushfire cleanup, roading), (iii) the availability of jobs associated with Snowy 2.0, and (iv) early retirement of some older workers.

*“Snowy 2.0 is certainly taking a bit of a drain. You can hardly blame someone saying, well you know I drive a log truck and I've been doing that for 10 years. I'm gonna go drive a gravel truck for a while. I'll probably make a fair bit more money” Business 5.*

*“I think the fires and COVID and everything else made people make a decision about whether they would continue in the workforce or not” Business 6.*

Labour shortages were occurring at critical points in the supply chain that can and do create delays and ‘choke points’ that have potential to negatively impact the operations of the industry as a whole.

*“We've had as many problems as everybody else with staffing, always got and have had for quite a while. A lot of positions in the middle are vacant. But not only that we've seen back in the supply chain with our contractors with harvesters and haulers, their inability to put bums in seats to actually deliver the product on time that we want” Business 5.*

## Ageing workforce

All but one business interviewed reported concern about ageing of the workforce, which is not unique to the forest industry but a challenge all the same. In particular, there was concern about a need to recruit younger workers while there are still sufficient numbers of older staff to be able to pass on the skills and knowledge. This was particularly difficult in the contracting sector of the industry, which often relies on learning skills on the job.

*“Look, it's not an ageing workforce, it's an aged workforce. They're already aged, they're not ageing. You know, a lot of these people should probably be retired. They just can't be bothered.... It's very, very concerning. You don't see a lot of young people in log trucks or harvesting”* Business 5.

*“It's not my generation who will have to deal with the next 10 years. It's far better if the younger group can learn from the older people as well”.* Business 6.

## Recruitment

The challenges associated with recruiting people to the softwood forest industry were discussed in detail, with many businesses investing significant time and resources on staff recruitment.

*“Probably the thing that is hardest of all is we're spending a lot of time on recruiting”* Business 1.

Challenges include recruiting people with appropriate skills, the need to be flexible and identify potential when seeking to specify who is a suitable candidate, the need to acknowledge the importance of unskilled labour as well as skilled, the small available recruitment pool, and the challenges of recruiting people to the industry and to rural areas more generally:

- **Difficulty recruiting people with appropriate skills:** There is an industry wide challenge to recruit people with the appropriate skills, particularly where very specialised skills are needed.

*“It's the continued one of staffing and it's the one that will be there going forward as well. And it's at all levels of the show, from plant operators to foresters to other skill sets. It's a tight market out there and with the amount of rehab that's going on, you know”* Business 1.

All businesses mentioned difficulty in recruiting truck drivers in particular (often in addition to challenges in their own sector of the industry). The cost and effort associated with training people to fit different roles is significant.

*“Even if we cut the wood, people couldn't cart it, there weren't enough drivers and seats, or drive total trucks around that could do it”* Business 3.

*“Really hard to get people qualified for fire suppression, driving trucks, spraying etc – need to invest a lot in their training”* Forest Business Survey.

Furthermore, the changing skills requirements of many roles was identified as a challenge not just in recruitment, but amongst the current workforce, not all of which had those skills now required.

*“Our world is changing in terms of the skills that we need to undertake our role. Our demands on the industry and the demands on its people within the industry I think has changed. For example, we have such a higher importance and focus on safety and safe work systems, we have such a higher-level emphasis now on community and stakeholder management. There's an increasing raft of statutory requirements and legislative requirements”* Business 2.

- **Flexibility in recruiting skilled staff:** Being flexible in the types of people being recruited had assisted one business interviewed, who focused on hiring people with similar, but not the exact skills they were seeking. These workers were found to be proficient in rapidly learning the required skills.

*“We might not get fitters and tuners; we might get boilermakers. We never used to try and get boilermakers but now we’re actually accepting boilermakers for the same reasons. Good people, got the right attributes around culture, they want to learn, and we start teaching them and bring them through”* Business 4.
- **Importance of unskilled labour:** Two businesses identified that while recruiting skilled/qualified staff was difficult, the importance of having a good base level of unskilled operational/field staff on board was equally important.

*“There is a cohort of people that are real doers that are a part of the professional star bank.... You still need staff that can maintain the pumps, maintain the tankers and work with the local CFA brigade often. It’s about making sure you’ve got that real good base level operational people in the mix as well”* Business 2.
- **Reduced recruitment pool:** Competition with other industries and businesses offering different work and often more pay was discussed as a challenge for all businesses interviewed. This not only reduced the workforce through loss of staff to other industries, but also reduced the pool of available workers that could be tapped into when hiring new staff.

*“So for the industry, for the contracting industry, we’re dealing with a lot smaller pool than ever”* Business 6.

*“We’ve not lost people directly to them, but say contractors who we could tap into for gravel trucks, they’ve got some pretty good contract works with Snowy. All their drivers ...it’s not so much in taking people away, but it’s making it hard for us to fill gaps because it’s good money”* Business 1.
- **Attracting people to the industry:** Four businesses felt there was a lack of interest or understanding about the forest industry and the work opportunities it offers, making it difficult to attract new people to the industry.

*“People don’t know about it, they’re not exposed to it, and they don’t see it as a great career and prosperous way forward”* Business 2.

*“What we are seeing is a lack of people that are probably interested in the forest industry or understanding the industry. I can bring anyone in on grassroots and pretty much educate them and teach them anything. But it’s just getting them through the door to start. We have to understand that there’s an opportunity here. It’s how we sell an opportunity”* Business 4.
- **Attracting people to rural areas:** Experiencing difficulty encouraging and enabling people to shift from urban areas to work in rural areas was identified as a challenge, one that is not new or unique to the forest industry. Many different things can make this difficult, including having job opportunities for partners and other family members, having affordable and accessible housing, having good quality schooling and sufficient teaching staff, and competing with opportunities and wages in larger cities.

*“There’s definitely a skill shortage because there’s lots of money to be made in cities compared to country towns.... If we’re looking to bring in anyone from outside the area, we really struggle for a couple things. One, the housing is too expensive, in my view. Two, you can’t rent a house. You cannot physically rent a house here. Pretty much all the rentals are gone. The third thing, there’s not really a lot outside of what the person does that their partner can sort of do”* Business 4.

## 8. Future of the softwood forest industry

When asked about the future of the softwood forest industry in the MRFH, all businesses interviewed had an overall positive outlook, albeit noting the challenges that lay ahead. Some saw the future as being largely 'business as usual'; others felt that the industry was thriving and would continue to grow; while others were adjusting to a 'new normal' of reduced work for the foreseeable future. Four main themes emerged when considering the future of the softwood forest industry: the available wood resource, cost-price squeezes, maintaining a viable workforce, and the importance of investing in the community.

- **Wood resource:** All businesses interviewed discussed the reality of reduced available wood/fibre for the next 10-20 years, impacting all sectors of the industry. Plantation growers will have significantly more work and costs associated with planting and management of young plantations, and less work in harvesting with reduced revenue. One business commented on the future cost of staffing due to the larger area of young plantation that will require management compared to the volume able to be sold. Harvest and haulage contractors will have reduced work overall, while silvicultural contractors will have significantly increased work overall. Processors will need to adapt to lower throughput at the mills, requiring innovative thinking to source timber from further away. This period of reduced available resource will then be followed by a surge in pulpwood in approximately ten years, accompanied with increased work for all sectors.
- **Higher costs, lower value:** One business discussed the implications of higher input costs (e.g. higher interest rates, increased fuel and electricity prices, higher haulage costs associated with sourcing timber from further away) and a forecasted reduction in the market value of timber, resulting in a reduced profit margin.
- **Future industry workforce:** While all businesses commented on the ageing workforce, one business commented on the generational and gender change being seen in the industry, not so much of younger people entering the industry workforce, but more mid-career staff (many of which are women) moving into management positions as the older generation retires, many of which are women. This is seen not only within businesses but also across the peak industry bodies. This was viewed as a positive change for the industry looking forward.
- **Community investment:** While all businesses discussed the importance of being part of a community, particularly during the bushfires and immediately afterward, one business also discussed the importance of investing in the community to support a place that people want to live in, work in and move to.

*"Focused on the longevity of the business and how we can be successful, it's not always about making money. Yes, they've got to give a return but it's around how they continue to support the community and put money back in the community. If the community is successful, the business is successful and then your profits fly from there."* Business 4.

## 9. Future business needs and priorities

For the most part, businesses interviewed were primarily focussed on their immediate to short-term future business needs, with most *“trying to get through the next few years”*. However, some businesses were looking further into the future in order to make investment decisions and consider future resource availability. This included:

- **Managing future bushfires:** Having contingencies and strategies in place to minimise impacts from future bushfires was the number one priority for all businesses interviewed across all sectors of the industry. With the high proportion of standing resource that is now too young to be salvageable if another fire came through within the next ten years, it was considered potentially ‘industry ending’ for the region if it were to happen on a large scale.
- **Processing setups:** Processors need to consider possible changes to their processing setups to accommodate lower or different log inputs coming through the facility for the foreseeable future. In the shorter-term the processing facilities need to source their wood/fibre needs from further away, while trying to limit disruptions to processing facilities in those further away regions that rely on the same resource.
- **Investment in community:** most businesses interviewed suggested that for industry longevity there is a need to invest in the community so it is a place people want to live and work.
- **Diversification:** Some businesses discussed the need to diversify some aspects of their business. This included investigating the carbon market, moving from some aspects of silviculture into planting and spraying, and considering product diversification.
- **Expansion of the softwood estate:** Expanding the area of the softwood estate was highlighted by all businesses interviewed. This was an industry wide goal before the bushfires and continues to be an important industry need looking into the future. However, one business identified a need for tangible mechanisms to be put in place to grow the estate outside of ‘farm-forestry’, and that acquiring good land for planting is difficult when competing with the agricultural industry who is willing to pay higher prices for that land.

### How can businesses be supported to achieve their future business needs?

When asking businesses about how they can be supported to achieve their future business needs, the types of support that businesses suggested were not directly related to the operation of their own businesses, but rather to facilitate the success of the industry as a whole (in turn supporting their individual business). The types of support included bushfire management, promotion of the industry amongst the workforce and school leavers, support with logistics and infrastructure, and supporting a positive perception of the industry.

#### *Bushfire management*

The need for greater support from the government to protect the remaining asset from bushfires or other disasters in the long-term was highlighted as the biggest priority by all businesses interviewed. It was identified that there is a need for more proactive engagement and investment from government for fire prevention, including legislative measures that enable cross jurisdictional firefighting and whole of landscape management, cooperative firefighting, improved bushfire detection systems, improved infrastructure and improved firefighting capabilities.

- **Cross jurisdictional/landscape scale bushfire management:** Four businesses discussed the need for NSW to better enable cross jurisdictional bushfire management and firefighting capabilities. This includes a focus on whole of landscape bushfire management irrespective of whether it is private plantation, National Park, farmland or council land.

The need to review legislative measures that enable cross jurisdictional firefighting in particular was highlighted. This identified as a large problem, for example when under the current systems most private plantation managers aren't able to cross their boundary to help fight a fire in neighbouring land. This limits firefighting capacity when resources are available to fight a bushfire early.

- **Cooperative firefighting:** Related to cross jurisdictional firefighting above, two businesses discussed cooperative firefighting approaches particularly in NSW.

*"Just simple things like the private growers at the moment really can't leave their property. Unlike in Victoria where there's industrial Fire Brigades, there isn't in NSW legislation. So their ability to step over the fence to stop a fight coming is limited"*  
Business 1.

- **Bushfire detection:** Rapid fire detection was noted as imperative, including identifying hotspot areas and the use of advanced technologies to quickly detect a bushfire so that it can be controlled faster.
- **Improved firefighting capability:** Having the right infrastructure and access to adequate resources, equipment and training to respond to and extinguish a bushfire quickly was discussed by two businesses interviewed.
- **Improved infrastructure:** Telecommunication infrastructure in particular was mentioned by two businesses as being important to improve in the region, because there are still 'black spots' with limited mobile phone reception. Other infrastructure such as fire trails and fire detection capabilities was also highlighted as important.

#### *Workforce*

As discussed in Section 7, challenges associated with retaining and recruiting workers in the industry are major issues for softwood forestry businesses. Five businesses discussed ways in which the government could support the industry through promoting the industry to the younger generation and the labour force more generally, providing adequate local training and supporting grants for training and recruitment:

- **Supporting the younger generation to join and continue in the industry:** Three businesses discussed the need to support the younger generation to want to join the industry and to be passionate about the industry so they want to stay in it. These businesses felt that there is a need to promote forestry so that people outside of the industry can see that there are good career options. This support could be in the form of advertising, providing grants and opportunities for relevant training and education, offering grants to businesses to do their own advertising, supporting interesting and thought provoking documentaries about the industry, and advertising the contribution of the industry on the local economy and employment.
- **Improve local training opportunities:** There is a need for reshaping training courses locally to provide more opportunities and accessibility to people who want to join the industry. Relevant training is not always possible to run locally because of low enrolment numbers. Some ways to reshape how training occurs suggested by interviewees included national level training courses with instructors who are willing to travel to different sites to undertake the training in blocks, or assessors able to travel to complete competency-based assessments (where a lot of the training is conducted on the job).

#### *Logistics and transport infrastructure*

Two businesses discussed the potential for government to support transport logistics and infrastructure, particularly in technology and improved efficiencies. This includes supporting

efficiencies in heavy vehicle regulations, where there are sometimes holdups with the transportation of logs. It might also include investment in supporting research into electric fleets, hydrogen fleets, higher mass vehicles.

#### *Support a positive perception of the industry*

Three businesses discussed the need for supporting a more positive public perception about the industry. Their concerns about negative perceptions reducing industry reputation and image, and the impacts this has on workers in the industry and the ability to recruit into the industry, is not a new concern (Mylek and Schirmer 2015). Businesses interviewed felt that negative perception of the industry were sometimes ill-informed, for example softwood plantations being the cause of bushfires, or that all types of forestry are the same. Two businesses suggested that negative or indifferent perspectives about forestry might arise out of a lack of understanding about the industry, and some ideas to help support a better understanding included:

- Promoting the industry through social media and televisions, similar to the 'wood is good' ad campaign.
- Acknowledging the contribution of the industry to the community.
- Engaging with the community to improve understanding that softwood forestry is a long-term and stable asset to the community.
- Supporting interesting, probing and thought provoking documentaries or segments on popular shows about the industry.
- Supporting more work to build social licence for the industry.

## 10. Conclusions

While there were significant challenges associated with the impacts from the 2019-20 bushfires for many softwood forest industry businesses, there was a common story that emerged about shared objectives, resilience, strong community ties and established industry networks that enabled a successful salvage operation. Businesses interviewed expressed pride in the softwood forest industry, in the effort of all staff during and after the bushfires, the willingness of the industry to work together towards a shared goal, and the innovations that came out of the salvage operation.

A number of innovations were developed and lessons learned as a result of the bushfire experience. These enabled a successful salvage operation as well as having a broader benefit in the form of increased efficiencies, increased safety resulting from some of the changes implemented and for some, increased revenue. Some of these innovations were made possible partly as a result of government grants provided after the bushfires, viewed by all businesses interviewed as showing confidence in the future of the industry and giving businesses a sense of future security.

While there was an overall positive outlook for the future of the softwood industry, with businesses ready to take on the next decade of 'new normal', retaining and recruiting appropriate staff continues to be particularly challenging across all sectors of the industry. When asked about how they can be supported to achieve their future business needs, the types of support businesses identified were not directly related to the operation of their own businesses, but rather to facilitate the success of the industry as a whole into the future. This included support in the form of greater engagement and investment in bushfire management, promoting the industry as a good place to work, improved transport logistics and infrastructure, and supporting a positive perception of the industry.

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## Appendix 1

### Forest business needs into the future - interview guide

*Note: The interviewees will have been provided with the information sheet, and also asked to complete the consent form prior to the interview. The questions in this document are intended to guide the conversation. Not all questions will be asked if the conversation covers them naturally. They are prompts to keep the conversation moving in the right direction.*

Thank you for agreeing to take part in this interview. I'll first give you a bit of background about this project and why we have asked you to participate in an interview. Before we begin, I just want to remind you that participation is entirely voluntary. You can withdraw at any time, including any information you've already provided to us.

Thank you for sending through the consent form. I'm just confirming that I'd like to record this conversation, is that still okay with you?

The University of Canberra has been commissioned by the Murray Region Forestry Hub to produce accurate data on the numbers of jobs and amount of economic activity generated by the forest, wood and paper industries in the Murray Region Forestry Hub after the 2019-20 bushfires, as well as examining skills and other business needs in the industry moving forward. You've already completed the business survey earlier this year to help answer some of these questions, we appreciate your participation in the study.

The purpose of these interviews is to get a deeper understanding about how your business has coped with the different challenges over the last few years, and more importantly what your business needs are moving forward. Because we will be speaking about the bushfires and other challenges, if at any time in the interview you feel uncomfortable and would like to take a break, please don't hesitate to let me know. We can pause at any time. *[if during the interview the interviewee appears distressed, ask them if they would like us to provide them with some details of assistance they can access such as lifeline or beyond blue]*

Do you have any questions before we start?

*\*Answer any questions they might have about the project*

1. First of all, could you please tell me a bit about the business you are representing?
  - a. What activities does the business do in forestry?
  - b. What region/s does your business operate in?

#### Business challenges

2. Has your business faced any particular challenges since 2019? And if so, what were these and how did your business cope with these impacts?

*Depending on how they answer, the following can be used as prompts:*

- a. Was your business impacted at all by the 2019-20 bushfires? How did you deal with those impacts?
- b. In what ways were you impacted by COVID? How did you deal with them?

- c. Has your business been impacted by challenges such as interest rate rises? Issues with global supply chains? Increasing input costs?
- d. Which of the recent key challenges has been the hardest to deal with?

*Try to distinguish between impacts related to the bushfire and other challenges not related.*

- 3. What has worked well at your business to cope with these challenges?
- 4. Is there anything you would have done differently?
- 5. Did you have any innovative ideas to deal with these challenges that worked well?

*If they did not already answer about government funding in the survey:*

- 6. Did you receive any funding from the State or Federal Government to assist you with bushfire related business recovery?

*If yes*

- a. What this state or federal funding?
- b. In what ways did this funding assist your business?
  - i. Was it useful? How was it useful.

#### Business needs into the future

- 7. What do you think the forest industry overall will look like in the future?
- 8. What do you think your particular sector of the forest industry will look like in the future?
- 9. Do you see yourself operating in the forest industry in the long term? *If not*, do you see the business branching into something else?
- 10. What are your business needs moving forward?
- 11. What else would you like to do for the business into the future? What are your goals/priorities?
- 12. Can the Government help in achieving these needs/goals in any way?

#### Resourcing

- 13. Do you feel that your business has adequate resourcing to undertake day to day business into the future?

*If no, ask in what ways are they facing resourcing challenges.*

- a. *Are there challenges with recruiting/attracting suitable staff?* If so, what are these challenges?
- b. *Are there challenges with retaining suitable staff?* If so what are these?