



FROM RECOVERY TO RENEWAL

Case Study Reports April, 2013

April, 2013 1



Copyright Regional Australia Institute Final

Acknowledgements

The Regional Australia Institute would like to thank all of the residents from the communities of Cardwell, Carisbrook, Emerald and Marysville who participated in the project. Your generosity in sharing experiences of the disaster and recovery has made the project possible.

The research was led by a team from Griffith University who also prepared this report. RAI would like to acknowledge and thank Adjunct Professor Jim McGowan AM, Professor Anne Tiernan, Professor Darryl Low Choy AM MBE RFD, Dr Tracey Acklay, Sandra Slatter, Dr Silvia Serrao-Neumann, Lex Drennan and others from Griffith University who contributed to the project.

The Regional Australia Institute was established with support from the Australian Government.



Table of Contents

Table of Contents
Cardwell: A Town in Transition 4
Case Study Overview
About Cardwell5
The 2010-11 Event 6
The "Case Study" Process7
The Findings8
Carisbrook: Fractured Recovery, Stable Economy15
About Carisbrook16
The 2011 Flooding Event17
The "Case Study" Process18
The Findings19
Emerald: Disasters and the Mining Boom22
Case Study Overview22
About Emerald23
The 2010-11 Event24
The "Case Study" Process25
Findings27
Marysville: Charting a New Future
Case Study Overview
About Marysville and Triangle
Black Saturday 7 February 200935
The "Case Study" Process
Findings



Cardwell: A Town in Transition

Case Study Overview



Cyclone Yasi and Cardwell Feb 2011

Cardwell is a small regional community experiencing a long term economic transition from an economy built on primary industries (timber, fishing and agriculture) and the railway to one driven primarily by tourism and aged care.

The extensive devastation of the community by TC Yasi has exacerbated this transition while undermining the sustainability and potential for growth in both the tourism and aged care sectors. A temporary construction boom associated with the reconstruction phase is now coming to an end in 2013. As a result, the future sustainability of the economy is uncertain.

After two years most businesses are still struggling to return to pre-impact financial position. Reconstruction work in the town centre is ongoing, which is impacting on foot-traffic in the retail district. Most businesses report a long and hard struggle to recover and the extended timeframe to turn a profit. For some, the expectation is that the recovery process will take more than 5 years.

Supporting the Future of Cardwell

The success of the community led long-term economic recovery planning in driving job creation, is essential to develop the local economy and assist existing businesses adapt to the changing market in the region.

Alongside this effort, the establishment / re-establishment of vital infrastructure for the tourism industry and the resulting growth is important for Cardwell to improve its position and achieving its potential.

"Post disaster stigma" remains an issue for Cardwell's future. Convincing the broader community that Cardwell is "open for business" is a complex task. Developing attractive tourist infrastructure, resolving the Port Hinchinbrook dispute and pro-active marketing of the region to the broader public are essential to rebuild and grow the local tourist industry.

The population decline cycle also needs to be arrested to ensure a working population remains to take jobs that may be created. As young people and families have moved on so too have business opportunities, leading to further job losses and further population loss as job seekers move elsewhere. The end of the reconstruction activities will exacerbate this in the short term.



About Cardwell

Cardwell is a small community located on the tropical coast half way between Townsville and Cairns. It is part of the Cassowary Coast Regional Council (CCRC). Cardwell's estimated resident population has declined slightly from 1252 in 2006 to 1176 in 2011.

Cardwell has a high proportion of retirees. Its median age has increased from 47 years to 52 years between 2006 and 2011 compared with the national median age of 37 years. It has a much older age profile with 44.4% being aged 55 years and older compared to the national population age profile of 25.6% aged 55 years and older.

The local employment profile reflects the high number of retirees living in Cardwell. That employment data shows that in 2006, there was a labour force participation rate of only 50%. In 2011, the labour force participation rate had dropped to 45%. In 2011, labour force participation rates for Queensland and Australia were 66 % and 65 % respectively.

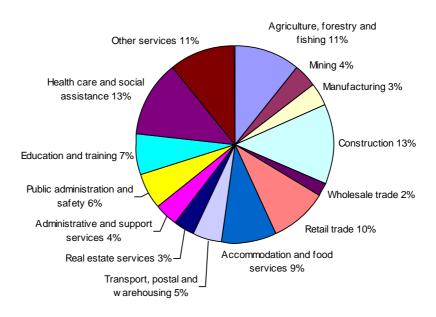


Figure displays the employment by industry sector in Cardwell in 2011.

Figure 1: % of Cardwell Employment by Sector 2011

Cardwell has a relatively low socio-economic profile. In 2011, the median household income was \$768 per week. In the same period, the Australian national median household weekly income was \$1234 per week (ie 35% lower than the national mean).

This aging population is also reflected in the industry data with 12.4% working in the "Health care and social assistance" sector (up from 9.0% in 2006).

The aging population and the relatively low median income have implications for its future economic development with older people generally have lower spending patterns.

As in many smaller regional communities, Cardwell is losing its young people as they leave in search of education and employment in the larger centres. In 2006, 208 people were aged under 15 years; in 2011, 168 people were aged under 15 years, accounting for almost all of the reduction in population.

Cardwell has a significant Aboriginal and/or Torres Strait Islander population with 10% of its population identifying as such; well above the state average of 3.6%.



The 2010-11 Event

A Category 5 Tropical Cyclone, Yasi is the largest and most severe tropical cyclone to cross the Queensland coast in living memory. It made landfall near Mission Beach just north of Cardwell in the early morning of 2 February 2011.

TC Yasi was accompanied by gale force winds with gusts recorded of over 250km/h. The largest rainfall totals were to the south of the cyclone with 200-300mm in the 24 hours preceding and immediately after Yasi's crossing.

The heavy rain and strong winds were accompanied by a 5 metre storm surge at Cardwell. Fortunately this storm surge coincided with low tide, thus averting more serious inundation.

The combined action of the heavy rains, gale force winds and the storm surge resulted in more than 210 buildings or 75% of the buildings in the town suffering damage. The storm surge was a major contributor to the destruction, particularly on the foreshore and buildings and facilities along and on the eastern side of the main highway. Seventy vessels from Port Hinchinbrook were smashed as the sea rose up to four metres above its normal level

Most residents heeded calls from authorities to evacuate prior to the crossing of the cyclone. This action was a factor in there being no loss of life.

The town was isolated as fallen trees and debris blocked the road and cut off both sides of the highway, preventing the return of residents for 4 to 5 days. Power, telecommunications and water were all compromised. The foreshore was destroyed. The jetty and the school suffered significant damage.

Economic Impact

Prior to the impact of TC Yasi, and like many small communities, Cardwell had been struggling with the slow decline of the local economy. One local described the situation in the following terms:

"Well, this town was a vibrant little town. It had two big sawmills running. We had a fishing industry. We had railway works people all here. There were lots of workers from the road works. The forestry was out here. We had a big forestry contingent. All of that's gone."

Cyclone Yasi made these challenges all the more difficult. All businesses in the town were impacted, many for more than 12 months. Some still have not recovered 26 months after the event. The loss of cash flow from sales was exacerbated by the costs of the clean-up, repairs and rebuilding. Limited supplies reduced ability to provide services in the immediate aftermath.

The tourist industry was devastated with consequent "flow-on" effects to the tourism - related businesses. The regional value of tourism was valued at \$104 million per annum. The Census data shows that in the category of Food and Accommodation the workforce has dropped from 12.3% in 2006 to 9.3% in 2011.

Local farming industries suffered immediate and ongoing damage from TC Yasi, due to extensive crop loss, damage and destruction of mature trees and farm infrastructure. The loss of the season's crop, combined with extensive repair expenses had negative impacts across this sector.

A major employer, the prawn farm had to put off about 80 workers which had a significant economic and psychological impact of the community.

The replacement of damaged council infrastructure is in excess of \$25M.

The post disaster reconstruction activity has changed the employment profile. According to the 2011 Census, 13.5% of people are working in Construction sector (up from 8.8 % in 2006).



The "Case Study" Process

Members of the research team visited Innisfail and Cardwell on 17 December 2012 where they met with the Mayor and CEO of the Cassowary Coast Regional Council, the President of Cardwell and District Chamber of Commerce and members of the Cardwell District Community Association to outline the project and identify possible interviewees. They also met with the CEO of the Girringun Aboriginal Corporation on 18 December 2012 to outline the project and its objectives.

18 interviews were conducted between 29 January and 03 February 2013 as follows:

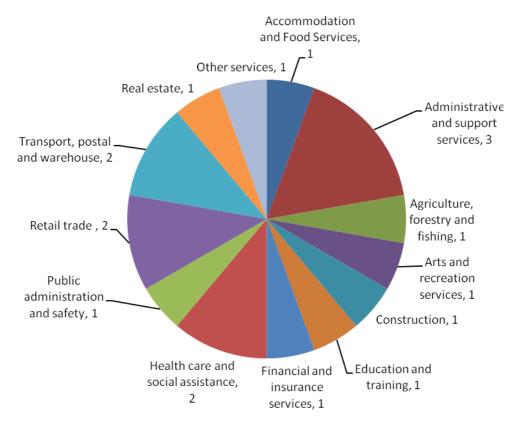


Figure 2: Number of Business Owners Interviewed by Industry

(*included in these figures were the CCRC Mayor and leaders of the Cardwell District Community Association, Chamber of Commerce, Greenway Tourism, Girringun Aboriginal Corporation).

A focus group was convened at Cardwell on13 February 2013 of key community leaders including the Council CEO. The purpose of the focus group was to reflect on the draft findings, "ground truth" the data and identify any relevant information which was not elicited during the interviews.

The Council also submitted its comprehensive response to a survey which had been sent to the Council CEO. Attached to that survey were the following key documents;

- The Cassowary Coast Regional Council (CCRC) Local Disaster Management Plan (approved Dec 2012);
- The CCRC TC Yasi Recovery Plan; Feb 2011;
- The Yasi Recovery Effort Review by CCRC Yasi Recovery Group;
- CCCRC List of Submissions Oct 2012 and Feb 2013;



- Lessons from Yasi Report and recommendations Feb 2012;
- CCCRC Disaster Risk Reduction and Resilience Decision Making Support System-Informing Decision Making for Disaster Risk Management Apr 2012; and
- Impact of Cyclone Yasi on Biodiversity Feb 2011.

The Findings

Uneven Impacts and Uneven Recovery

The experience of businesses in Cardwell indicates that the cyclone has had a disproportionate impact on certain segments of the local economy. The post-cyclone construction boom, and the presence of large scale infrastructure projects, has enabled some elements of the retail sector and the construction sector to recover quickly. The tourism sector continues to struggle, in part due to incompletely restored infrastructure and to immediate post-disaster perceptions that the whole area has been 'written off'; the "post disaster stigma". Although the agriculture sector has slowly regained its feet, the loss of cashflow from seasonal crops and extended timeframe for the recovery of banana plantations continues to hurt farmers in the region.

Many long-term residents left Cardwell in the aftermath of the TC Yasi, either because of a lack of desire to rebuild, through loss of employment or employment prospects or higher rentals as a result of the reduced number of rental properties available. The Post Office reported that there were 250 people requesting postal redirections from Cardwell.

The influx of construction works and the exodus of long-term residents, due to a lack of jobs and an unwillingness to go through the extensive process of rebuilding and restarting their lives, has resulted in fundamental changes to the town's demographics and economy.

In this context, disaster recovery will not return the town to 'normal'. The picture emerging from Cardwell is that businesses and the Cardwell community continue to struggle to adapt to the new 'future state".

Response and Relief Performance

On the whole, the efforts of various authorities and agencies to restore essential services, such as power and water, to the town were well-regarded. Although there was some concern that personnel were not used as efficiently as possible, the general perception was that services came back quickly given the level of devastation in the area.

A particular item of frustration to the community was the problems experienced with evacuation and reentry to Cardwell. The refusal of authorities to allow re-entry was perceived (despite the safety rationale) as bureaucratic and illogical given that those who had not evacuated were within the lock-out area already. This impacted on business recovery as people who had chosen not to evacuate were better positioned to address business impacts and re-open quickly than those who had evacuated. Some claimed that the cumulative impact of this is a reluctance to evacuate in future, regardless of directions from authorities.

A key learning from the immediate restoration process was the importance of critical business services to the community. The provision of disaster relief cheques to the community necessitated the provision of services to cash those cheques. Once this became apparent, key services such as the local bank and Australia Post office were quickly re-established, albeit involving extensive work-around for the bank. Future recovery plans should seek to incorporate these learnings about the close connection between government assistance and private sector services to support community recovery. Emergency assistance grants need to be seen not as handouts but integral to the strategy to assist the economic recovery of local businesses.



Recovery needs to be Community Led

In both the response phase and during the recovery process, the large geographical area covered by the Cassowary Coast Regional Council (CCRC) was identified as a problem. This contributed to the inability to develop truly local response plans. Recovery arrangements were not 'owned' by the Cardwell community. The local council did not possess an evacuation or response plan that specifically addressed Cardwell, and similarly with recovery planning.

The CCRC established recovery committees for the whole council area which was impacted by TC Yasi in accordance with the model proposed by Queensland Reconstruction Authority (QRA). However, the Cardwell community found that this mechanism did not address specific local concerns and was unresponsive to their needs. Local knowledge, leadership and engagement were seen as fundamentally important.

The feeling of being overlooked or ignored triggered bottom-up initiatives, including the creation of a new community group, the Cardwell District Community Association (CDCA) and the preparation of the Cardwell Strategic Action Plan. The local Chamber of Commerce was revitalised. In particular, through the Cardwell Strategic Action Plan, this group sought to harness local knowledge, address local concerns and develop a shared vision for the future development of Cardwell. Although the recovery process is long term, difficult, extensive and ongoing, many interviewees spoke of the process to develop the Action Plan as creating new sense of community and enthusiasm aimed at improving community and economic resilience.

The Cardwell community expressed concern at the capacity of the Council and the model used for the recovery. The Council, on the other hand, through the documentation provided with the Council survey, was critical of the State's disaster management framework and the support provided to it. It claims that the documentation pays insufficient attention to the recovery phase of disaster management and contains "no clear, detailed statement about local government's role in recovery despite local government being identified as being the most appropriate level of government to respond to localised issues".

This uncertainty and ambiguity around the role of local governments in recovery has contributed to the current unfavourable resource and funding arrangements for councils to undertake the recovery task. In the Council's view, the Natural Disaster Relief and Recovery Arrangements (NDRRA) make "no provision for resourcing councils to undertake even a limited local recovery role much less lead it".

The CCRC has argued that data plays a vital role at the pre disaster planning stage and the post disaster recovery stage. "At the pre disaster planning stage it could provide a set of indicators of vulnerability within a community that can be applied to modeling community resilience and recovery capacity. At the post disaster recovery stage could provide a set of indicators to monitor recovery progress and outcomes of various recovery projects. An improved understanding of the environmental, social, economic and built environmental impact of a disaster, would position agencies to better target and design recovery programs". In support of this the Council is advocating, for what it terms, a "Disaster Risk Reduction & Resilience Decision Support System".

Population Displacement and Changing Demographics

In the aftermath of the cyclone, a significant proportion of the local population decided not to return to Cardwell. This decision was influenced by factors such as damage to residence, loss of employment and perceptions about the prospects of Cardwell.

A critical issue highlighted was the negative impact of this population loss on the community and economy of Cardwell. As the population declines so too do the business opportunities, leading to further job losses and further population loss as job seekers move elsewhere. As a result of this cycle, the town has become 'older', with changed spending habits and changed service needs. In the short term these changes have been obscured by the influx of construction workers. With the departure of



this workforce, Cardwell will be left to work through the issues of an aging population. With 525 of its residents (44.5% of residents) over the age of 55, and a retired population on fixed incomes, the town faces serious issues in generating sufficient market activity to sustain economic growth.

The Rockingham Aged Care facility is one of the largest employers in Cardwell. Thirteen percent of the employed population are employed in the Health care and social assistance sector. Traditionally, Rockingham has provided its services on the basis of a low up-front bond (significantly lower than an equivalent service in a metropolitan region). The impacts of Yasi, such as the costs of business interruption and rebuilding, have threatened the financial viability of this model. The potential of increased expenses, although necessary to operate the facility, pose a threat to the residents who live at Rockingham as they are unable to afford significant increases. In this challenging situation, the community also finds itself with the potential to lose one of its largest employers due to lack of funding. Government support was seen as critical to its continued operation and the economic prospects of Cardwell.

In the absence of economic development that will bring more jobs and younger families into the town, the ongoing cycle of aging and population loss is likely to continue. The following comment describes the negative economic cycle from the point of view of one of the interviewees:

"Well there is a decrease in houses. Leads to a decrease in population and a decrease in jobs.... leads to a decrease in population. That means a decrease in teachers for the school. Just everything decreases, a total decrease in the town."

Economic Impacts on Market Segments – Agriculture and Tourism

Agriculture and Aquaculture

Numerous farms and aquaculture ventures laid off employees in the immediate aftermath of the cyclone, some closed permanently and others are still struggling to recover to pre-Yasi levels

The difficulties experienced in the farming sectors were compounded by the high costs of insurance for both farm infrastructure and crops. Consequently, a number of ventures were not insured. Despite the availability of government grants to assist businesses to recover, most operators dismissed the grants on the grounds that they were too small, too hard to apply for and too difficult to repay given the post-disaster circumstances.

The farming sector continues to struggle to recover, and its slow recovery reduces the ability of this sector to act as an employer and magnet for people to move to the Cardwell region.

Tourism

Interviewees referred to Cardwell's natural attractions. To the west and north is World Heritage Wet Tropics. To the east is the Great Barrier Reef Marine Park and Hinchinbrook Island.

The town has been working towards leveraging its natural environment as a "draw card" to attract tourists. Fundamental to this objective is the need to re-establish its marina and marine and tourism infrastructure.

Following Yasi, the tourism sector was heavily impacted and continues to struggle today. In addition to the loss of town infrastructure and damage to tourist accommodation providers, damaged 'tourist infrastructure' such as scenic drives and walking tracks which, to-date, have not been upgraded and the ongoing infrastructure reconstruction works in town all contribute to reducing the appeal of Cardwell as a preferred destination. Extensive media coverage in the aftermath of the cyclone, and the town's struggle to rebuild, have contributed to an opinion within the broader Australian community that Cardwell has been "wiped off the map". Consequently, 2 years post-Yasi, the interviewees believed that the tourist trade is struggling to return to pre-impact levels.





Figure 3: The Port Hinchinbrook Marina after Cyclone Yasi

The difficult question of Port Hinchinbrook is an ongoing issue that is negatively impacting on the recovery of the tourist market. The Port Hinchinbrook development was originally approved because of the need for marine infrastructure to support our tourism industry, to establish "all weather, all tide" access in the area for recreation and safety purposes and to establish a modern residential precinct that would grow the population in Cardwell and district and assist in re-establishing the viability of existing business and affording opportunity to establish new business.

The operator's reluctance or financial inability to repair the marina post-Yasi contributes to the perception that Cardwell is 'closed to tourists' and fails to leverage what is an important attraction in the region.

The local community sees the development of the tourist industry as a key part of building a long-term sustainable economy in Cardwell. Bringing this vision to life requires the commitment of all three tiers of government to developing tourist infrastructure in the region and creating an environment in which tourist operators and the general public see Cardwell as a desirable destination. The "post disaster stigma" is created by images of the devastation of the disaster. Convincing the broader community that Cardwell is "open for business" is a much more complex task. Developing attractive tourist infrastructure, resolving the Port Hinchinbrook dispute and pro-active marketing of the region to the broader public are essential to revitalise the local tourist industry.

Problems Arising from the Reconstruction Boom

The reconstruction phase is essential to provide Cardwell residents with the necessary infrastructure to live in the town. However, the post-disaster reconstruction boom has created a range of challenges for the local community and local businesses.

Due to the extensive reconstruction required in Cardwell, the reconstruction phase has seen a significant influx of construction workers. This has been further augmented by the large infrastructure development projects underway in the surrounding region. The combination of damaged housing supply and a surge in demand has seen rental prices spike. This has resulted in marginal populations, such as those who have lost their jobs due to local business interruption, being forced out of the rental market. Consequently, the reconstruction process has served to exacerbate the population displacement problems experienced in Cardwell.

Although in the short term the construction population is assisting business recovery in selected market sectors, there is widespread concern over how the local economy will handle the departure of this workforce which will occur throughout 2013.



Further issues have arisen in the reconstruction phase relating to the purchasing practices of insurance companies. There was a common perception that insurance companies had preferential arrangements with external contractors leading to local contractors being squeezed out of the market. Concerns were also raised about the quality of the work undertaken and the need for 're-work'. These issues contributed to the sense that the local community was not considered nor effectively engaged in the recovery process: that it was something imposed externally.

Although the reconstruction phase has been essential to bring the town back to a functioning level, the activity associated with reconstruction has served to mask the underlying weakness of the local economy. Once the construction is complete and the construction workforce moves away, the softness of the local employment environment and lack of revenue streams are likely to become more apparent.

Disaster Assistance

An extensive array of disaster assistance was received by the community, in the form of physical aid, financial aid and material donations. The primary source of financial aid was through Government providing disaster relief payments to individuals through the Australian Government Disaster Recovery Payment of \$1,000 per adult and \$400 per child. While these payments were generally well received by the community, some spoke of the risk of the development of a "handout mentality" and the loss of personal resilience.

Businesses reported receiving very little financial assistance, aside from subsidies to support retaining employees during the interruption to trading. As a general rule, businesses felt that either they were not eligible for government support or were unable "to jump through all the hoops" to access support. What financial assistance was received was too slow to arrive and required extensive paperwork.

Franchised businesses valued the support from their corporate offices.

Individual businesses referred to the complexity of some of the NDRRA funding programs for businesses which was in contrast to payments to individuals.

While acknowledging the value of the NDDRA for the restoration of physical infrastructure, the council raised the omission of funding to assist coordinate the local recovery program and the lack of recognition of the natural environment as an essential public asset contributing to community and economic wellbeing.

Cardwell derives much of its economic activity from tourism which is reliant on the natural environment of the wet tropics. The Cassowary Coast Community Plan, the Liveable Cassowary Coast Plan 2020, and the Cassowary Coast Economic Development Plan all highlight the importance of the natural environment for community well-being and the economic development of the region

Currently the NDRRA scheme does not provide funding for the restoration or repair of the natural environment. Environmental restoration works, particularly in coastal and rural regions are equally as important as the restoration of hard assets and sufficient funds and resources should be made available.

The cyclone and accompanying storm surge saw large tracts of beach impacted with significant erosion and deposition occurring, dramatic changes to dune and beach profiles and severe damage to foreshore vegetation. They have experienced major dieback of vegetation on the exposed and surge inundated areas. Much of the beach sections around Cardwell have "lost important buffering potential, are unsafe or difficult for people to access, have developed negative impacts on coastal processes, and importantly for the tourism industry have lost much aesthetic appeal".

Reconstructing essential infrastructure such as coastal roads, paths and drains without funding reconstruction of the natural buffer zones that will help protect them is not seen to "reflect the principles of building a stronger more resilient Queensland".



"Affordable sewerage" for Cardwell was identified as catalyst for future economic development. It was claimed that the existing sewerage system at Port Hinchinbrook was originally approved on the basis that it would be expanded to include the township of Cardwell. This has not happened. The township could be incorporated into the Port Hinchinbrook sewerage scheme but needs to be funded by Government.

Donations as a Mixed Blessing

There was general agreement on the overwhelming importance of the donation of physical assistance. Volunteers assisting with clean up, particularly those who came equipped with earth moving gear, tools and personal supplies, were singled out for praise. Many individuals donated their time independently, as well as organisations such as BlazeAid who extended their services from bushfire recovery to flood recovery. In a similar vein, Girringun Aboriginal Corporation played an important role in the immediate recovery through the provision of experienced rangers who were able to assist in the clean -up process. The Salvation Army and Red Cross were generally identified as providing useful social and community support.

A key issue that emerged was some of the unintended, negative consequences of the well-intentioned donation of material goods and food vouchers. Food vouchers donated for use at Woolworths diverted customers away from the local IGA, undermining the local supermarket's cashflow at a critical time. Similar experiences were related regarding handouts of products sold at the Post Office (eg. mobile phones), the provision of care packs with materials sold at the supermarket and the general difficulty in managing large-scale material donations. Managing and appropriately acquitting these donations imposed an extra workload on the community already struggling to get back on its feet.

Insurance Issues

In relation to the insurance industry, concern was expressed that local builders were bypassed with preference being given to large outside construction companies. There should be a "buy local policy". There were concerns about the quality of some of the work. Some problems such as corrosion caused by salt water were not evident for some month after claims were settled.

However it was also acknowledged that the buildings had been repaired to a higher standard and will be better able to withstand another cyclone.

Developing Business Resilience

Although business owners generally weren't familiar with terminology such as 'business continuity plans' or 'recovery plans', there was a broad understanding of 'what to do' next time. This informal planning extended beyond personal safety to issues such as securing records, providing alternate power sources and protecting stock. Owners had clearly learnt from previous experience and were conscious of the need to get back up and running quickly. However, some of the businesses that endeavoured to get back as quick as possible to assist the community in its basic needs ended up missing out on government grants that have specific rules related to restoring business activity in declared disaster areas.

On a positive note, some interviewees spoke of the learnings from the cyclone to develop business mitigation strategies. While they did not use the term, strategies such as growing shorter term crops to reduce risk, diversifying their products and plans to mitigate the loss of critical equipment (ie computers) were identified.

Betterment and Building Resilience

A highly contentious issue, raised by almost every interviewee, is the reconstruction of the highway through Cardwell. The road is being rebuilt in its previous location, in close proximity to the foreshore and through the centre of town (albeit with enhanced mitigation measures), as this meets the NDRRA standard requirement of replacing like for like. This construction project has caused ongoing issues for



foreshore businesses, reducing foot-traffic and generally frustrating businesses recovery efforts. Given the scale and duration of the interruption, which continues 2 years after Yasi, numerous businesses have raised questions of compensation for loss of income. Furthermore, the community more broadly holds deep concerns regarding the wisdom of rebuilding the road in a location that is highly exposed to future cyclones and storm-surges. The negative impact on the town as a tourist destination was also highlighted.

Although opinions are divided, there appears to be a preference for having a heavy vehicle bypass as this is expected to improve the general amenity of the town as a tourist destination and remove the highway exposure to coastal inundation due to storm surge.

This example highlights that the Betterment clause within the NDRRA program is either not known or unable to be implemented.

In contrast to this example, the majority of insurance funded reconstruction work has seen an increase in the standard of construction, particularly the standard to which housing stock has been rebuilt. Despite the delays and frustrations experienced by the community in the reconstruction process, there is recognition that improving the quality and increasing the standards of construction will enhance the town's resilience to future cyclones.

Cardwell is Better Prepared

There was some consensus that Cardwell was better for a future disaster event, "although not if the surge is two metres higher" or if "the event occurs is the next couple of years". The Cardwell District Community Association is driving strategies which will increase the community's resilience.

Recovery is Not Complete

After two years most businesses are still struggling to return to pre-impact financial position. Reconstruction work in the town centre is ongoing, which is impacting on foot-traffic in the retail district. Most businesses report a long and hard struggle to recover and the extended timeframe to turn a profit. For some, the expectation is that the recovery process will take more than 5 years.

Beyond the difficulties arising from the market distorting construction boom, the long-term recovery of Cardwell is reliant on the creation of jobs. Although elements of the retail sector have rebounded, the underlying weakness of Cardwell's economy has been exacerbated by the impact of Cyclone Yasi. Long-term economic recovery planning, addressing infrastructure needs and driving job creation, is essential to develop the local economy and assist existing businesses adapt to the changing market.



Carisbrook: Fractured Recovery, Stable Economy

Case Study Overview



Carisbrook 14 January 2011

Carisbrook is a small rural community closely located to the large regional centre of Maryborough. Carisbrook as a result is a dormitory centre with a limited economic base. Most of the residents travel to Maryborough, other nearby centres or farms for work.

The limited impact of the flooding on the wider regional economy has been an important factor in the recovery. The main challenge for business and residents has been delays in insurance arising from confusion about the type of flooding experienced.

The availability of flood recovery assistance for new businesses has also led to two major businesses who had bought land in the area bringing forward the establishment of local operations and new employment.

Carisbrook's community led "Pigs Might Fly" initiative has also won the state and national community category of the "Resilient Australia Awards".

Supporting the Future of Carisbrook

Carisbrook is a community that remains scarred by the event but is also showing crucial signs of renewal and the opportunity for a positive future. As part of wider and much less impacted regional economy, the economic side of the recovery process has been less problematic than in other case study communities similarly affected.

This is not to downplay the serious challenges for local businesses which were unable to reopen. Because of the proximity of other commercial centres, local residents were able to shop elsewhere. There is on-going trauma experienced by some local business owners resulting from both the event and recovery process.

Importantly for the town no business has closed and two new employers have opened post disaster. The key for Carisbrook will be to sustain the local business growth that has followed the flooding and



ensure that the town is well prepared for future rainfall events through better planning and mitigation actions.

Community led post disaster strategy to create new events and improve the amenity of the town could create opportunities for population growth which in turn could support a larger local economy in the future.

About Carisbrook

Carisbrook is a township of 791 people (2011 Census) in the Central Goldfields Shire Council area of Victoria. It is located about 7km from Maryborough, the major service and commercial centre in a shire which supports a large agricultural sector. Carisbrook is located at the junction of the Tullaroop and McCallum Creeks.

The town is primarily a residential (or dormitory) centre with a small number of "micro-businesses" which are essentially owner operated businesses servicing the township. There are five larger employers in Carisbrook whose markets are much wider. Their labour is sourced from a number of centres including Maryborough and Carisbrook.

Unlike many regional townships, Carisbrook is not a service centre for the agricultural hinterland. This function is based on Maryborough. A large number of residents are in retirement with the proportion of people over 55 increasing from 27.9% in 2006 to 33% in 2011.

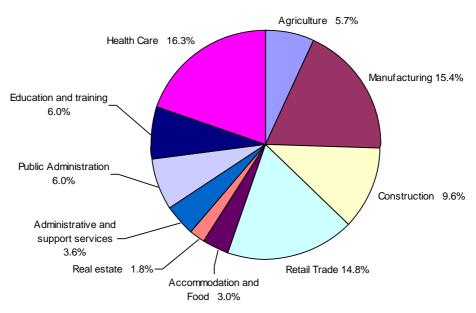


Figure 4: % of Carisbrook Population Employed by Sector in 2011

Only 28 people were in the 20-24 age group and 60 in the 25-35 age group, highlighting the decision of these groups to move away from the area for work and career opportunities. This trend is apparent in many smaller regional communities including the other case study communities of Cardwell and Marysville.

However the town has a relatively large primary school with more than 200 students, many of whom live in Maryborough and the surrounding rural areas.

Carisbrook has a relatively low socio-economic profile with a household median weekly income of \$813 per week in 2011; about 30% lower than the Australian national median of \$1234 per week.



The 2011 Flooding Event

Carisbrook suffered major flash flooding in the early morning of 14 January 2011 with 298 of the town's 330 homes impacted. Most houses received inundation ranging from 300mm to 2000mm (CGSC Submission to the Enquiry into Flood Mitigation Infrastructure in Victoria).

The flooding was reported as the 'worst in living memory' and occurred after heavy rains dumped more than 230mm in the days preceding 14 January. According to that submission to the Flood Mitigation Infrastructure Enquiry:

"Flood flows into the Tullaroop Reservoir were beyond previous records held. The Tullaroop Reservoir filled in the September 2010 floods and therefore provided no flood protection in the January 2011 floods."

The flooding took authorities and locals by surprise. The lack of awareness regarding flood risk was recognised in the Victorian Government's announcement of funding for a flood study for Carisbrook in September 2011 when it was stated that flood intelligence for Carisbrook was limited, and that the only warning locals received was the general flood watch alert.

While severe, the flood water impact was relatively brief with most of the flood water receding within 24 hours.

As well as flooding over 80% of the town's houses and businesses, there was damage to critical infrastructure. The sewerage system was flooded and took a week to recommission. The telephone system was compromised and took some weeks to function effectively. Transportation was an issue for the residents as many cars were inundated and needed replacement. The Council ran shuttle bus services while people waited for new cars.

While the power infrastructure was largely unaffected, individual homes and businesses were unable to re-connect until insurance issues had been resolved and wiring replaced and checked.

A number of families were displaced for more than a year. Even over two years later, a few houses are still yet to be repaired.

Economic Impact

Carisbrook is a dormitory centre with a limited economic base. Most of the residents travel to Maryborough, other nearby centres or the farms for work.

There are fewer than twenty local businesses. These are mainly individual or family operated small business servicing local community. They are predominately retail traders. There is a hairdresser, hotel, general store, garage, saddler, post office, bakery and newsagency. The local restaurant is open only during weekends and for private functions.

The three largest employers located in the town at the time of the flooding serviced large, mainly external markets. While these local businesses were impacted, the community was not isolated and the services which had been provided locally could all be accessed from Maryborough.

As with housing, delays with insurance caused by disputes over whether the policies covered riverine and/or overland flooding resulted in long delays in re-establishing some of those enterprises. The financial impact on these businesses was severe. The local hotel was closed for 14 months.

While many businesses have continued to struggle, importantly none of the town's businesses has closed.

Two of the largest employers in the town have been established since the flooding. They received funding from the Business Recovery Flood Fund as an incentive to establish businesses in Carisbrook. While these businesses already had purchased land in the area with the intention of starting up, they



acknowledge the flood recovery assistance packages offered provided additional incentives to commence operations sooner.

The council estimated that cost of the damage to council infrastructure was about \$3M.

The "Case Study" Process

Members of project team visited Carisbrook and Maryborough on 16 January 2013 where they met with the Mayor and CEO of the Central Goldfields Shire Council and a local community recovery leader to discuss the project and possible interviewees.

17 interviews were conducted in week of 11 February 2013 as follows:

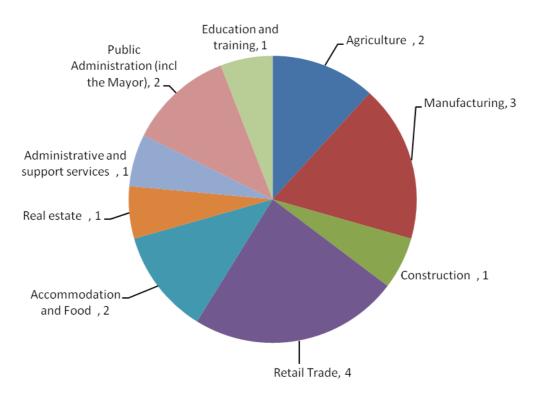


Figure 5: Number of Business Owners Interviewed by Industry

Although employment in the health care sector accounts for 16.3% of Carisbrook's employment, the project team was unable to identify people providing these services from a base within the town. It is assumed that these people worked in other centres.

A focus group was convened at Carisbrook on 8 March of key community leaders including the Mayor, a member of the Recovery group and two business operators.

The purpose was to reflect on the draft findings, "ground truth" the data and identify any relevant information which was not elicited during the previous interviews.

The Council also submitted its response to the survey which had been sent to the Council CEO. The following key documents were provided;

- The application for 2012 Resilient Australia Awards; Carisbrook's "Pigs Might Fly" Community Resilience Project. 2012.
- Central Goldfields Shire Council; 2011 Flood Recovery Evaluation Report. June 2012



 Central Goldfields Shire Council; Submission to the Parliamentary Enquiry into Flood Mitigation Infrastructure in Victoria. June 2011

The Findings

Lack of role clarity and its consequences

The response to the flooding event has created a legacy which has impacted on the social and economic recovery of the community. Residents who were interviewed complained of the inadequate warning. There was criticism of the role and performance of the local State Emergency Service (SES) and the Shire Council.

The Council through the mayor's first-hand account and the survey expressed concern that the role of the local authority in the disaster management system needs to be clarified. Local councils have "no combat role" under Victorian emergency management arrangements. In floods that is the responsibility of the SES and other state authorities. Nevertheless, the Council was held accountable by many residents.

Many residents believed that the initial advice of the Council's website that the flooding was riverine flooding created future problems with the insurance companies. At a town meeting more than two years later, the council acknowledges that the initial advice that had been published on their web site, that the flooding much of the water had come from overland. This was seen as a key reason for original denial of claims by the insurance companies and has led to a view that the Council was a factor in the delays in having their insurance claims paid. This is disputed by Council.

While many acknowledged the role of the Council in the clean-up, the animosity towards the Council has continued in the recovery phase.

The submission to the 2012 Resilient Australia Awards acknowledges this issue:

"In the twelve months after the January 2011 floods, there was a great deal of anger and upset within the community directed towards the Council, the CFA (Country Fire Authority), and the SES and between SES and CFA also. This developed to the point where Council employees that (sic) lived in Carisbrook reported not going out to normal social events for fear of having to deal with recriminations from the rest of the community and the local SES branch essentially collapsed. Recovery in the town was stymied with infrastructure recovery money spent without local consultation, further exacerbating the deteriorating relationships....."

Recovery Arrangements need Institutional Support

The recovery arrangements were fractured. The initial structure was initiated by Council and involved local representatives, state agencies and the council representatives. It was replaced by a community organisation which continues to operate.

The appointment of three different flood recovery officers in a short period after the flooding was a further cause of disappointment, although at least one of these officers is believed to have resigned because of the community pressure.

However out of the anger and frustration, the local group has developed a plan for the future of Carisbrook. This example of community engagement and building local resilience has been recognised by Carisbrook's "Pigs Might Fly" initiative winning the state and national community category of the "Resilient Australia Awards".

However the initiative is about community recovery and involves projects focused on improving the amenity of the township and promoting the town to its own residents and those outside. While the proposed annual festival and rail initiative will have some economic benefits, they are unlikely to attract new businesses.



One issue which was highlighted by the interviewees was the need for regular and accurate communication from the Council during the event. People were very critical of a statement from the former mayor after about six months that Carisbrook's recovery was progressing well. At that point in time most of the population was still living in caravans awaiting the rebuilding of their homes.

Local businesses have struggled

Almost all of the local businesses were severely impacted. Delays in re-opening as a result of the flooding were exacerbated by delays in the approval by the insurance companies of their claims. The created serious cash flow issues for those businesses and compromised their capacity to repay debt.

Because of the proximity of other commercial centres, local residents were able to shop elsewhere.

Insurance Issues

Impacting on the rate of rebuilding and recovery of both individuals and businesses was the difficulties and delays in obtaining insurance payments in the wake of a flash flood. This was and continues to be a major cause of angst and anger in Carisbrook.

The inconsistent approach taken by the insurance companies over whether the damage was caused by riverine or overland flooding were evidenced by the different assessments of neighbouring properties. The requirements to challenge the original assessments or to have claims finalised added to the emotional stress of residents and business people. The issues with builders, the delay time in having one builder receiving the majority of the work and the quality of the work were of lingering concern.

Support for businesses

All of the businesses interviewed indicated that they received some financial assistance for the "clean up" phase, with 9 small businesses receiving "clean-up" grants of \$13, 330 on average.

Table 1 NDRRA GRANTS; CARISBROOK

NDDRA Grants	Total Applications	Decline d	Approve d	Grant Paid	Averag e Grant	Approva I Rate
Primary Producer	33	5	28	492,150	17,577	85%
Small Business	10	1	9	119,967	13,330	90%
Not For Profit	4	1	3	21,123	7,041	75%
Total	47	7	40	633,240	15,831	85%

Source: Data from Rural Finance Victoria

There was a great deal of uncertainty about the types of support available to businesses. Concern was expressed at the compliance requirements and the complexities of the forms. One person indicated that he was unaware of the eligibility for support from CentreLink until about six months after his business was closed. There was no retrospectivity.

The interviewees and the focus group spoke about the need for business/financial advice. There was a view that this support needs to come from a person embedded in the town but who is not a local resident. Some expressed concern that they were uncomfortable in divulging their financial affairs to a person whom they know. The need to embed this capacity in the town for a period of time was also related to criticism that some external advisers providing business support services visited, held information sessions but didn't follow-up on their commitments.



Even in such adversity, opportunities for renewal can be seized. The historic hotel which was built in 1857 was substantially destroyed. It took too long for the insurance assessment which delayed the rebuilding. It did not trade for 14 months. However the owners took a longer term view and undertook a major refurbishment. They also now employ a chef. It has again become an important focus for the community.

At the focus group the disadvantage of those owning rental properties was raised. While those renting received the "hardship" payments, their leases were voided by the conditions of the houses. Many of these people left the town after receiving the payout. The owners of these rental properties received no support, had to clean up their properties and had no tenants. It was argued that these type of investors were in the same position as the small locally owned businesses.

Two businesses received funding from the Business Recovery Flood Fund as an incentive to establish businesses in Carisbrook. One intends to move all its business interests to Carisbrook. These two new businesses are the largest employers in Carisbrook with currently about 45 employees. This will rise to about 60 later in 2013. Both these businesses were considering a move to Carisbrook as a consequence of factors other than the incentive payment. The support provided to these two businesses was contrasted with the lack of support for existing businesses.

Business Continuity Planning

The local businesses did not have written business plans or business continuity plans. Unlike those 'micro' businesses, the larger companies all had business plans in place, thought in terms of risk and had done as much as possible in the way of mitigation against future flood events (larger drains, raised floors to protect stock (hay for example), ensured records were safely stored in multiple locations, and had adequate insurance).

Interestingly in its Submission to the Parliamentary Enquiry into Flood Mitigation Infrastructure in Victoria, the Council acknowledged that it did not have a Flood Disaster Plan as it had focused on the risk of bushfires following 12 years of drought and 2009 bushfires.

Mitigation Strategies

In February 2013, the results of the flood study were announced and the community is to consider a range of options. The responsibility for flood gauges and for cleaning and maintaining the waterways rests with state government agencies.

The Council is working with the SES to develop a flood disaster master plan for the Shire which the Council expects will have flood risk town specific elements. However Carisbrook residents remain critical as they want a plan specific to Carisbrook rather than one that includes their town as part of Maryborough. This is a source of significant dissatisfaction for local residents who see than themselves as having different needs and risks.

The CGSC now requires that new buildings be built 300mm about the 2011 flood height.

Psychological and Emotional Impacts on Business are Long-Term

Some small business owners who dealt with trauma affected people regularly were still suffering from 'vicarious trauma'. This was evidenced by their obvious brittleness, and difficulty in discussing events, and in one case real anger which was directed ostensibly in the direction of government agencies who they interpreted as not only being unhelpful but also as a cause of their suffering.



Emerald: Disasters and the Mining Boom

Case Study Overview



Emerald Town Centre 1 January 2011

Emerald is major regional service centre in Central Queensland that was severely affected by floods in 2008 and twice in 2010 while simultaneously experiencing an economic boom due to major mining projects in the region.

All of Emerald's major industries were affected by the disaster in 2010. The mine workers and related businesses were insulated from the sustained economic impact from the flooding but economic recovery of small business was more problematic. Some businesses were finding it very difficult to get back on their feet– a situation which can be masked by the relative wealth of the community.



Supporting the Future of Emerald

Emerald's growth potential remains strong with significant investment in approved infrastructure projects flowing from the mining boom. However the peak of the boom may have passed and the town will need to adjust to a future where further disasters will occur without a boom to insulate the town from the worst effects.

Mitigation and preparation for management of future events is the priority for Emerald's businesses and industry. Repeated events have led to learnings for business which is better prepared for recovery.

Community consensus and action is needed on the most important mitigation strategies to reduce the impact of future events.

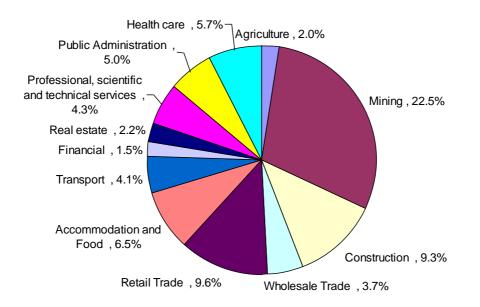
About Emerald

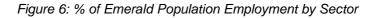
Emerald is the largest town in the Central Highlands Regional Council (CHRC) in Central Queensland. It is located 270km west of Rockhampton and 900km north west of Brisbane by road. It is the major service centre for the surrounding agricultural and mining industries.

Emerald's estimated resident population increased from 10,998 at the 2006 Census to 12,895 at the 2011 Census. The town is experiencing significant increases in population with an anticipated annual increase over the next 10 years of 2.8% compared with Queensland projected average of 1.8%. This reflects the impact of the coal mining industry and its related industries. This growth generates increased employment opportunities across all sectors of the local economy which fosters further growth and investment.

Emerald is a wealthy and economically diverse community with the median household income of \$2294 per week in 2011 compared with the Australian median household income of \$1234. Essentially its median household income is nearly double the national median. The employment opportunities and high wages as a result of mining have seen large numbers of younger people move to the town. The median age is 29 years.

With a strong labour force participation rate of 77%, the unemployment rate is very low at 2.4% in 2011. This has increased marginally from 1.9% in 2006 but remains significantly below the state and national unemployment rates. Employment in the town is dominated by the mining sector, followed by construction and retail/trade (see Figure 1 for detailed breakdown).







An interesting demographic aspect of Emerald is the very large number of new people to the town. According to the 2011 Census, 4500 people or 42% of the population have moved to the town during the previous five years and 1750 people or 15% had moved to Emerald in the previous twelve months. While this has many positive consequences, some people reflected that creates difficulties in building a strong sense of community: "They come to make their money before moving back to the coast". It also has implications for disaster preparedness as these new residents may not have experienced even the most recent disaster.

Emerald's growth potential is very strong with significant investment in approved infrastructure projects. There are currently projects valued at \$36.4M approved and/or under construction with \$13.5M for the airport extension, \$6.6M for the aquatic centre, \$5M for a GP super clinic and \$4.5M for road and drainage projects. For the private sector, the Emerald Homemakers Centre is under construction (\$5M). The Central Highlands Regional Council has approved building applications of \$3.4M. Five major mining projects in the Emerald area are under consideration but may be impacted by the current slow-down in mining activity.

The 2010-11 Event

Flooding events were not new to the people of Emerald. They had experienced severe flooding in 2008 when flood heights reached 15.36 metres at the Vince Lester Bridge, the town's only access to the east and south. This flooding was described at the time as "a one in one hundred year event".

Emerald was flooded twice in December 2010. On 3 December the flooding peaked at 10.95 metres at the Vince Lester Bridge, with the Fairbairn Dam at 123% capacity and flowing 1.9 metres over the spillway. Emerald was isolated. All the main highways and many Council roads were closed. The rail network sustained washouts to the east and west of Emerald.

Reflecting the experiences of the 2008 floods, supermarkets experienced a run on stock with the supplies of bread, milk, fruit and vegetables and meat being exhausted and causing some concern about resupply. Trucks were guided through road works on Monday 6th December 2010 to facilitate the transport of agricultural products and to allow resupply.

Agforce, the peak body representing primary producers in Queensland, estimated that about 30% of the Emerald cotton crop was inundated with a loss of 62,000 bales and a value in the order of \$31m.

The second flooding commenced on 27 December and peaked on 31 December at 16.05 metres, surpassing the 1950 record of 15.7 metres. The Fairbairn Dam was at 178% and flowing 5.6 metres over the spillway. Again Emerald was isolated; this time for 11 days. The town itself was cut in half for seven days.

In Emerald, it was estimated that 1060 residences had water over the floor. 4301 "hardship" grants through the Australian Government Disaster Recovery Payment of \$1,000 per adult and \$400 per child were provided to the value of \$1.6M. 2500 people were evacuated from their homes with more than

400 staying in one of four evacuation centres at the height of the flooding.

In addition to the inundation of residential premises, the industrial, commercial and Government areas of Emerald were severely impacted. Both shopping complexes were inundated with the Centro complex most severely impacted. It was estimated that over 100 (90%) buildings in the industrial





area and approximately 30 % of commercial offices were impacted by flood waters.

Re-supply issues reoccurred. Despite the town's isolation by road and rail, the airport which is located in the higher south east part of the town remained opened. Rotary aircraft were used to transport essential items as well as materials for the clean-up to the flooded section on the western side of the Nogoa River. Rural re-supply was managed in the same way.

Economic Impact

The Central Highlands Regional Council commissioned a report into the *"Economic Impact of the 2010-11 Floods on Central Highlands Regional Business and Industry (*Economic Impact Report)*"*. The report by Lawrence Consulting was presented in November 2011. While the report was for the regional council area, the majority of affected businesses and primary producers were located in and around Emerald.

There 341 businesses of a total of 386 or 80% of Emerald's businesses were impacted. In the regional council area, 88% of businesses affected were in Emerald itself.

According to the Economic Impact report, the total estimated cost of direct damages to businesses (excluding mining) across the Central Highlands as a result of the flooding was \$313.6 million, or \$98,251 per business.

45.5 % of businesses that were forced to close reopened within a week, while a further 19.7 % opened again within 2 weeks. The average length of time that businesses forced to close took to reopen was 25.2 days.

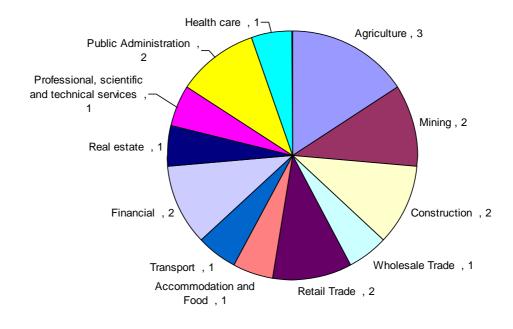
In the agricultural sector there was major damage to irrigation infrastructure, fencing, plant and equipment and crops and livestock with 35 primary producers in the Emerald service area reporting significant damage. The Economic Impact report assessed that the average cost of repairing infrastructure, equipment and/or replacing stock losses per property as a result of the 2010-11 flooding was approximately \$306,992. While the report did not have specific data on the losses in the Emerald area, anecdotal commentary is that costs around Emerald were higher than for the entire Regional Council area as a consequence of large scale farming and grazing operations, many of which involved significant irrigation infrastructure. All three primary producers who were interviewed indicated losses of around \$1 million.

Mining was affected. Access to the mine sites from Emerald was cut for an extended period, production was halted and costs were high. A "Force Majeure" was declared to mitigate claims from customers. Rail damage prevented coal getting to the ports for export. Once the rail became operational, coal stockpiles were used so that there was minimal disruption to the overseas customers. Indeed despite this being a more serious event than 2008, coal mining representatives who were interviewed agreed that the lessons learnt enabled then to be back in production with eight days compared with 11-14 days in 2008.

The "Case Study" Process

The project director visited Emerald on20 December 2012 where he met with the Mayor of the CHRC and the CEO of the Central Highlands Economic Development Corporation (CHDC) to discuss the project and possible interviewees.





18 interviews were conducted in week of 4 February 2013 as follows:

Figure 7: Number of Emerald Business Owners Interviewed by Sector

Although the agricultural sector is not a significant employer of labour in Emerald, it is a significant contributor to the economy of the town, with a large number of businesses dependent on the sector. Mining representatives were selected from the two largest mining companies in Emerald. The representative from the Health care sector provided useful insight into the social and psychological effects of the disaster and their ongoing impacts on Emerald's recovery process.

A focus group was convened by teleconference on 11 March of key community leaders including the Council CEO, CEO of the Central Highlands Development Corporation, the Editor of the local newspaper, the Council Communications Director and the Recovery Development Officer whose position was funded through a grant from the Local Government Association of Queensland. The purpose was to reflect on the draft findings, "ground truth" the data and identify any relevant information which was not elicited during the interviews.

The Council also submitted its comprehensive response to the survey which had been sent to the Council CEO. Attached to that survey were the following key documents;

- The Central Highlands Local Disaster Management Plan (approved December 2012), which includes a separate plan and contact list for all centres;
- The Report of the Central Highlands Regional Council Flood Recovery Co-ordination Group into the Flood Events –December 2010/January 2011;
- "Economic Impact of the 2010-11 Floods on Central Highlands Regional Business and Industry"; A Report by Lawrence Consulting (November 2011);
- Emerald Flood Modelling;
- Central Highlands Economic Profiles 2012-13 and 2010-11 by the Central Highlands Development Corporation;
- Central Highland Regional Council Floods Recovery Plan for 2101-11 Floods; and



Alert Networks-Nogoa and Comet Rivers.

Findings

Flood Plain Location

Living on a flood plain can have significant benefits particularly for agriculture. It also has inherent risks which need to be understood and managed. In Emerald in 2010-11, three isolated "islands" were formed. This has the potential to create major difficulties if the town needed to be evacuated.

While most interviewees were aware of a recent State Government grant to Council of \$5M through the "Royalties for Regions" fund, there was no consensus about mitigation priorities. Some expressed concern that some actions to mitigate risk (i.e. levies) could have adverse consequences for others. Some others had a view that the costs would be prohibitive. It is noted that the CHRC have planned community consultation workshops to consider options on possible flood mitigation works.

Restoration of Communications Infrastructure is Critical for Business Activity

Emerald's businesses are particularly vulnerable as even moderate flooding cuts road access to the east, south and north, the main economic arteries. Rail transport is often compromised. Business recovery is jeopardised as access to supplies for local businesses is limited as are markets for products particularly agricultural and mining products. All businesses are impacted during this period of isolation, not only those directed affected by flooding. Restoration of transport routes and telecommunications is a priority. Greater investment in mitigation to improve access during flooding would benefit the business sector as well as the community, more generally.

Economic impacts can be hidden

Emerald's economic recovery issues were masked by the mining boom which was occurring in 2011 but have become more apparent with the slowing in that industry.

Interestingly house prices and rentals increased in the first year after the flooding even in areas subject to flooding. This was related to the "mining boom" and the shortage of rental accommodation caused by the flooding and delays in the rebuilding which were exacerbated by delays with insurance. The owners of rental properties experienced significant loss of income during the period as leases were voided. They were not eligible for any emergent grants as these were not the principal place of residence.

According to advice from some interviewees, the slow- down in the mining sector during 2012 has seen this trend in prices and rentals reversed.

Businesses which are not "flooded" are often impacted through a range of factors including dependencies on "flooded" businesses but more so as a result of the town's isolation which limits access to supplies and markets. There is little recognition of the impact on these businesses.

Even a wealthy and diversified economy like Emerald has had to deal with a multi-tier economy. The mine workers and related businesses might be insulated from the sustained economic impact from the flooding but economic recovery of small business was more problematic. People were finding it very difficult to get back on their feet– a situation which can be masked by the relative wealth of the community

Support for Business Recovery

According to the Economic Impact Report, businesses overwhelmingly used internal sources to finance recovery, with the primary financial resource indicated by business being "absorbed own losses" (59.6% of all responses). Many businesses relied upon personal savings (16.7%) or bank



loans (10.5%) to cover losses, whilst only 16.7% of businesses made an insurance claim and 21.9% were provided assistance through State and Federal Governments' National Disaster Response and Recovery Arrangement (NDRRA) schemes which were administered by the Queensland Rural Adjustment Authority (QRRA).

The survey data was consistent with the data from the interview process.

National Disaster Response and Recovery Arrangement (NDRRA) Issues

The local application process for NDRRA funding was complex and time consuming even for the Council which was experienced in lodging these applications. However, there was a general recognition of the value of NDRRA/Government support for rebuilding of infrastructure, including Council infrastructure as local governments do not have the financial capacity needed for such works.

The CHRC believes that it is imperative that local councils be provided with regular training and ongoing refresher programs by State and Commonwealth agencies on the criteria and administrative requirements of the schemes.

Concern was expressed at the more rigorous criteria which had been announced since the 2010-11 events which may deny support for "community infrastructure" such as parks and sports facilities.

Support through the NDRRA for primary producers and small business (fewer than 20 employees) is available under three categories. Category B provides low interest loans of up to \$250,000 to recover and re-establish after a disaster event. Under the Exceptional Disaster Assistance Scheme which must be approved by the federal Attorney-General and which are termed Category D loans, primary producers and small businesses may be eligible for loans of up to \$650,000 if they have suffered extreme damage. Large businesses (over 20 employees) may also be eligible.

Category C Grants of up to \$25,000 are available to primary producers to assist with clean-up and recovery efforts. Generally recipients are required to have the work completed and claim reimbursement.

NDRRA support through Category B and D loans for small business is inadequate. This is reflected in Table 2, which shows only two businesses of the 190 across the region had Category B loans approved and then only to the value of \$390K. No businesses claimed under Category D.

	Category B Loans		Category C Grants		Category D Loans	
	Amount (\$M)	No	Amount (\$M)	No	Amount (\$M)	No
Small	\$0.39	2	\$1.665	190	-	-
Business						
Primary	\$1.408	8	\$3.374	281	\$3.410	7
Producers						
Total	\$1.798	10	\$5.039	471	\$3.410	

Table 2. NDRRA Flood Support through QRAA for Central Highlands

Source: Economic Impact Report; Lawrence Consulting Nov 2011.

Clean-up and restoration grants (Category C) of up to \$25, 000 are useful but the requirement to have invoices following the completion of the work can add to cash flow issues. There should be greater flexibility e.g. payment on presentation of quotes with subsequent acquittal to ensure necessary accountability.

While economic recovery is dependent upon the local businesses, politicians and the media seem to afford much higher priority to personal hardship and distress. Emergent assistance grants from both the State and Commonwealth Governments are actioned quickly with significant media attention.



However business, particularly small local business seem to attract little political attention. Some were critical that these hardship grants are poorly targeted with some recipients seemingly inconvenienced rather than seriously impacted.

There were similar issues of complexity and financial requirements for the agricultural sector but there is both greater knowledge of the available support and greater uptake as is evidenced from Table 1 of that support particularly after the threshold for concessional loans was increased to \$650, 000 (Category D Loans). Evidence suggests this increase made this form of support more attractive with 7 primary producers accessing these concessional loans.

The role of AgForce and QRAA was seen as important in disseminating information on the types of support available and the criteria for such assistance.

Local small business do not have access to such support as they do not have such an effective lobby or advocacy organisation representing their interests at state and national levels.

The Council expressed concern that the requirements for applying for Category C and D Assistance need to be clarified and streamlined.

Small locally based businesses directly affected are most vulnerable

The most vulnerable businesses are locally based small businesses whose market is the local community. This is exacerbated for those businesses which were directly impacted from the event. They are small and don't have alternative markets.

NDRRA category B grants are only for clean- up and reestablishment and not for loss of income. The loss of income affects cash flow but most small businesses have loans which must be serviced, staff to pay (or lose) and other expenses such as rent. They suffer not only from loss of stock and damage to their premises but also from the loss of revenue for the period in which they are unable to trade. In the case of small businesses in the Centro (Coles) complex, the businesses were closed for six months. Businesses in the shopping complexes are heavily dependent on "walk-in" trade. The loss of income can be the difference between small businesses getting up and running again, and trading themselves out of debt or folding all together.

In 2011, the average length of time that businesses forced to close took to reopen was nearly four weeks and some were unable to re-open for six months. Businesses which are forced to cease trading for a period may lose their customer base which is often painstakingly built up over a long period. These personal and business relationships are not easily restored, particularly where those suppliers and customers have had to seek alternative sources. The longer the period of closure the more difficult the re-establishment of the customer base becomes.

More support is needed to help small to medium local businesses in the immediate recovery phase of a disaster to keep going during the period in which they cannot trade because of flooding around them; or because of unavailability of stock or because their businesses are dependent upon the economic recovery of other businesses (e.g. transport, contractors for the agricultural sector).

Pre-existing economic trends are often reinforced by the disaster. In some cases the event can become the tipping point for decisions about the future of businesses.

In Emerald, local retail businesses have also had to endure the national downturn in retail trade as well as competition from national companies (including franchised operations) which are more able to sustain short term losses as some were able to access support through their parent organisation or franchise head office.

Insurance issues

There were concerns that some insurance companies were too slow to process claims. Insurance companies need to be more flexible and consistent in their approach to repairs/reconstruction.



Information on the requirements in relation to damaged stock was often confusing (e.g. stock needed to be kept but it was never viewed by assessors). Assessors often lacked local knowledge which would have aided the processing of claims.

Most stressed the need a consistent definition of flooding which is able to be understood by policy holders.

The allocation of significant numbers of jobs to a few builders (usually outsiders) resulted in delays for individuals but also impacted on local builders and suppliers. Bulk repairs are structured to maximise the throughput of houses rather than speed of individual house repairs.

During interviews the primary producers indicated that they could not get or could afford insurance for flood damages and losses. The Economic Impact report supported this conclusion.

Insurance companies should be encouraged to have a preference to "buy locally". However it was acknowledged that can be complicated by limited local suppliers and lack of choice.

More problematic in the long-term has been the decision of the largest insurer, Suncorp, not to issue any new policies.

Staff retention is a major issue

Retaining trained staff in Emerald remains an issue for both big and small employers. There was considerable pressure to maintain and pay staff even if productive work was not possible. Again this burden falls more heavily on local small businesses. Some businesses (e.g. hospitality and accommodation) rely on the use of "457 visa" workers.

Economic recovery is impacted by social/psychological recovery

Economic recovery is impacted by the social/emotional/psychological recovery of the community and individuals. Counselling is vital but needs to be available for longer and have a financial/business planning component. While there is value in locating counseling at a central, one stop shop front, it may not be not well utilised by the people that need it most (often men who have been socialised into the need to be in control and stoic). Counseling needs to be supported by an outreach model. Counseling services should be targeted with personal visits to those who may need the service. Specifically targeted counseling to the small business sector is required.

The memories of the flooding events are strong with many still "on edge" as evidence by the reaction to the possible impact of ex TC Oswald which saw "panic" buying of critical household supplies.

The loss/limited number of State funded rural financial counselors was an issue raised by the agricultural interviewees. Small businesses could benefit from this support.

Disaster experience helps

The community and businesses were better prepared for the disaster after a "one in 100 year flooding event" three years earlier. The clean-up was quicker and better organised. Many businesses (including mines) were able to be back into production more quickly despite a more serious event. Council communications through SMS and direct meetings kept the community better informed and were generally commended.

The mining industry provided a structure to support the clean–up, built around the application of its disaster recovery/business continuity planning. It also provided labour, equipment, community support and donations.

Its disaster planning has been further refined as a result of the learnings from this and other events.

The allocation of mining staff and other staff of closed businesses such as the seriously affected Centro centre to the clean-up provides for a quicker return to normal while providing meaningful, community-valued work to staff which aids their personal/emotional recovery.



Following the flood events of 2010-11, the CHRC commissioned a full review of its Local Disaster Management Plan (LDMP). As a result the CHRC LDMP was totally re-written to include lessons learned from recent and previous events at an internal cost of \$90K. The Council has undertaken a comprehensive set of risk assessments.

Council has completed an assessment of gaps in the River/Rain ALERT network.

An Interim Flood Overlay has been developed with the assistance of the Queensland Reconstruction Authority, the Department of Natural Resource Management and Town Planning Consultants. This was adopted in the Planning Scheme by Council in December 2011. The Council reported that it was the first local Government in Queensland to do this post the floods.

Business models have changed

Mitigation strategies have included better preparation which equals quicker return to production as well as reduced losses. Examples of changes to business models include new technologies (iCloud) and the protection of critical equipment, mobile shelving, greater stockpiles of supplies, particularly around December and January, realignment of fencing to reduce future flood impacts, "buy local" strategies as a recovery mechanism, relocation of businesses, flood mitigation devices (Centro), diversification of markets and /or products particularly crop diversification, changes to farming practices, and "self-insurance."

The Centro complex which was closed for six months has invested more than \$400k in a building flood mitigation system which involves external protection devices, modified stormwater system and pumps and gates.

Consideration of support/advice on mitigation/adaptation measures for individual business should be considered. Promotion of successful innovations would be beneficial.

Business Planning needs attention

It appears that many small business owners do not think in terms of "Risk", nor do they have business continuity plans. Large companies and particularly mining companies automatically consider risk as part of their business plans. Likewise the farmers, who are unlikely to have formal business continuity plans, do seem to have a better understanding of risk and many of the larger primary producers in the region have reduced the threat of loss by diversification (different crops, cattle, multiple locations).

There is a need to understand that disaster preparation requires not only plans to move stock but also the business plans, records, orders, payments, invoices etc. which are needed for insurance claims, for accessing government grants and loans and to enable a quicker operating return. This needs to be explicitly addressed in business planning/mitigation/education.

Business continuity plans should specifically include personal and staff welfare impacts as a consequence of disaster events.

Donations are appreciated but can be counterproductive to Business Recovery

The management of material donations was a significant issue. While these donations were wellmeaning, and generally gratefully received by the community, they were also difficult to manage and hard to store. During the immediate aftermath of the disaster managing material donations consumed valuable resources including space, staff, food and accommodation. The provision of physical donations also has the unwanted effect of undermining the business model of local businesses by saturating the market with free goods. Material donations add another blow to businesses who, following a disaster, are already dealing with reduced/interrupted sales and cash flow as well as potentially significant repair costs. Donations of money is generally perceived as the best option and



has the added advantage of being able to be spent in the local community and consequently used to support local businesses.

The recent spate of disasters across Australia, and in Queensland in particular, has seen a rise in adhoc mass volunteerism by unaffected individuals. Community members were, again, generally grateful for the offers of physical labour to assist the clean-up process. Problems arose where well-meaning volunteers came to Emerald to offer help without being suitably prepared for post-flood conditions; lacking critical items such as food supplies and self-contained accommodation.

Planning for Recovery is essential

The CHRC considers "Recovery" as a crucial component of disaster management, and in particular the ability for the community to return to as close to normal as possible in the shortest time frame.

The CHRC advised that its Recovery Strategy, which was part of its local disaster management plan, provided a structure, guidelines and clearly defined roles to people/agencies involved with the response and recovery resulting from the disaster. This governance within a structured model resulted in a positive outcome in recovery

The Council said its "role is to develop a strategy to manage the recovery process and engage stakeholders, recognising that individuals, families and the affected community as a whole have a wide spectrum of different needs and expectations. Services provided to an affected community can be diverse and at times extremely complex."

Council provided a dedicated building and office for the recovery centre operation for 18 months.

As a result of the flooding in 2008, Emerald developed a recovery model which was subsequently varied slightly to align with Queensland Reconstruction Authority's recommended structure for local authorities. A Flood Recovery Co-ordination Group was established to support the Community Support, Health and Wellbeing (including housing), Economic Recovery, Infrastructure and Environment committees. The committees were led by "community leaders with expertise, experience and credibility". These groups were formally reported to the Council. The Council provided a copy of the comprehensive Report of its Central Highlands Regional Council Flood Recovery Co-ordination Group into the Flood Events –December 2010/January 2011.

The criticality of housing to economic recovery needs to be understood. Business owners and/or their staff whose houses are damaged focus on that more basic need. Furthermore, damage to housing resulting in displacement of the local population can seriously undermine the 'market' to which a local business sells. In the absence of a viable market, businesses are less inclined to re-establish themselves after a disaster. Promoting the rapid recovery of housing, along with keeping residents in the local area during the rebuilding process is central to facilitating economic recovery.

The recovery process needs structure, community connected leaders, action orientation, confidence, community credibility and a community engagement strategy, which involves regular communications to all residents. The process must link the community with the Council and community leaders to assist with the dissemination of information to the public. There was a strong contention from the focus group of the importance of community workshops post event for debriefing and identification of future mitigation strategies. Both elements aid the building of resilience.

The structures and processes for recovery need to be included in the disaster management plan. Formal and public reporting processes and recovery reports should be an obligation of all recovery groups.



Marysville: Charting a New Future

Case Study Overview



The "Black Saturday" Fire from the Marysville Sports Oval

The town of Marysville in Victoria was almost completely destroyed by the Black Saturday bushfires. Only one of the 39 retail businesses in the main street remained open after the fires.

Enormous efforts and resources via local people, governments at all level, local and external business and the wider Australian community have been put in to rebuilding the town. However four years on, the recovery of the town is on-going and the future uncertain.

The economic side of the recovery remains extremely problematic for the community.

Marysville's former strengths in natural amenity, a unique historic town centre and extensive tourist infrastructure are still only beginning to be restored where this is possible. Much of the history is lost and new strengths will need to be found to fill their place. Since Black Saturday, the population of the town has halved.

Supporting the future of Marysville

Despite the on-going challenges there remains significant potential for Marysville to re-establish a sustainable economy and chart a positive future. It remains close to Melbourne and the ski-fields and conference infrastructure which underpinned the economy before the fires are beginning to come back online.

However a sustainable local economy will be much different to the economy of the past. Innovation will be needed alongside the new tourist infrastructure to recreate Marysville as a destination for day trippers from Melbourne, conferences and new markets. An entrepreneurial approach will be crucial.

Given the reduced population in Marysville, on-going support and involvement from people from outside of the community to help locals lead renewal can help to accelerate what is expected to be a long on-going economic recovery process.



About Marysville and Triangle

"The town held a special place in the hearts of many Victorians, who returned often to stay and the historic guest houses and Bed and Breakfasts, just as their parents and grand-parents had done before them."

"Marysville and Triangle" consists of the small communities of Marysville, Buxton, Narbethong and Taggety in the Shire of Murrindindi about 100km north east of Melbourne. The area's economy is based on its natural environment, particularly at Lake Mountain which has the closest snowfields to Melbourne. In addition to tourism, the main industries are agriculture, aquaculture, timber and sawmilling.

In 2006, the estimated resident population was 517. However, according to 2011 Census, the population had dropped by over 50% to 233 residents. In addition to the reduction in population since the Black Saturday fires, the age profile has changed dramatically. In 2006, Marysville's age profile showed 36 % aged 55 years and over compared to 24% for Australia. By 2011, nearly 47% were aged 55 years and older. The median age in 2006 of 46 years had increased to 52 in 2011. The data reflects of the loss on business and employment opportunities and the need for younger workers to move away in search of employment. Older Australians also tend to spend less which also has an impact on the local economy.

Figure 8 below displays the change in the nature of employment in Marysville from 2006 to 2011. The dominance of the "Accommodation and food services" sector, an indicator of the importance of tourism is apparent from the table as is it significant decline by 2011.

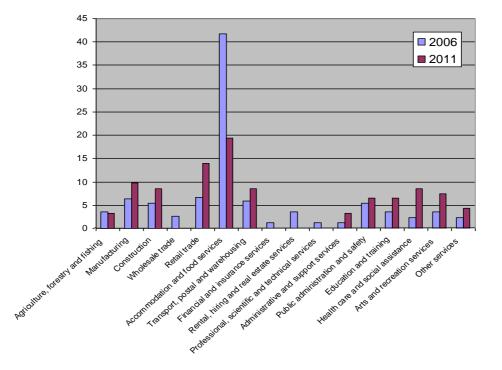


Figure 8: Comparison of Marysville % Population Employed by Sector

The unemployment rate has increased dramatically from 5.6% in 2006 to 9.1% in 2011. It has a low socio-economic base. According to the 2011 Census, Marysville's household median weekly income of \$818 is 66% of the national mean of \$1234. Only 90 people indicated in the 2011 Census that they were employed and nearly half of these were working part-time or casually. Median weekly rental increased from \$135 in 2006 to \$350 in 2011 as a result of severe shortages in rental accommodation



caused by the Black Saturday fires. In 2006 there were 65 rental accommodation units. There were only 9 in 2011.

The data provides an insight into the challenges for the economic recovery of Marysville. It reflects of the loss on business and employment opportunities and the need for younger workers to move away in search of employment.

The recovery task in the face of such a level of devastation is unparalleled in recent Australian history.

Black Saturday 7 February 2009

The Black Saturday bushfires were a series of individual bushfires that burnt across Victoria on Saturday 7 February 2009. The fires resulted in Australia's highest ever loss of life from a bushfire, with 173 fatalities, 414 people injured 2,133 homes were destroyed, 78 townships affected and over 4,500km² burned. The fires left an estimated 7,500 people homeless.

The conditions for the Black Saturday bushfires were largely due to the prolonged and intense heatwave in January and February in 2009, resulting in successive record high temperatures. Victoria was subject to very dry conditions before the fires following a decade long drought which affected south east Australia. This resulted in very high and very dry fuel loads. These conditions, together with strong winds and low humidity, caused very intense fires. The conditions on 7 February were particularly severe with fires travelling at speeds of up to 50 kilometres per hour.

Marysville and the surrounding areas suffered the greatest losses as two of the largest fires, Kilmore East and Murrindindi, merged.

Thirty-nine people lost their lives in and around the triangle (35 Marysville, 4 Narbethong). Of the 452 homes in Marysville which existed prior to the fires only 34 remained habitable. In Buxton, 84 homes were destroyed along with 75 in Narbethong and 43 in Taggety.

Over 50% of Marysville's residents who were displaced have not returned.

The economy of Marysville and the Triangle was based on the natural attractions and tourism.

Fire damage forced the closure of these key tourist attractions including Lake Mountain. With accommodation and tourism the major industry in the Marysville area, only 200 beds of an estimated 1500 remained available. Three conference centres were destroyed. In the Murrindindi Shire Council region, the tourism



accommodation options dropped from 40 options (motels, apartments, caravan parks) in 2006 to 21 in 2011.

Almost all the shops and cafes and restaurants were lost. Essential services in Marysville including the police station, the post office, community centre, medical centre, retirement village and the primary school were destroyed.

Economic Impact

Marysville was heavily dependent on tourism, but agriculture, forestry and fishing were also important in the Triangle area. The economic impact of the fires was devastating. The immediate damage



caused by the fires resulted in extensive displacement of the location population. Of the 90% of the population who lost their homes, over 50% have not returned to the region. The following table presents an overview of the impact of the fires on the commercial property base in the Marysville region.



 Table 3: Commercial Properties Destroyed in the Marysville and Triangle Region in the Black

 Saturday Fires

Locality	Number	Percentage	Comment
Marysville	40	80%	Damage to infrastructure was concentrated in Marysville and Lake Mountain. Accommodation and main street commercial properties the hardest hit.
Narbethong	11	60%	Mainly a mix of accommodation (camps and cottages), small businesses (garden supplies/trout farm) and timber mills.
Buxton	2	20%	
Taggerty	2	25%	

Source: Boston Consulting Group Report: Marysville and Triangle Economic Recovery Strategy– June 2009. p25.

Only one of the 39 retail businesses in the main street remained open after the fires.

The importance of tourism on the town before the fire can be gauged from the Census data. The proportion of employed people in the Accommodation and Food group in 2006 was 41.5%. In 2011 it had dropped to 19.4% along with a corresponding population decrease of over 50%. This starkly illustrates the scale of the challenges for economic recovery in Marysville.

The Boston Consulting Group report entitled Marysville and Triangle Economic Recovery Strategy (June 2009) (p 18) attempted to quantify the value to the economy of tourism. The total value of the economy was estimated at \$33M per year of which "visitors" to the area contributed about \$28M per year. Lake Mountain contributed \$13M, Conference Centres \$6M, other non-mountain tourism activities \$4M, and part time residents contributed about \$3M to the local economy. Part time residents held 230 properties and spent an average of \$13,000 per annum (\$5,000 on visiting spend and \$8,000 on property costs/maintenance). This made up 10% of the economy (p 22).

Local tourism based businesses relied heavily on the local natural environment and its walking trails, horse trails, mountain bike trails, Keppels Lookout, Stephenson Falls and Lake Mountain Alpine Resort. These operators have found it hard to attract new people back to the region following the fires due to the destruction of the natural environment.

In addition to the impacts on the tourism sector, the agriculture and timber industries were devastated by the fires. Most of the high value ash species in the region burnt out, and local sawmills in Narbethong were destroyed. Primary producers lost equipment, fencing, buildings and livestock. The local (trout) aquaculture businesses were also seriously impacted.

The large majority of Marysville & Triangle's businesses are "micro" businesses with revenues of less than \$200k per annum. Their economic recovery has been difficult. By way of example, the general store did not open for nearly 10 months after the fires and a year on, the Marysville region still did not have a service station operating to supply petrol to local residents.

The dramatic impact on tourism in the Marysville Triangle was and continues to be felt in other towns within the Shire as many local businesses benefitted from tourists including day-trippers travelling to and from Marysville and its natural attractions. Some argued that this broader impact is not understood by governments.



The "Case Study" Process

Members of the project team visited Marysville and Alexandra on 18 January 2013 where they met with the CEO of the Murrindindi Shire Council, the Council Economic Development and Tourism Manager and the President of the Chamber of Commerce to discuss the project and possible interviewees.

22 interviews were conducted in week of 11 February 2013 as follows

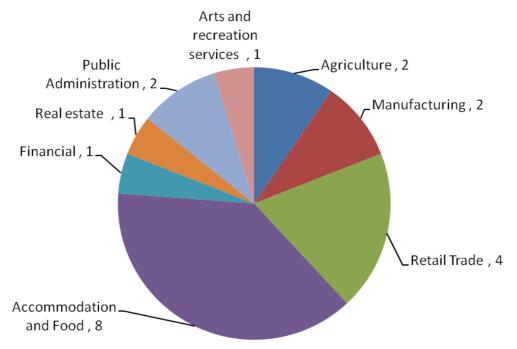


Fig 9: Number of Marysville Business Owners Interviewed by Sector

The interview process sought to capture the perspectives of a cross-section of the local community. In addition to interviewing the Mayor of the Murrindindi Shire Council, community leaders from the Marysville and Triangle Chamber of Commerce, Mystic Mountains Tourism Association and the Community Recovery Committee were also consulted. Further discussions were held with a range of local businesses people.

A focus group was convened on 7 March comprising representatives from the Community Recovery Committee, local business owners, a bank manager and a case manager from the recovery process. The Economic Development and Tourism Manager from the Council was unable to attend but was provided with a copy of the draft findings and provided with the opportunity to respond. The purpose of this focus group was to reflect on the draft findings, "ground truth" the data and identify any relevant information which was not elicited during the initial interviews.

The Council also submitted its response to the survey which had been sent to the Council CEO. Attached to that survey were the following key documents;

- Murrindindi Shire Council; Business Continuity Plan Dec 2012;
- Murrindindi Shire Council; Bushfire Reform and Recovery Plan Feb 2011;
- Murrindindi Shire Council; "7 February 2009-Our Story-Black Saturday".
- Boston Consulting Group; Marysville and Triangle Economic Recovery Strategy, Final Recommendations; 30 June 2009;



- Boston Consulting Group; Marysville and Triangle Economic Recovery Strategy Progress Report; 30 Feb 2011;
- Marysville & Triangle Community Recovery Committee, Terms of Reference;
- Murrindindi Shire Council; Bushfire Rebuilding Report Feb 2009; and
- Murrindindi Shire Council; Murrindindi Business Recovery Scrapbook 2009-2012.
- The Victorian Bushfire Reconstruction and Recovery Authority; Legacy Report-Overview; June 2011 provided additional information.

Findings

The Employment Paradox

In the recovery environment businesses face increasing pressures on cash flow through population displacement and corresponding reduction in market size. This presents a paradox where the rational adaptation to these circumstances by businesses actually aggravates the underlying problem. The logical response to a smaller market and less cash flow is for businesses to downsize, reducing the number of employees and their hours. Under these broad conditions remaining residents, who are potentially facing massive financial outlay to rebuild their homes and lives, struggle to find work and are inclined to leave the region for opportunities elsewhere. The region is unable to attract new residents due to a lack of employment opportunities as people are not attracted to move to the town for casual employment. Furthermore, casual employment is not considered in applications for home loans. As a result the local population decreases and the business contraction process starts again.

This downward spiral is exacerbated by the high premiums on rental housing in the region. As the bulk of housing was destroyed in the fires, rental properties have been slower to be rebuilt than owner occupiers. The lack of rental housing supply drives up the price and provides a further disincentive to move to Marysville.

The challenges faced by Marysville in this context are highlighted by the massive depopulation that occurred following the fires. Of the 90% of residents who lost their housing, over 50% have not rebuilt in the region. Three years after the fires the population of Marysville has dropped from over 550 people to about 230.

It was argued that if it had not been for the temporary village which was established, the population exodus would have been greater.

Draw card businesses can provide a 'pull' factor

Marysville has struggled with the circular challenge that without businesses, tourists will not come and people will not invest in businesses without a market to justify the return. Certain businesses in Marysville were identified as key drawcards to the town as they had a reputation which attracted tourists. The facilities at the Lake Mountain snow fields have been upgraded by the Victorian Government following the fires and a major corporation has been awarded the tender to operate the business. However the lack of available accommodation will mean that it will focus on "day trippers" which do not spend as much as tourist who stay for longer periods. This is the classic "chicken and the egg" dilemma.

The planned construction of a hotel and convention centre in Marysville is seen as improving the broader opportunities for economic recovery. The \$28 million facility is being funded jointly from the State Government which is contributing about two-thirds of the cost and a commercial operator. It will bring employment during the construction stage but the limited local accommodation is likely to be a



factor which impacts on the potential short term economic benefits. There are high expectations in the community that this initiative will drive further economic development.

Business Recovery is a Long Term Process

The economy of the region is facing 'crunch time' as reconstruction winds up and 'sympathy tourism' dries out. The underlying weakness of the economy remains. Marysville was known for its historic feel and ambience. With the loss of most historic buildings, guest houses and B&B's the nature of the town has permanently altered.

Of those businesses that chose to remain in Marysville few would rate their financial performance as having returned to pre-2009 levels. Having lost so much of its population, businesses in Marysville consequently struggle to find and retain reliable staff. In addition, staffing costs have risen, leading to fewer hours for them and higher costs to potential customers. The tourist market has fundamentally changed behaviour with the market being both smaller than before and spending less time in Marysville due to the loss of overnight accommodation and loss of attractions/activities centred around the town.

Marysville finds itself trapped in a stagnating cycle where population loss has undermined business, which lessens the appeal to tourists which further undermines businesses. Despite the millions of dollars that have gone into rebuilding Marysville, the region is struggling to break out of this cycle.

However, there is a growing recognition that the nature of Marysville as an attraction and destination has fundamentally changed and businesses need to adapt to this environment. Four years after the fire, the remaining businesses are still struggling to return to profitability. Most business owners project between a 10 to 25 year timeframe for the town to really get back on its feet. The 2 year horizon over which the Victorian Bushfires Reconstruction and Recovery Authority (VBRRA) operated is clearly insufficient.

There is a recognition from many business owners that they cannot re-create the "quaint, historic village" that Marysville was. That has been largely destroyed. Marysville will need to be marketed in accordance with a future vision which will be based on natural environment.

Community Recovery Cannot Occur without Economic Recovery

Extensive emphasis has been placed on assisting the town and the broader region to recover from the fires. Since 2009 over \$135M has been committed to community recovery in the Marysville region according to Boston Consulting Group report (Feb 2011). By way of contrast, \$2.77M was provided as direct grants to small business through the under the Natural Disasters Relief and Recovery Arrangements (NDRRA).

The lack of funding for small businesses reflects a lack of understanding of the intrinsic connection between economic recovery and community recovery, particularly in rural settings where the majority of businesses are owned and operated by residents. This bias towards community recovery is also reflected in imbalance in grants made available to homeowners as compared to businesses for immediate clean up.

The distinctions drawn between community recovery and economic recovery miss the vitally important link between two areas. One will not occur without the other.

Institutional Capacity to Lead Recovery is Essential

The general recovery process in Marysville was, at times, made difficult by the number of recovery groups established in the wake of the fires, their competing activities and lack of experience coordinating large-scale social recovery.

Although the principle of community led recovery is well understood, the presence of numerous industry groups, such as the Marysville and Triangle Chamber of Commerce and Mystic Mountains



Tourism Association, led to conflict between the groups over roles, responsibilities and the direction of recovery. This conflict reduced community cohesion and created uncertainty and delays.

The structure of the recovery processes went through a number of iterations.

The first recovery group was Marysville and Triangle Development Group (MATDG) which was initiated by the federal Member of Parliament and comprised of "local leaders".

In June 2009, following a recommendation from the Boston Consulting Group's Economic Recovery Strategy, the Marysville and Triangle Economic Leadership Group (ELG) was formed.

Both Council and VBRRA resourced the group which comprised members from different business and industry sectors. It aimed to give the business community 'one voice' when dealing with government agencies and other stakeholders. Simultaneously the network was able to build strong relationships with key stakeholders such as Tourism Victoria, Department of Sustainability and Environment and VBRRA.

Importantly, the ELG had an independent Chair who was from outside the area and someone who was not caught up in the emotion of the event. The ELG was the contact point for VBRRA and Government on economic and business recovery matters

At around the same time as the formation of the ELG, State Government appointed a Community Recovery Committee (CRC) for the Triangle which was the contact point for the VBRRA and the State Government. This Committee's role was to identify projects, prioritise and allocate funding to projects. The CRC was the contact point for VBRRA and the State Government on community (recovery) matters

The Murrindindi Shire Council expressed concern that it was largely bypassed during the recovery but has been left with meeting the operating costs of the post event facilities. However the view of many interviewees and the focus group was that the council was a small, rural, under-resourced council which was overwhelmed by the Black Saturday fires.

The capacity of the Murrindindi Shire Council was significantly impacted by a series of fires which affected many towns and villages including Marysville and Kinglake. Since Black Saturday, its rate base has diminished as a result of the loss of housing stock and businesses while its costs have increased.

Some suggested a formal taskforce or a coordinating body with direct access to the State Government to facilitate economic recovery during future disaster recovery phases should be brought in early to assist businesses back on their feet.

Community Led Recovery is not Straightforward

Governments at varying levels recognised that the emotional impact of the fire would be ongoing. Despite the need to plan and make decisions for recovery in the immediate term, community members were not necessarily in the right frame of mind to be undertaking such activities. Support officers, such as community engagement officers and case managers, business recovery officers and support agencies (i.e. Small Business Mentoring Service and Rural Financial Counseling Service) were provided to assist community groups in the recovery process.

Throughout the recovery process there were numerous concerns about the process being hijacked by outsiders. Feedback has indicated that where government officers, such as community and business engagement officers, were embedded in the community their assistance was much better received than those who drove in on an ad-hoc basis from Melbourne.

Regulating Reconstruction Creates Uncertainty

The reconstruction of Marysville and its surrounding region has been slowed due to the changing planning rules for the region. Given the scale of the Black Saturday fires, it is hardly surprising that



governments acted to tighten planning regulations. However, the manner in which this was undertaken served to create confusion in the marketplace as residents did not know what was actually required of them. Rebuilding to new standards also tended to result in a shortfall between insured sums and reconstruction costs.

In this environment of personal loss, working through the shifting regulatory landscape created further difficulties for people and businesses who wanted to rebuild. It certainly delayed the process and contributed to the eventual decision of some residents and "part-time residents" to walk away. The loss of cash flow, in some cases for nearly four years, provides a strong disincentive to restarting a business in the disaster affected area.

Reconstruction Masks Other Problems

The reconstruction mirage can be seen in aggregate measures of economic activity in the short-term post-disaster period. In the aftermath of a major disaster, the rebuilding phase of recovery will generally drive a significant influx of reconstruction workers, sometimes temporarily living in the region. This influx, and associated economic activity, can serve to mask the longer-term decrease in population and broader business performance. The reconstruction boom thereby distorts measures of a region's economic performance and obscures the long-term challenges faced in economic recovery.

Another aspect of the "reconstruction mirage" faced by Marysville is governments building 'things' to demonstrate that action is being taken to restore Marysville. These activities may help to break the negative employment-business cycle affecting the region, and developments such as the Conference Centre are intended to sustain long-term economic growth. Nonetheless, an excessive focus on building 'things' appears to result in over-expenditure on infrastructure that does not serve the long term needs of the community.

The merit of the community centre is hotly debated by the community: some favour it, others loathe it and there is doubt about the Shire Council's ability to maintain it. The focus on building this centre appears to have detracted from attention needed to broader business recovery in the Marysville community. Local government representatives also identified the difficulty arising from a contracting rates base being required to cover a significant increase in maintenance and insurance liabilities attributed to new infrastructure.

Business Recovery Assistance

The total approved grants through the NDRRA scheme in the Triangle was \$3.47M with small businesses receiving \$2.72M and primary producers \$0.55M of this total. Average grants to businesses and primary producers were \$20, 500 and \$22, 500 respectively.

Grants	Total Applications	Declined	Approved	Grant Paid	Average Grant	Approval Rate
Initial Cleanup Primary Prod	39	17	22	110,000	5,000	56%
Supplementary Primary Prod	27	2	25	435,064	17,403	93%
Initial Cleanup Small Business	188	31	157	774,625	4,934	84%
Supplementary Small Business	141	17	124	1,945,341	15,688	88%

Table 4: NDDRA GRANTS: MARYSVILLE AND TRIANGLE



TOTAL NDRRA	440	77	363	3,473,041	9,568	83%
Special Circumstances	35	8	27	135,000	5,000	77%
Supplementary Not for Profit	5	1	4	53,011	13,253	80%
Initial Cleanup Not For Profit	5	1	4	20,000	5,000	80%

Source: Data from Rural Finance Victoria

Immediate clean-up grants were generally identified as useful. Certain grant programs and agency were well-perceived, whereas others were roundly criticised for being overly bureaucratic and obstinate about rules and procedures. Other problems included:

- Programs excluding businesses on the grounds of receiving other grants;
- Programs excluding businesses who got up and running quickly;
- Excessively difficult application processes;
- Unrealistic criteria that doesn't recognise the impact of disasters;
- Delays in disbursement of funds; and
- Onerous reporting requirements.

There was some comment that the criteria for the NDRRA loans which are administered through the Rural Finance Corporation are too rigid, particularly for "seasonal" businesses in an area built on seasonal tourism. The regular repayment cycle does not meet the cash flow characteristics of these businesses.

It was also noted that Victorian Bushfires Appeal Fund monies could not be used to assist economic recovery. Due to the charter and legislation of the Red Cross, donations could not be used to assist business, only the community. Consequently, of the nearly \$300M donated, none could be used to assist small businesses to recover.

Further, businesses which were deeply affected by the population displacement and infrastructure destruction, but were not in themselves fire affected, were generally ineligible for disaster assistance. The grant schemes, in short, did not recognize the intangible impacts of the fire on remaining businesses. This led to the belief by some that businesses which re-opened and got back on their feet quickly were effectively penalised by being ineligible for grants and that there was a penalty for recovering quickly.

The "part-time residents" were not entitled to support as these homes were not their principal place of residence. In Marysville, this group provided 10% of the town's income. Every occasion in which one of these owners decides not to rebuild adds to the economic stress of the community and the loss of business opportunity, further compromising the economic recovery objectives. To date the majority of this cohort has not rebuilt.

Good Practice

Programs that were well received included the Small Business Mentoring Service and Rural Financial Counseling Service as well as the appointment of Business Recover Officers whose role was to coordinate the economic/business recovery processes. Businesses which were identified by the



Business Recovery Officers as needing assistance were referred to either the Small Business Mentoring Service or the Rural Financial Counseling Service for "one on one" assistance.

The Business Recovery Officers were appointed and funded by Council, through grants provided by State Government agencies. Of concern was that the funding was short-term, requiring four applications over three years. This support was generally praised as it provided invaluable assistance to businesses unfamiliar with how to engage with government. While this service was paid for by the local council, the Business Recovery assistance was not recognised by some as it was seen as a role of council.

A government program to subsidise 50% of business interest repayments was also identified as an excellent idea. However, the program was not generally considered effective as the extensive delays to business rebuilding meant that the term of the program had all but expired before the loans could be used by businesses. This problem was compounded by a lack of coordination between private banks and the government in the establishment and operation of the program.

Grants Can Affect Community Cohesion

Importantly there was some resentment about the amount of money given to some people as compared to themselves. Our interviewees suggested that people often believe others received much more assistance then they in fact had. Although grant programs are established with the best of intentions, to assist communities and businesses to get back on their feet, the provision of so much assistance had negative consequences on the community. A degree of comparison and negativity arose about how much people were getting and whether or not they deserved it. There was also concern about the development of an "entitlement" mentality where people were taking advantage of the generosity of others and expecting to receive handouts. Undercurrents of tension remain in the perceptions of the behaviour of individuals and businesses.

Unforeseen Consequences of Good Intentions

In Marysville this issue is reflected in a number of ways. Generally the provision of free food in the aftermath of a disaster was appreciated by affected people, adding greatly to the sense of a supportive community. In the short term, the donation of food did not distract from business opportunities as virtually all businesses in the immediate area were unable to operate. However, the provision of "clean-up" materials and services did impact suppliers from nearby centres.

Donations of material goods required extensive efforts to store, distribute and acquit them. This imposed further costs on recovery programs and, beyond that, negatively impacted on a number of businesses in Marysville and the broader Shire of Murrundindi. With residents accessing free goods, even unaffected businesses in the region found the demand for their market offerings decreasing.

In Marysville, which was effectively destroyed, houses had to be rebuilt and cars replaced. Some service providers (such as mechanics and handymen) were impacted as the "old was replaced with new". Correspondingly, the need for repairs and servicing has declined.

Psychological and Emotional Impacts on Business are Long-Term

The psychological trauma of the bushfires on the small businesses should not be underestimated. The emotional stress meant that many of the small businesses found it psychologically difficult to access and deal with government assistance or other support mechanisms (e.g., insurance). These impacts are long-term and continue to play a part in the efforts of the community to recovery.

For some the survival of their business from the fire has become a source of resentment. For some, the destruction of a business has made "it easier to walk away".