

This report was prepared by EMS Consulting, and commissioned by the Committee for Greater Shepparton.

We acknowledge the Yorta Yorta peoples of the land which now comprises Greater Shepparton and we pay our respects to their tribal elders, we celebrate their continuing culture and we acknowledge the memory of their ancestors.

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Forward

About Greater Shepparton

Greater Shepparton is located about 180 kilometers north of Melbourne and is one of Victoria's larger regional cities with a population of more than 70,000 residents. It is the largest city on Victoria's largest river and sits at the heart of Victoria's Food bowl. Shepparton is located on the eastern bank immediately below the points at which the Castle and later the Broken Rivers and Seven Creeks enter the Goulburn River (confluence).

Greater Shepparton LGA includes several smaller towns and hamlets including Mooroopna on the western bank immediately across the river from Shepparton, and Tatura further west. This report largely focuses on the experiences of members of these three centres.

Shepparton is the key services hub for a region that extends from the southern Riverina in NSW to the northern outskirts of Melbourne (approx. 135,000 residents). The city's largest employment sectors are health and social services, manufacturing (80% food manufacturing), education and construction. The region is home to almost 20% of regional Victoria's manufacturing, 25% of Victoria's heavy vehicles (trucks), Victoria's largest regionally owned and operated aged care provider, and Goulburn Valley Health.

The surrounding region is home to a diverse mix of agriculture that is dominated by perishable produce including fruit, vegetables, and dairy, along with beef, sheep, and grains. The region's water resources for irrigated agriculture, industry and residents underpinned by supplies from Lake Eildon that are delivered via the Goulburn River.

Critical national and state freight and transport intersection

Greater Shepparton is one of Australia's major food, fibre, and freight hubs. It is located on the national freight route that runs from Queensland's Darling Downs, through the primary production corridor of NSW into Victoria and through to the Port of Melbourne.

In addition to the significant north-south transport activity, Greater Shepparton's strategic importance lies in its east-west connectivity. The city was founded as the punt crossing between Victoria's goldfields, and today the Peter Ross-Edwards Causeway (causeway) is the critical road infrastructure connecting northern Victorian towns and communities on the east and west sides of the river from Benalla to Bendigo, and interstate from Albury to Adelaide across the Goulburn River that bisects northern Victorian – from the alps to the Murray River. There are more than 32,000 traffic movements across the causeway each day, making it one of regional Victoria's busiest traffic routes.

Goulburn River and floodplain

The Goulburn River runs for more than 650 kilometers, and its floodplain covers an area of approximately 3,700 square kilometers, stretching from the headwaters of the river in the Victorian Alps to its confluence with the Murray River near Echuca. It is the longest river and the largest floodplain in Victoria – approximately 10 times the floodplain of the Yarra River and 20 times the Maribyrnong River.

The area around Shepparton is predominantly agricultural land with large areas of flat, open plains with a relatively flat topography compared to other regions in Victoria.

At Shepparton, the river can rise and fall quickly within its banks in response to heavy upstream rainfall and as it delivers volumes of water for irrigation across Victoria's largest irrigation region. The relatively flat topography means out of bank flooding – as

experienced in October 2022 – tends to rise and fall more slowly and spreads faster than it rises. However, there are specific points and locations within the region that are more likely to experience more rapid changes in water levels.

October 2022 Floods

The October 2022 floods followed significant rainfall across many Victorian catchments.

On Thursday 6 October 2022, Greater Shepparton City Council issued warnings for *Up to almost 100 millimeters of rain is forecast for Shepparton before this weekend. Rivers, creeks, and water storages are at, or over, capacity, as we warn Greater Shepparton residents to prepare for possible flooding across the region*¹. The update also confirmed the SES as the lead agency and provided a range of resource and information links. The forecasts and warnings were reported widely in local media.²

A chronology of public updates and information activities is included with this report.

Approximately a week later the combined flows reached Shepparton-Mooroopna and over the following days spread out either side of the river, while continuing to move downstream. The confluence is a key factor determining the behaviour and magnitude of flows and flooding downstream at Shepparton-Mooroopna.

Considerable work continues to fully understand the precise impact of the flooding in Greater Shepparton. As an indication it is estimated that approximately 1-2% of houses in Shepparton-Mooroopna experienced above floor flooding and at the peak of the flood more there were more than 800 road closures across the Goulburn Murray region.

Many more houses (and residents) were isolated but not flooded, and large sections of Shepparton including its CBD, industrial and manufacturing precincts and health service providers were not directly impacted by flooding.

Greater Shepparton's floods coincided with floods in 63 of Victoria's 79 Local Government Areas (LGA) and one alpine resort (Falls Creek). This resulted in a wide range of experiences and flood behaviour, and created significant simultaneous and widespread demand for resources, support, and expertise to assist response, relief, and the ongoing recovery.

This report aims to inform possible improvements to Greater Shepparton's flood response capability, but it also considers how our region can better prepare and respond to future widespread/state-wide events like the 2022 floods.

Victoria's Emergency Management arrangements

The formal structure of emergency management from planning and preparedness through response, relief and recovery is detailed in the [State Emergency Management Plan](#). The plan articulates the priorities that underpin and guide all decisions during a response to an emergency with *the protection and preservation of life and relief of suffering paramount*.³ It is complemented at the local level by the [Greater Shepparton Municipal Emergency Management Plan](#).

¹ Greater Shepparton City Council website <https://greatershepparton.com.au/whats-happening/news/news-article/!/456/post/flood-information-update-6-october-2022>

² Shepparton News 5 October 2022 <https://www.sheppnews.com.au/news/flood-warnings-flow-across-the-region-as-rain-continues-to-fall/>

³ Victorian State Emergency Management Plan, pg. 7

The SEMP explicitly references the importance of shared responsibilities with community, individuals, and business.

Some of the examples of expectations include:

- *community members being self-sufficient for a defined period (e.g., up to 72 hours) after an emergency event,*
- *the expectation that community members have a home emergency kit, or*
- *the expectation that community members moving houses proactively inform themselves of the emergency risks in their new neighbourhood⁴*

This report captures a range of ideas shared by members as they reflected on the role they felt community, business and agencies could have played to enhance the capacity and capability of emergency management within Greater Shepparton region – within the formal framework and alongside these arrangements in accordance with the ideas of shared responsibility. The framework provided by the Victorian State Emergency Management Plan is helpful in recognizing the platform upon which shared responsibilities are and can be defined, explored, and enhanced for future emergency responses.

Greater Shepparton City Council is currently developing and implementing the Greater Shepparton Flood Recovery Plan, led by the Municipal Recovery Committee (MRC). The MRC and subcommittees are dealing with the social, built, economic, natural environment and Aboriginal culture and healing pillars of recovery and the Committee for Greater Shepparton is participating in this process.

⁴ Victorian State Emergency Management Plan, pg. 11

1. Introduction

1.1 Background

In October 2022 the Greater Shepparton community experienced significant flooding due to intense rainfall events that occurred in the catchment areas of the Goulburn and Broken rivers. The rainfall caused the rivers to rise rapidly, leading to extensive flooding in urban and rural areas. Several local towns, including Shepparton, were severely affected with homes, community facilities and businesses being inundated for several weeks.

The extent of the flooding across Greater Shepparton was the most severe this century, with many residents and authorities challenged by the scale, complexity, and severity of the event. The aftermath of the floods resulting in widespread damage to infrastructure, agricultural land, and the local economy. Furthermore, the floods had a significant impact on the mental health of residents, many of whom were displaced from their homes and have had to deal with the long-term effects of the disaster.

Many members reflected on the speed and severity of this flood, noting action needed to be swift. Appendix 1 to this report provides a timeline of activities and events that took place during this flood emergency.

With more than 35,000 homes damaged by the flooding of towns hugging the Wimmera, Avoca, Loddon, Goulburn and Murray rivers in Victoria, attention now must turn to the lessons learnt, and the actions being taken to mitigate the damage for future events.

Greater Shepparton's Flood Response activity

The following statistics provide a snapshot of some of the support provided during this flood event:

- Emergency relief centres provided support to up to 800 community members in any one night during the height of the emergency with multi-agency recovery hubs recording 1,100 visits.
- More than 80 staff were located at the Incident Control Centre through the peak of the event providing diverse representation across all aspects of the emergency, with additional specialist groups providing further support and technical expertise.
- 2,657 food relief hampers provided, in addition to relief hampers provided by the Red Cross.
- Food sourced from over 20 different supermarkets, local businesses, farms, and organisations.
- 6 satellite hubs serviced Mooroopna, Murchison, Tatura, Undera, Barmah, Cummeragunja and Shepparton.
- More than 180 staff from Greater Shepparton City Council⁵ were deployed and mobilized to support flood emergency efforts, together with more than 150 GV Cares community volunteers and many more community members.
- Over 1,800 school families impacted by the floods.
- Since the flood approximately \$200,000 has been donated back to community from Lighthouse Project and more than \$250,000 from Greater Shepparton Foundation through donations into their Community Flood Recovery Campaign. Both the Shepparton Lighthouse Foundation and GV Foundation continue to support the community via Shout for Good and GIVIT platforms.

⁵ Source: Emergency Recovery Victoria

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- Approximately 16,000 people applied for State Government grant payments – a good proxy for the number of people directly impacted (e.g., forced out of their homes) by the floods.
 - Approximately 500-700 properties in the region were flood damaged with varying levels of damage from totally or partially destroyed, to a level of damage which allowed residents to safely reside in their homes.

The Shepparton 2022 floods highlighted the need for effective flood management strategies, including timely warnings and proactive measures to protect vulnerable communities. This report aims to capture feedback and insights gathered to identify lessons learnt to mitigate the effects of future floods in the region.

1.2 C4GS Engagement and Scope

The Committee for Greater Shepparton (C4GS) engaged emsConsulting to facilitate the collection of feedback and experiences from its membership to harness insights into the recent flood event.

The Committee for Greater Shepparton is a member funded organisations with almost 120 members from the region's business, government agencies and not for profit organisations.

Feedback was gathered through several mediums including industry-based roundtable workshops, individual one on one meetings, and feedback received directly via email.

1.3 Scope

C4GS sought to understand the views and experiences of its membership base, as members of the local community and key stakeholders following the flood emergency that impacted the Goulburn Valley.

C4GS engaged emsConsulting to seek the views and experiences of its membership, across key industries represented in the Goulburn Valley. The outcome of this consultation being to author a report capturing what was heard. The engagement activities focused on capturing key insights and asked participants three key questions:

- What worked well during this emergency event?
- What were some of the challenges experienced, and
- What would we do differently for our next emergency response – what are the lessons learned?

This report documents 'What we Heard' from C4GS members who participated in the recent industry-based consultation roundtable discussions. Specifically, each discussion explored what the members witnessed, heard, and experienced having reflected on the October floods.

Approximately 60 members participated in the following industry-based roundtables:

- Agriculture and Horticulture (including cool stores)
- Manufacturing
- Transport & Logistics
- Healthcare & Aged Care
- Health Support Services
- Finance and Insurance
- Education, including Early Childhood
- Retail, Arts & Recreation

The information captured following this emergency service response may assist with the recovery efforts currently underway, and importantly if actioned, can be applied to future emergency events. The lessons learnt may also have further application to other community engagement / response initiatives.

Importantly, the insights gathered through these forums will assist the C4GS accurately represent the views of the Greater Shepparton community in the upcoming formal flood reviews being conducted by local, state, and federal levels of Government.

To date, Council (local government) has conducted two major debriefs – internally and with the multi-agency Municipal Emergency Management Planning Committee. The final phase of reviews will be conducted with community agencies involved in the response and relief phase. The recommendations of all three reviews will inform the Council's continuous improvement activity for Emergency Management.

The Victorian State Government has announced the establishment of a parliamentary inquiry which will have a statewide focus including the Avoca, Barwon, Broken, Campaspe, Goulburn, Loddon, Maribyrnong, and Murray rivers and is seeking submissions by 5 June 2023. assessed.

In addition, Infrastructure Victoria also announced feedback into their Infrastructure Strategy 2030, noting that climate change is directly affecting Victorians, given recent extreme weather events demonstrating the impacts of infrastructure disruption and the need for adaptation.

The speed and scale at which this event unfolded made it very challenging for the community.

The feedback captured in this report is intended to be constructive rather than critical.

1.4 Acknowledgements

emsConsulting would like to thank the key stakeholders and C4GS members who attended and contributed to this work. Their passion, enthusiasm, honesty, trust, and time has been greatly appreciated, without which this report would not have been possible.

Any quotes in this report are included to provide context to the insights and themes discussed. All efforts have been made to respect the privacy of those who we engaged with.

2. Stakeholder Insights

Over approximately a two-week period in February 2023, emsConsulting facilitated discussions and engaged with approximately 60 key stakeholders and C4GS members to seek their views and gain insights from their recent experience with the flood emergency in the Goulburn Valley and specifically in and around Shepparton, Mooroopna and Tatura (Greater Shepparton).

The stakeholders and members engaged in this work were representatives of the industries and businesses across the Greater Shepparton region.

emsConsulting acknowledges the large number of volunteers, stakeholders and community members who were involved in the flood response and who are still at work on recovery efforts. It was not possible to speak with everyone who contributed and emsConsulting would like to apologise to anyone who is offended resulting from not being engaged.

This document reflects what we heard from stakeholders as they relate to the issues, challenges and lessons learnt through their experience with the Greater Shepparton Floods.

Throughout the discussions, there were several key themes and common elements and shared experiences that emerged. These findings have been grouped into 'key themes' as we explored the following key questions:

- What worked well during this emergency event?
- What were some of the challenges experienced, and
- What would we do differently for our next emergency response – what are the lessons learned?

The key themes have been developed from listening to the views, opinions and suggestions from the stakeholders engaged. They do not represent the view or opinions of emsConsulting, nor are they to be interpreted as recommendations from emsConsulting.

2.1 What worked and why?

There were several key themes that emerged when we explored the elements of this emergency response effort that worked.

2.1.1 Strong sense of community

Almost all the stakeholders engaged in this work commented on the strong sense of community spirit, support and the enormous amount of goodwill that was called on and demonstrated during this emergency.

It was also noted that the support and assistance was underpinned by professional and practical expertise in food manufacturing, storage, transport and distribution, health, and social services, as well as working in and with multicultural and first nations communities.

The collective power of community members and agencies who stepped up to assist in this emergency response was to be commended.

Like most regional communities, in times of emergency, the community steps up – in Shepparton, Mooroopna, Tatura and the many communities in the GV. Flood effected or not there was never a shortage of volunteers to assist, whether it was filling sandbags or delivering food to those in need, the local community went into action. The commitment and resilience of the volunteers was evident during this emergency response and there was no issue in sourcing numbers of volunteers. Many commented on the willingness of volunteers to also provide resources that included vehicles (ute with a snorkel), boats and large transport vehicles.

It was often commented that many of the support agencies were overwhelmed by volunteers and people wanting to help, so much so that messages went out advising, 'we've got enough volunteers for today, how about tomorrow?'

An additional element to this strong sense of community was the local networks that were relied upon to get things done. The existing relationships in the community proved critical in responding to the emergency. At times this response was referred to as a 'community led' response as many members felt it was the community leaders that stepped up and provided the leadership that was needed through this flood event.

The impacts on the ground were shared, barriers were removed, and the formal and informal connections made in the 'good times' were key and were leveraged during this emergency. It is this strong sense of community and the connectedness within communities that meant people with these relationships contacted those they knew and those they could rely on to access information and get responses needed.

There were also examples of locals bypassing local agencies or emergency response staff to seek responses and guidance from former residents or colleagues who now work in key utilities, emergency response agencies and departments. This resulted in several positive opportunities for locals to access senior levels within critical organisations but also reflects a challenge to ensuring consistent and accurate communications in the region. In several instances participants suggested their informal contact with people they knew improved their trust and confidence in the local representatives.

2.1.2 Trust, Teamwork and Collaboration

The trusted, long-standing established relationships within the community were relied upon during this emergency response. While these trusted relationships were identified as a key element of what worked well during this emergency, it also highlighted a risk for any new members of the community – not knowing who to call in the absence of knowing who's who.

During the consultation workshops many agency and community leaders mentioned, and provided examples that demonstrated teamwork and exhibited qualities of leadership that meant the community could trust what they were saying and doing. The following individuals were called out specifically as those that stepped up and for whom many felt did a fabulous job:

- Councillor Shane Sali, Mayor, Greater Shepparton City Council
- Joel Leister, Goulburn Broken Catchment Management Authority (GBCMA)
- Guy Tierney, Goulburn Broken Catchment Management Authority (GBCMA)
- Goulburn Broken Catchment Management Authority (GBCMA)
- Amy Robinson, Executive Officer, Lighthouse Project and GV Cares initiative
- Peter Foott, CEO, Foott Waste Solutions
- Jeremy Rensford, Chair, Shepparton Foodshare
- Andrew Shields, Goulburn Murray Water
- Daniel Flanagan, Goulburn Valley Water
- The Mooroopna Football and Netball Club

We should also note that the efforts of Geraldine Christou and Louise Mitchell were also recognised for their sustained efforts in the Incident Control Centre and ongoing in recovery efforts.

The trust and teamwork demonstrated, leveraging existing relationships across community and other established relief agencies, provided much needed support, cultural intelligence and on the ground local knowledge. The Goulburn Valley is fortunate to have many trained technical specialists within the Goulburn Broken Catchment Management Authorities, and other agencies, with local experience of the catchment and a great level of trust within the community. Local consultants were also brought in, who had knowledge of the catchment, to complement the local knowledge of the GBCMA.

The strong level of trust that existed among all those volunteers also meant there was a strong level of teamwork. Volunteers worked together and supported each other across the course of the emergency and continued into recovery.

A powerful sense of trust also extended to several technical experts in the Incident Control Centre. Many members complimented the experience and collaboration of agencies such as Goulburn Murray Water and the Goulburn Broken Catchment Authority and the technical experience of the *'hydrologist who briefed the community at the first town hall meeting'* (GBCMA Guy Tierney) on what to expect.

Likewise, many examples were provided as to the collaboration between private businesses, community agencies, the school communities and transport companies. Several examples are provided below:

- Workforce Mobility - Bus companies working with schools and local businesses to secure the safe transport of students / teachers and businesses workforce.
- Co-sharing office accommodation - Agencies welcomed other businesses, both public and private, to work from their facilities in non-flood affected towns, while others shared their sheds and warehouses to allow for business continuity for flood affected businesses in Mooroopna.
- Agencies partnering under one roof - A positive outcome of the ad hoc hub model was Greater Shepparton Lighthouse (GV Cares) and Shepparton Foodshare working together along with other agencies under the one roof. This model worked well by leveraging the united approach between these two agencies that had developed during the last two emergency crisis in the region and capturing the many benefits of working together rather than in isolation.
- Agencies going above and beyond their own remit to assist Greater Shepparton City Council with both equipment and expertise. GV Water provided their de-watering mobile assets to assist Council in Shepparton (Shepparton Lawn Tennis Club) and Mooroopna. Leveraging both expertise and equipment from GV Water provided significant help in the evacuation and recovery processes.

Several agency leaders also said their previous experience in large scale emergency responses, including COVID and bushfires, had built their trust in emergency response processes, council, agencies, and departments. With little more than a phone call to guide them, they were willing to incur significant financial costs to ramp up their emergency response and recruit key skills with the confidence that they would later be reimbursed by the relevant level of government, department, or agency.

2.1.3 Social media

Many members highlighted the success of the [GV Floods Group \(facebook.com\)](https://www.facebook.com/gvfloods) Facebook page as a key source of information for them during this emergency. This page included information from both formal and informal sources, including pictures and footage of the flood effected region. This was often described as the go to source for both business and individuals, and even referred to as their single source of truth and was key in sharing information including local intelligence gathered by residents and business for example local road closures and whether roads were suited to heavy vehicles.

The use of social media allowed many across the region, and outside of the region to stay connected. While not recognized as a 'formal' channel of communication during an emergency event, the establishment of this Facebook page by a member of the community was a lifeline for many. Many members noted this page became their 'single source of truth', in the absence of timely and accurate communications. Many members noted that they learned of key decisions such as the closure of the Causeway, key emergency relief contact numbers and flood impacts via the GV Floods Facebook page.

WhatsApp was also frequently cited as a primary communication tool that worked extremely well for business, community, staff, and client communications because of the existing widespread familiarity with the platform, its ability to translate messages into other languages, and the ease with which existing chat groups could be brought into the emergency response.

Many businesses established WhatsApp chat groups for their patients and in some instances multicultural staff. This technology was quickly adapted by some employers to establish staff and supplier channels, allowing the CEOs to be the single communication point for their staff and in the case of the agriculture industry, right through the supply chain to the farmer. WhatsApp quickly became a key method for keeping health care agency staff, school communities and business communities in contact.

One of many great examples raised was the use of a WhatsApp group that enabled dairy processors, to stay connected and to direct/redirect daily milk collections to factories, to share information regarding road closures and to assist their tankers safely navigate the flooded road network.

The use of WhatsApp was also cited as an effective means of communication during the floods as it allowed many employers to communicate directly with their staff in their first language. The ability for WhatsApp to be used to automatically translate key messages into diverse languages provided an easy way for employers to stay connected with their diverse workforces.

2.1.4 Applying the lessons learnt from Covid.

This emergency was not the first for the Goulburn Valley in recent times. The Greater Shepparton community was significantly impacted by the recent Covid-19 Pandemic including a two week lock down of approximately a third of the city's population. Many members commented that many of the lessons learnt from the Covid-19 emergency crises allowed them to be better prepared and more agile for this emergency.

Whether it was preparing for and reintroducing remote learning for our education providers, re-establishing working from home protocols for the business community or using technology (WhatsApp, Zoom, Facebook live) to communicate.

However, it was also noted that emergency management for the pandemic was very different to a flood emergency.

2.1.5 Business Continuity and Disaster Recovery Plans

It was widely reported that individual businesses and agencies invoked their business continuity (BCP) and disaster recovery plans (DRP) effectively and in a timely manner. Business and agencies felt their plans worked well and adapted quickly.

The practice of reviewing and testing both BCPs and DRPs meant that businesses knew how to get into action and what their contingency planning involved. Many businesses across various industries noted that at times their plans had to be adjusted due to inaccurate, conflicting, or out of date communication from ICC, or attributed to ICC by representatives delivering the information. For example, production planning and transport logistic operations governed by BCP plans were hampered and cut short due to evacuation advice and road closure information and timings that were subsequently delayed.

2.1.6 Flood Mapping and design of housing developments

Many participants commented on the remarkable performance of the newer housing developments in Greater Shepparton – in particular, the Boulevard, Seven Creeks and Kialla developments.

The GBCMA's flood mapping, Council's planning controls and the developers' investment in engineering and design combined to manage the movement of water through the estates with no homes flooded.

Streets acting as shallow canals to protect houses were noted as having 'worked well' during this flood emergency with residents of these newer estates 'trusting the engineers' in their home design.

Many who attended the roundtables complimented the Goulburn Broken Catchment Management Authority's modelling and mapping tools, and Greater Shepparton City Council's planning controls which meant developers had access to critical, up to date information for the effective design of new estates.

With the experience demonstrating the importance of flood modelling and public access to flood mapping, many participants were keen to ensure adequate funding and expertise are available to GBCMA and Council to maintain these resources and expand their coverage to existing residential areas and to areas identified for future development.

Participants were also eager to see the successful approach in the newer estates incorporated into rebuilding of flood impacted properties in older areas. There was some discussion about the possible need for funding support and incentives to enable property owners to do this. Many felt this would be offset by reduced future disaster recovery costs and the economic impact on workforce availability.

Some members suggested levees to protect key infrastructure and also protect heavily impacted residential areas of Mooroopna. Importantly, the levees were described as modest elevations of existing footpaths – and not of the scale in place in other regions and catchments.

What We Heard

"Shepparton does things well"

"Social media what a great connector"

"Shane Sali – a great trusted leader that really stood up 24/7."

"Our CMA's flood maps were millimeter perfect – great comfort."

"Jeremy and Amy – so calm and organised they were our appointed community leaders."

"A lot of what we did was spontaneous and ad hoc but it worked."

"We were able to distribute food, nappies, formula and other supplies quickly because we didn't need to wait for residents to phone in – we knew the families in the flooded areas and what they would need."

"Change starts with a conversation."

"It was very humbling to see the community coming together to get everyone through."

"Our city responds well in a crisis."

"The city responded to help itself."

"Employers became the go to for triaging services."

"Our emergency response team and business continuity plan worked well – Shepp Villages."

"It's the formal and informal connections you make in the good times that become key in the bad times."

"We had a waitlist of 150+ volunteers."

"On volunteerism - if we tried to do this in Bendigo, I don't think it would have happened."

"The ADF provided good support when the eventually arrived."

"GV Water did a great job protecting our water supply."

"Collaboration between educators was incredible."

"Department of Education had a good emergency management plan – senior leaders stood up and we had a senior leader from the department sitting in the Departments ICC, so we have little reliance on local ICC."

"I had faith in the Engineers – no sandbags required"

"Council did a fantastic job in so many areas given the circumstances – but there were some challenges."

2.2 What were some of the challenges experienced?

Across the many members engaged in these workshops, there were challenges experienced by businesses and agencies in trying to ensure their business continuity needs were met. While all members recognised that human safety is paramount in a flood emergency, many felt that the business continuity needs of local industry and service providers were not adequately understood or prioritised in this emergency response.

With stakeholders now having had some time to reflect on the experience and focused on identifying lessons learnt, it is beneficial to consider the matters that challenged or frustrated people during this emergency response, to learn from these experiences.

2.2.1 Clarity of roles, responsibilities, and coordination.

It was evident throughout the workshops held, that many industries were unaware of who was accountable for managing the emergency including the establishment of the Incident Control Centre (ICC) or were unable to get effective access to decision makers. Many members were unaware of who the decision-makers were during this emergency and were still asking 'who was in charge?' at the workshops held some three months later.

This lack of clarity for the business community contributed to perceptions of a lack of coordination between the relevant emergency service organisations such as SES, Victoria Police, State and Local Government, the Australian Defence Force and Red Cross. This made business decision-making difficult and often frustrated timely implementation of individual business continuity plans.

However, in the context of these discussions, members indicated that what they really wanted was greater clarity and simpler access to their specific industry or sector contacts within the ICC. Some noted that general communications indicating the SES was the lead agency didn't provide sufficient guidance for business seeking specific industry or sector advice or authorisations.

As noted in the 'what worked well' section, several business leaders felt pre-flood working and personal relationships with ICC members were key to their industry/business needs being understood, and the timely implementation of effective operational protocols.

These observations contributed to perceptions that there was inadequate representation to reflect the scale and diversity of Greater Shepparton's industries in the ICC. For example, perceptions of one representative accountable for the needs of the health, care, and social services sectors and one representative for the entire agriculture industry meant that they would be unable to understand and respond to the dynamic breadth of needs required to be met urgently.

It's worth noting that throughout the peak of the emergency 60-80 representatives were located in the ICC from a wide range of industries and departments and with specific expertise and responsibility for managing sector requirements and concerns.

Clarity was also key for essential service businesses. For the purposes of emergency management, the definition of essential services is determined by the nature of the event and hence essential service status under one scenario for example Covid response does not necessarily translate to essential service status under another scenario such as floods. The experiences and observations shared by participants suggests many were operating on the understanding they were an essential service or that equivalent professional functions (e.g., nurses) would be treated the same.

This contributed to a difference between expectations and experiences and perceived inconsistencies in operating arrangements.

Case Study: Gouge Linen and Garment Services

Gouge is a commercial laundry based in Mooroopna servicing healthcare providers, hospitals, Ambulance Victoria, aged care facilities, allied health facilities, food and pharmaceutical producers, and accommodation providers. With a fleet of more than 50 trucks Gouge services all of Victoria and southern NSW. Production operates 24hours, 5 days a week, while logistics operate 24/7. Gouge has a diverse workforce with approximately 70% of employees with a first language other than English. The business is highly dependent on staff, road access in and around the region, electricity, gas, and water.

"Firstly, this event was both fast moving and extremely challenging and the whole community combined with our Emergency Services pulled together to manage this natural disaster. Emergency Services had a difficult role to play, and this feedback is intended to be constructive to make improvements now for future events.

The capability for essential service providers like Gouge to better manage disaster events would benefit greatly from a clear line of two-way communications. There is an opportunity, now, to establish a framework that identifies essential service providers, contact details, and formalise a mechanism for two-way communications with the Incident Control Centre (or something similar). We understand this would need to do in a way that doesn't negatively impact on the many other important functions the ICC manages during these events.

The following are examples where improved coordination and communication would have resulted in better outcomes:

Premature Shift Closure

Given the rapidly increasing scale of the event, Gouge worked an unplanned production shift on Saturday 15th October to build healthcare linen stock levels. Gouge closed this shift 8 hours early following advice from the SES that the Causeway between Mooroopna and Shepparton would be closed by midday. This was inconsistent with Police advice located at the Causeway and we understand the Causeway was eventually closed at around 9pm. Gouge could have operated the shift for another 8 hours and got staff home safely. To put this into perspective the shift would have yielded enough linen to provide 3-5 days of linen for multiple major regional hospitals and taken pressure off our disaster recovery plans and our healthcare customers.

Recommencement of Operations

Gouge was looking to recommence production immediately upon staff being able to safely cross the Causeway into Mooroopna (most staff are based in Shepparton). Notwithstanding other vehicles were able to cross the Causeway we were unable to get access to key decision makers on a timely basis to obtain permissions. This meant that recommencing shifts was delayed, and we initially had to bus staff on a 4 hour round trip on a single shift structure. We are aware of hospitals; aged care facilities and other critical businesses were also not able to get staff to and from work.

This last example raises a broader issue around infrastructure/access requirements however in lieu of that investment a single two-way communication channel where information can be provided about things such as event status, impending road closures, providing access (where safe) to otherwise closed roads would be extremely beneficial to manage these type events and recover more quickly from them.

2.2.2 Communication reach, relevance, and timeliness

A common theme during the consultation, across all industry groups, was the perceived quality of communications, or lack of communication including their reach and relevance to all recipients across a large geographic area with varying flood impacts. Whether the communications issues were perceived or actual, it was certainly an area that many experienced as a challenge.

Power disruptions and digital connectivity significantly impacted communications to and with those most impacted by the floods. With communications processes increasingly reliant on online platforms including websites, social media and email, many participants highlighted the importance of digital network capacity and reliability – along with the fundamental need to recharge phones and devices.

We also heard that the effectiveness of town hall community briefing sessions was hampered by poor audio technology (i.e., speakers could not be heard), poor visuals, and digital connectivity/technical issues (i.e., people struggling to dial in remotely due to poor connections). Later meetings held at Council's events venue were excellent with dedicated microphones and higher quality audio and video, and accommodated many more emergency response representatives.

It was also noted that media coverage – generally by outlets from outside the region - often misunderstood the scale of the impact in Greater Shepparton and this has continued through the recovery phase. For example, reports that all of Shepparton was flooded triggered cancellations and postponements for tourism providers not impacted by the floods, and this was felt in local retail activity in the lead up to the Christmas 2022.

What We Heard

“Why was the Causeway closure brought forward with no explanation or warning. It is a critical access point and key piece of infrastructure.”

“Communication around the closure of the Causeway was confusing and inconsistent.”

“Widespread messaging such as ‘Evacuate Shepparton’ were factually incorrect and caused unnecessary angst within the community.”

“Messages were complicated and unclear. Some street names were provided as to flooding and others on the same street corner weren't named, so it made it hard to determine if you were at risk or not.”

“Communications – we need to be prepared. I was lucky I got in contact directly with the CEO at Shepparton Council.”

“Communications to our migrant community were poor – there were no messages in their first language and while we tried to source the information, we had no access”.

“Significant business continuity planning was complicated by poor communications.”

“No advance notice or any correspondence as to the closure of The Hub – people just got used to going there for support, then it was just shut down, so the vulnerable had nowhere to go.”

“Poor communication of key support phone numbers for example the 1300 number, was provided to support agencies prior to ICC approval – was the only way we could get the number out to the public so they could register for food support.”

“The communication around road closures was poor and unreliable. Messages that the Hume Freeway was being closed provided no clear direction and transport in and out of the region was hampered. You ended up having to drive around yourself to determine what roads were available to keep our logistics team informed and business running.”

“Organisations were called on to communicate the services and processes that ICC had established - Employers were taking customer calls from their staff and community members needing help.”

“There was a lack of ownership and communication as to the impact the Causeway closure had on Mooroopna – between those owning the infrastructure, making the decisions, and controlling the traffic flow.”

“The rumor mill regarding school closures was working overtime. More information should have been provided earlier and clearly communicated.”

“Schools became the single source of truth for school families – Families trust their schools

2.2.3 Leveraging local skills and capabilities.

Greater Shepparton local industries have significant specialist skills and capabilities in areas such as logistics and transport, agriculture, horticulture, food manufacturing and storage, healthcare, and social services. Many of these industries service a much broader region, for example GV Health services a region from the Riverina to the outskirts of Melbourne, and local logistics companies provide critical state and national freight services.

These industries and businesses bring with them specialised skills and capabilities that can enhance flood preparedness, emergency response and recovery. Many participants felt that these professional skills and capabilities were not adequately leveraged during the emergency event and in recovery.

While informally community leaders called on these local skills and experience, the formal emergency management response structures did not or could not. With Greater Shepparton one of more than 60 local government areas across Victoria simultaneously impacted by flooding, many felt the lack of local engagement was a missed opportunity that could have released valuable non-local emergency response resources to support other regions that do not have access to the required capabilities and skills. At the same time this would have enabled greater local knowledge, history, relationships, and professional expertise to be imbedded into the local response.

Several local agencies noted that although they had experience and had reviewed the lessons learned from other recent emergency responses, such as the Covid pandemic, they were not called up formally to assist from the start. Instead, they felt they were called in when things weren't working.

Many participants remarked on the importance of local networks and knowledge to the delivery of food relief. For example, once local agencies with established networks into the community were engaged to deliver food relief the process scaled up quickly. The process was able to move beyond waiting for flood-impacted residents to make contact and request support, to

anticipating needs and hence more efficiently delivering culturally appropriate and adequately sized food boxes and supplies.

Transport businesses in the region, with the skills, capabilities local knowledge and assets to navigate flood waters and assist with food distribution, transport and logistics felt they were not leveraged. While many of these businesses offered their people and their assets, the offers were not or could not be readily received. Many felt the region's transport and logistics expertise could have streamlined what appeared to be cumbersome processes and operations.

For some participants this translated into the perception that Instead of playing to strengths, and working effectively, diligently, and professionally together, members were told 'everything was in hand' when the reality they were observing on the ground told a very different story.

An important attribute of leadership is knowing when to step-up or step back. It is testament to the many businesses and volunteers, who ordinarily manage their own business emergency response plans and business continuity plans, who made the conscious choice to get into action as a community.

Council contacted and engaged a range of local volunteers, business and community agencies during the emergency, however some members perceived a reluctance or inability to accept help from other community groups and agencies. These agencies joined forces for a community-led emergency response. It was acknowledged that these constraints may lie in current emergency response protocols and rules. Many participants acknowledged the importance and opportunity to improve preparedness and identify local response capabilities during planning and in advance of the immediate challenges of an emergency.

There were so many examples provided where local skills and capabilities went into action, including but not limited to, food distribution, transporting key supplies, translating communications for the many cultural and diverse communities in Greater Shepparton, door knocking to evacuate vulnerable members of the community, or helping other businesses use their premises temporarily to ensure business continuity for key essential services.

In addition, we heard that many local multi-cultural leaders were not involved or effectively engaged during this event. While local relationships were leveraged, and individuals called up to support their communities, questions were asked as to why organisations such as the Ethnic Council weren't given full authority to lead key functions engaging with the migrant communities of Shepparton and Mooroopna.

There was also discussion within care and social services sectors regarding the effectiveness of current emergency response arrangements. Many commented on the very personal and trusted relationships they have built with their clients who are often vulnerable individuals within the community. Many felt empowering and authorising these agencies to take the lead in preparing their clients (e.g., stocking the pantry, relocation), responding during the event (e.g., evacuation) and providing relief and recovery services (delivery of food, supplies, and medication, accessing insurance and grants) could achieve a more effective approach to emergency response particularly in regional areas.

Local businesses and agencies know each other's expertise and capabilities and have the required relationships needed, for example leveraging the existing trusted relationship between agencies and our more vulnerable members of the community, to help them prepare. It was this network of informal relationships and communication across the business network that allowed the

community to leverage local skills and capabilities. The following case study presents a good example of tapping into local skills:

Case Study: Shepparton Art Museum (SAM)

SAM contacted Council to offer support with logistics and project management if required. Given the challenging circumstances, the SAM team dropped in art making activities to the relief center - including multilingual activities for children and their families.

We also delivered activities to Lighthouse, who were delivering food and other items to flood affected families.

SAM also offered to run art making sessions at the relief centers, but logistically could not make this happen easily.

Further into the crisis, we were contacted to try and provide school sessions at another relief center but could not do this as our team were unable to access the site due to flood waters.

2.2.4 Workforce mobility, health and wellbeing

A common challenge experienced by most businesses and agencies across the region was getting staff to and from workplaces with many businesses indicating 60-85% of the workforce were unable to attend work during the emergency. Greater Shepparton's industry is dominated by health care, social services, and manufacturing and all require staff onsite and staff ratios to be met.

Member feedback repeatedly reinforced that the towns of Mooroopna and Shepparton operate as one city. The closure of the Causeway and the lack of alternate river crossing fundamentally disrupted business operations.

There were many reports of inconsistent treatment of workers allowed to cross the Causeway during its closure to general traffic. For example, nurses from GV Health were assisted to travel across the Causeway while nurses from aged care providers were advised they were not recognised as essential and were directed to turn back.

As previously noted in this report, the experiences and observations shared by participants suggests many were operating on the understanding that their previous status as an essential service continued into the current emergency or that equivalent professional roles would be treated the same (e.g., nurses). This contributed to the gap between expectations and experiences and fed perceptions of inconsistent operating arrangements.

While many businesses invoked their remote working or flexible working policies where they could, for many essential service operators it was not that simple. Organisations made their own arrangements to get critical staff into work, which in some cases meant a 30-minute trip turned into at least a four-hour bus ride.

During the event, 17 private flights were chartered to deliver critical medical staff to GV Health however their movement from the airport to the hospital was initially delayed by the lack of road transport assistance, with local Shepparton Police recognised as leveraging their personal contacts within the ICC to make transport of the health staff possible.

The additional challenge faced by employers was managing the accommodation of their workforce when they were able to get their employees to site. Temporary housing and accommodation is an issue for all flood affected members of the community and this was compounded by the need to house employees close to work to mitigate the challenge of moving around the region. Some agencies indicated that the relocation of staff wasn't simple with the need for appropriately designed accommodation for carers and clients.

Many employers stated housing was the biggest challenge for recruitment and retention of staff before the floods for example GV Health currently rents over forty houses in Shepparton and on any given night may have up to 20-30 rooms booked at hotels / motels and serviced apartments to accommodate staff. Prior to the floods, there would be at least 50 professionals and key workers applying for each private rental since the floods this has increased by almost 50% to more than 70 applicants.

Maintaining the health and well-being of staff was also a key concern for employers across the region and across all industries. Employees were either directly impacted or helping friends and family impacted by the floods, or unable to get to work. This meant many industries were left short-staffed, and those who were able to attend were working longer hours and trying to cover the short fall.

Many employers commented on the impact this event has had on the physical and mental wellbeing of their teams. This event off the back of the recent Covid Pandemic, has taken an exhausting toll on the available workforce in the region. Some industries such as Health and Education have seen significant exits from the industry – those contemplating retirement are retiring early, or many reducing their work hours – At the time of writing this report, GV Health are carrying approx. 180 FTE vacancies alone.

What We Heard

"We were relying on a lot of intel from staff member as to the state of the roads."

"Staff availability was an issue as they were unable to access their workplace or get to work because of where they lived."

"Pick-up and drop-off at Tarcoola site of staff created a few headaches, fortunately for Bernie's friend, putting in a huge effort, we overcame this issue."

"Because we didn't have any information, we stood our staff down for 2 days, until we could get some clarity on what was going on."

"There were 17 privately chartered flights to get staff to work, but we were once again challenged in getting them to site when they landed."

"The current exhaustion leading to exits from the healthcare industry will have a profound impact for local regional healthcare ongoing."

2.2.6 Roads and Freight Routes

Greater Shepparton's local freight industry comprises more than 500 local freight businesses as well as transport operations within a range of local businesses and farm operations. It includes short, regional, and long-haul freight activity Greater Shepparton one of Victoria's busiest freight hubs.

This activity increased during 2022 as earlier flooding impacting road and freight networks across southern NSW, had seen a significant proportion of east-west freight diverted south and through Greater Shepparton. This activity added to the region's existing freight activity and heavy reliance on the causeway river crossing.

As noted previously in this report, the ICC included a dedicated traffic management function with more than 40 specialist staff monitoring more than 800 road closures across the Goulburn Murray catchment at the peak of the event. However, many participants felt that the volume, variety, and frequency of freight activity required greater local knowledge and capacity within Incident Control. Participants supported a coordinated approach to releasing local logistics professionals to supplement the expertise within ICC.

A challenge faced by many members was the lack of real time updates and notifications of road closures and road openings. This was particularly important to local road transport businesses with responsibility for daily milk collections from farms across the region, the movement of fresh and processed product to ports and consumers across Australia, and the continued delivery of feedstock and farm supplies. It was equally important to organisations that distribute medicine, meals and similar services from central kitchens or depots to clients and residents in their residential facilities and care.

With the causeway closed, participants spoke of 100km trips that became 400km, and the challenges of scheduling freight and transport movements to accommodate the road closures. In addition, concerns were raised that even once roads were declared open, there was often insufficient advice to confirm the roads were fit for heavy vehicles. For example, the lack of certainty, concerns for contractor and staff safety and the extended trips which meant fewer collections could be completed in a day resulted in milk being dumped because it could not be collected.

Several transport and logistics businesses indicated they stood down staff for at least 48 hours because they were unable to confirm road and in particular causeway access and did not want staff and vehicles stranded on the wrong side of the river or unable to access the GV Highway back to Greater Shepparton. This not only resulted in business disruption locally, but also to national and international supply chains including the movement of freight in and out of Melbourne.

It was also noted that movement in around the region was further hampered by the state of the roads, and the urgent repairs that were required even before this flood event.

Some sectors indicated they had been able to continue their essential service recognition established during the Covid pandemic. This provided the necessary authorisation to continue to move produce across the causeway and along the GV Highway. It was acknowledged that safety must remain the priority, but future planning must incorporate a more consistent and predictable approach to identifying and authorising essential freight and supplies, and their safe movement within, to and through the region.

No one underestimates the task ahead of local, state, and federal governments as they endeavour to repair local, state, and national road networks to a safe standard for all users. This will be a challenge in all flood affected regions across Australia, and in Greater Shepparton, the challenge is made more urgent and complex because of the mix of short, regional, and long-haul freight activity that makes the region one of Australia's most important freight hubs.

What We Heard

"We were relying on a lot of intel from staff member as to the state of the roads."

"Product was downgraded because we couldn't get through."

"Transport connectivity to move milk was an issue from farm to processor – road closures information was shared via informal communication channels."

"Make a decision! Who is accountable for drainage and infrastructure?"

Case Study: The Bega Group – Tatura Milk

Business overview

Tatura Milk Industries is part of the Bega Group.

The Bega Group employs more than 3,800 people and operates 20 manufacturing sites across Australia and are supplied by around 4,000 suppliers.

Tatura Milk is a major dairy manufacturing plant operating 24 hours/7days and manufactures cream cheese, infant powders, milk powders, milk protein concentrate, lactoferrin and frozen cream.

Location: 236 Hogan Street Tatura Victoria 3631.

Significance of the organisation

Significant local employer – 350 employees impacted by flooding.

Overview of direct impacts

- Road closures (including causeway between Shepparton and Mooroopna) prevented >50% of staff attending factory site for >9 days and prevented milk tankers collecting and delivering milk to factory.
- Milk dumped on farm by suppliers (and paid for by Bega).
- Loss of Power due to Mooroopna Substation Flooding resulted in complete loss of electricity to factory for 3 days, and limited electricity supply for another 6 days. During these 6 days when power was limited, we were constantly managing electricity load/use to prevent black outs in Tatura.
- Loss of production due to lack of staff and impacted milk supply.
- Staff paid to stay at home.
- Factory could not operate and lost refrigeration capacity, therefore over milk and cream onsite had to be transported to other Bega sites and competitors for processing into lower grade products.
- Even when the causeway was opened for milk tankers after a few days, our employees could not get across and we did not have enough electricity to run the factory and process milk.

Actions taken by management to date to manage flood impacts.

- Crisis Team immediately established.
- Generators procured which provided minimal power to site for offices but could not run factory.
- Partial power reinstated 3 days post substation flooding, allowed transfer of milk to other sites, but no processing on-site.
- >1ML of milk onsite at Tatura transferred to other sites for processing.
- Aged milk/cream sent to local piggeries as stockfeed.
- Worked with other processors collaboratively to manage milk processing over the period of the crisis.
- Milk disposed on farm as tankers could not access farms, with farmers still paid for this milk.

It's more difficult to quantify longer term impacts of reduced milk production on farm due to flooding and impact of supply into Tatura Milk, but it estimated to be significant. The milk supply pool in northern Victoria has reduced by >10% in FY22/23 compared to the previous year due to wet weather and flooding. This increases competition for milk and prices have increased significantly as a result.

2.2.7 Energy generation and network reliability

Many of members who participated in the roundtables noted the challenges caused by energy supply interruptions. This extended not only to individual businesses but also to the relief centers established in Mooroopna, Tatura and parts of Shepparton. This emergency event highlighted the vulnerabilities of key energy assets across the region and the lean transmission network.

As home to almost 20% of regional Victoria's manufacturing capacity, the loss of power had a significant impact on processing plants, especially those with perishable product. The location of the Mooroopna Electrical Substation close to the Goulburn River was raised throughout these discussions with many members highlighting the need to protect this key asset with an adequate flood levy.

Not only was the power loss for the region a significant issue, but the ability and cost to source, and power backup generators for industry was another challenge. Many organisations tried to source generators in the days prior and during the emergency only to find that the region had 'sold out' of generators, that road closures prevented their safe relocation to site from neighboring towns or city centers and if available operators have the challenge of sourcing diesel to keep them running.

What We Heard

"I leveraged my personal relationships to try and find out what was happening with the power supply."

"No levy bank around critical infrastructure for the community"

"It was challenging not having the right equipment available – generators, sandbag filling machines."

"Telstra was slow for a while, but then it was like someone flicked a switch and we were back – why can't we have that speed all the time?"

2.2.8 Response speed and adequacy.

While all members engaged acknowledged this emergency event was fast paced and challenging, many perceived additional challenges created by cumbersome generic processes and the lack of local or specialist industry knowledge.

We heard that there were too many approvals required to get things 'signed off'. For example, some community agencies were advised the task of translating public emergency information from English to other languages would take one to three weeks to achieve. Time the community did not have.

Several participants urged improvements and streamlining emergency relief grants as well as the release of recovery funding to councils, agencies and volunteer organisations.

Some participants noted that grant applications prepared with assistance from local bank staff resulted in the funds being deposited in the applicants the bank account 'the same day'. Others suggested existing identification cards such as a Medicare card (that is digital and lists all family members) could provide a simpler method for releasing relief funding particularly where the funding is for a fixed amount eg \$1000.

Amongst the discussions, participants recognised that Emergency Recovery Victoria (ERV) is still quite new. It was established after the 2019-20 Eastern Victorian bushfires, and its role was expanded to coordination of state and regional recovery for all emergencies including floods barely 12 months prior to the October event that impacted most of the state.

Participants noted that while funding was still pending, ERV was effective in partnering with local agencies to provide support, and they trusted that the required funding would follow.

ERV, and other agencies and departments' willingness to visit the region and engage with the local community and agencies was welcomed.

Participants involved in response efforts observed what they felt there was an unnecessarily slow flow of information and messaging from ICC Media to Greater Shepparton City Council, and to SES on the ground. As a result, the information was often too late or out of date by the time it reached the public. Some questioned whether the floods coinciding with the Caretaker Government and weeks out from the Victorian State election may have further constrained the timeliness of actions and decisions.

Several participants questioned whether the statewide impact of the 2022 floods (62 of 79 LGA areas) signals the need for a step change in emergency response. Some members felt regional industry, agencies and community can and should play a much greater role in regional emergency response capability and capacity – beyond filling sandbags and food boxes.

The discussions recognised the long history of volunteering that underpins regional CFA and SES and asks whether this approach that involves regular training and drills could be adapted to incorporate appropriate local professional expertise, capacity, and resources – particularly in a region like Shepparton-Mooroopna with its mix of industry, cultures, and services. It was noted that this approach could greatly improve flood and emergency literacy.

What We Heard

“Immediate response to our need for medications was that it wasn't formally part of the emergency response plan.”

“We saw what happened at Seymour and Murchison but we in Shepparton were still too slow to prepare and respond.”

“Government webpages were too slow to be updated so information was out of date.”

“Given Mooroopna situation how could we be so unprepared? We've watched it for years – we knew it would flood.”

“ERV are only new in construct, so that explains some of the funding delays experienced.”

2.3 Lessons learned for the future – what would we do differently?

A key requirement of any emergency management response is to take time post the emergency to reflect on lessons learnt.

The lessons learned for the future, and what we do differently in an Emergency Management Response have been presented below and have been captured from the members engaged. The opportunities for 'doing things differently' in future range from personal learnings, strategic, operational, and tactical lessons learnt.

The comments and suggestions below should inform how the community approaches recovery and rebuilding, to ensure a Sustainable Community.

2.3.1 Climate-proof critical freight and transport networks by building a second river crossing at Shepparton-Mooroopna to enable delivery of response and relief services, and the safe movement of people, workforce, and freight.

As evidenced in the Report, participants across the board recognised that the majority of challenges experienced during the floods would not have occurred if an alternate local river crossing was available. This was consistent across all sectors from freight and agriculture, to health, education and aged care and reinforced the reliance on the causeway for local, regional, and national business operations.

2.3.2 Improved communication of arrangements for the movement of staff and freight within, through and to the region during an emergency - especially via critical road infrastructure.

Participants recognised that it is foreseeable that future natural disasters (floods, fires) will disrupt access to critical road infrastructure notably the causeway and the GV Highway, but each event will present a different set of circumstances and risks.

The safety of individuals must be the priority, however working with industry to identify critical staff and freight activity and providing clear, consistent and early guidance to prioritise movements during an emergency, is key to business planning, setting expectations and the delivery of key services including emergency response and relief.

Members were particularly keen to see improved arrangements for the causeway and the GV Highway.

2.3.3 Content, delivery and understanding of emergency communications.

Many participants suggested the need for greater community education to improve the understanding of floods in the local catchment and terminology such as 'river levels' – both were referenced in public communications and assumed a level of local knowledge. They also recognised that 'every event is different' and that communities often do not engage until the threat is imminent – as illustrated by the traffic to the GBCMA's portal however resources shared via trusted agencies, employers and community leaders and organisations could assist.

Participants also called for better communications that prioritised simple language, less jargon and shorter length – and made use of existing networks and trusted voices. It was felt that this would improve understanding and improve the accuracy of translation for culturally and linguistically diverse communities, but it also recognises that many users are

accessing the information on phones or similar smaller screen devices, and via translations generated by apps such as Facebook and Whatsapp.

Participants encouraged use of existing communication technologies / tools that the community is already familiar with and using – for example, the use of WhatsApp by major industries right through to CALD communities given its ease and translation capabilities.

2.3.4 Review of emergency response planning.

- Participants were eager to ensure local councils, SES and other front-line agencies are adequately funded and resourced to maintain up to date Emergency Management Plans, particularly with a view to the anticipated increase in frequency, scale and variety of natural disasters. It was noted that since the floods the region has also been hit by multiple hailstorms.
- Participants recommended clarifying and communicating the roles, functions and hierarchy of all agencies involved in the emergency response processes including Emergency Management Victoria and Emergency Recovery Victoria.
- Industry and agencies recommended improving communication of specialist/industry specific representation in ICC and providing the contact details to local industry and agencies prior to the event – even via a dedicated chat group or similar to streamline inquiries and share responses and on the ground intelligence.
- Review and define industries that are classified as essential services under foreseeable emergency scenarios and ensure these are communicated as early as possible in an event. Alternatively, some members commented that the whole region should be deemed an 'essential service region' given state and national products and services generated in the region.
- Many members commented that while the current Emergency Management Response is focused on the safety of people, this principle needs to extend to local businesses providing essential services in the region and across the state particularly where the business relies on key workers or provides specialist supplies.
- Ensure the anticipated reviews of emergency plans and resources include local industries' needs and understand the business models and operating requirements – especially the components for local health and residential care that are not reflected in the current plan.
- It was also raised that community and industry engagement should be key in the review of the emergency management plan so that business continuity needs are considered, and to use the process to build community knowledge.
- It was suggested that the business and community should be part of 'Emergency Scenario Drills'. Just as many organisations test their Emergency response and Business Continuity Plans, many members felt this should also be completed with community and industry. For example, Nathalia's annual testing of their temporary flood levy. Nathalia have leveraged this annual disaster response exercise to educate and inform their community on a regular basis.

2.3.5 Strengthen and expand Greater Shepparton's local emergency response by making use of local business and community organisations, and the professional skills, trusted relationships, local knowledge, existing communication networks and local resources they can provide.

The combination of established roles and functions for some agencies, the ad hoc or late call up of others and the confusion expressed by some who were unsure if they needed approvals to act suggests there is scope to improve emergency preparedness, and the delivery of response, relief, and recovery by working with and integrating local business and agencies.

This proposal was expressed in a variety of ways including community led response and place-based emergency plans and was often prompted by the expectation that the region will experience more frequent widespread or state-wide emergencies and the challenges they present to the supply and deployment of resources to regional areas.

The proposals outlined below are intended to work under, within and in some instances alongside the current overarching State and Municipal emergency response frameworks. It was suggested that the challenges such as scope, funding and legal liability could be addressed through place-based emergency plans and protocols and in some instances may benefit from more formal arrangements such as MOUs and pre-existing procurement arrangements.

Possible options include:

- Partner with or outsource local emergency **support** functions to appropriately skilled and resourced local agencies and organisations. Examples may include engagement with CALD and first nations communities, sourcing and coordinating volunteers/volunteers register, a standing 'emergency relief workforce' that can be deployed regionally, sourcing and distributing food relief, preparing clients and residents in advance of an emergency e.g., to relocate or to 'stock the pantry' and components of relief centre operations and activities.
- Work with local industry to identify the **professional skills** required within ICC and other response agencies, and to identify local resources that can step into these roles if required. The roles may include logistics, communications, IT, translation/translator services and engagement with non-English speaking communities and would require familiarisation programs to appropriately prepare local resources.
- Streamline **procurement** of response, relief and recovery services from local business and agencies. Suggestions included identifying the training and capabilities required for local business to undertake emergency response and relief activities and provide training programs to accredit the businesses. Once accredited the businesses could be included on a local preferred provider panel for emergency related services. Ideally by fulfilling the requirements for local procurement opportunities local business would be well placed to participate in equivalent regional, state, or national procurement processes.
- While many proposed resources such as a volunteer register, a matrix of assets and services, and a community skills / capabilities matrix, it is recognised that maintaining these resources would involve considerable work. Instead, it is recommended that these be prepared when they are needed as part of emergency preparations, and in partnership with or by local industry, agencies, and member bodies. Integration of

industry and agencies into emergency planning should simplify this process and improve understanding of requirements.

2.3.6 Support businesses and agencies to embrace shared responsibility.

Alongside the appetite to bolster local emergency response, many participants felt the ideas of shared responsibility such as 'expecting to be self-sufficient for the first 72 hours after an event' helped clarify how they can prepare their business, employees, and communities.

In some instances, participants recognised the need for accommodation for key workers onsite at their facilities or the need for alternate, appropriately designed relief accommodation for carers and clients. Others saw the opportunity to step up community preparations including encouraging relocation to family and friends, 'stocking the pantry' and understanding emergency warnings.

In each case funding assistance or reimbursement protocols were identified as a valuable way to encourage investment and provide certainty for organisations providing these services.

2.3.7 Build on the proven performance of Goulburn Broken Catchment Management Authority's flood mapping and portal, and Greater Shepparton City Council's planning and development policies and controls.

Many commented that the floods were a very widespread and public test of the GBCMA's flood mapping and portal, and of Greater Shepparton Council's town planning and land use controls.

The performance of both was widely praised by participants who wanted to ensure funding and resources continue to be available to the GBCMA and Council to maintain these resources and expand them to new areas.

Participants were also eager to see the successful approach in the newer estates incorporated into rebuilding of flood impacted properties in older areas. There was some discussion about the possible need for funding support and incentives to enable property owners to do this. Many felt this would be offset by reduced future disaster recovery costs and the economic impact on workforce availability.

Some members suggested levees to protect key infrastructure and also protect heavily impacted residential areas of Mooroopna. Importantly, the levees were described as modest elevations of existing footpaths – and not of the scale in place in other regions and catchments.

2.3.8 Improve energy security for regional manufacturing, service providers and relief facilities by protecting existing infrastructure and accelerating investment in local renewable energy generation, storage, and distribution/transmission.

In addition to calling for better protection of existing energy networks and infrastructure, participants discussed the potential for local renewable energy generation and storage to improve local energy security for Greater Shepparton's local industry that is dominated by manufacturing and food processing.

What We Heard

"We need to factor in Climate / Sustainability considerations and let's work together – lots of organisations are working on this separately but let's work together for the region both residential and business impacts."

"Prevention is possible. Levees are needed in residential areas – Mooroopna needs one; Fix the Causeway; Protect pre-seventy-four developments; Protect council infrastructure; Invest in existing developments."

3. Conclusion

In conclusion, this report sheds light on the significant impact of the flood on the community's physical, emotional, and economic well-being. This report reinforces the need for comprehensive planning and implementation of flood management strategies to mitigate the devastating effects of future floods, both for human safety and business continuity.

We hope the insights from this report will guide policymakers and stakeholders in making informed decisions that prioritise the safety, prosperity, and sustainability of the Greater Shepparton residents and region.

Thankyou

The Committee for Greater Shepparton, and emsConsulting would like to thank and acknowledge the following C4GS members for participating in this review:

- Bega Group
- Commonwealth Bank of Australia
- Connect GV
- Department of Education
- Ethnic Council of Shepparton and District
- FamilyCare
- Foott Waste Solutions
- Giz a Break
- GMCU
- GOTAFE
- Gouge Linen & Garment Services
- Greater Shepparton Foundation
- Greater Shepparton Lighthouse Project
- GV Health
- GV Highway Shepparton Bypass Action Group
- J. Furphy & Sons Group
- Kreskas Bros. Transport
- La Trobe University
- MB+M
- MEGT – Industry Training Hubs
- Murray Dairy
- Museum of Vehicle Evolution (MOVE)
- NAB
- Notre Dame College
- Noumi
- Pental
- Peter Radevski
- Primary Care Connect
- Shepparton Arts Museum
- Shepparton Villages
- SPC
- University of Melbourne
- Valley Pack
- Valley Sport

Appendix 1 – Community meetings and interactions timeline

Flood Event – October 2022

With thanks to the Greater Shepparton City Council for providing the details below.

Date	Event	Location	Other
Saturday 1 October 2022	VIC SES Flood Community Update event	McIntosh Centre Shepparton	
Thursday 13 October 2022	Incident Control Centre opened.	District 22 – CFA headquarters	
Friday 14 October 2022	Public Information Session – jointly held by VICSES, Council, Goulburn Murray Catchment Management Authority, Agriculture Victoria	Senior Citizens Centre Shepparton (Welsford Street)	Live streamed
Friday 14 October 2022	Emergency Relief Centres in Shepparton and Tatura opened, at one stage hosting 800-plus residents	McIntosh Centre – Shepparton Deakin Reserve - Shepparton Ballantyne Centre – Tatura Wilson Hall - Tatura	
Wednesday 19 October 2022	Public Information Session – jointly held by VICSES, Council, Goulburn Murray Catchment Management Authority, Agriculture Victoria	Riverlinks Eastbank Shepparton (Welsford St)	Live streamed
Sunday 23 October 2022	Community information update – jointly held by VICSES, Council, Goulburn Murray Catchment Management Authority, Agriculture Victoria, Emergency Recovery Victoria, Goulburn Murray Water	Riverlinks Westside Mooroopna (141-179 Echuca Road)	Live streamed
Monday 24 October 2022	Community information update – jointly held by VICSES, Council, Goulburn Murray Catchment Management Authority, Agriculture Victoria, Emergency Recovery Victoria, Goulburn Murray Water	Murchison Community Centre Murchison (Watson Street)	
Tuesday 25 October 2022	Community information update – jointly held by VICSES, Council, Goulburn Murray Catchment Management	Undera Recreation Reserve Undera (1915 Echuca Road)	

	Authority, Agriculture Victoria, Emergency Recovery Victoria, Goulburn Murray Water		
Late October 2022	Kerbside hard waste flood collection commenced, and public skip bins placed in impacted communities		
Wednesday 2 November 2022	Community information update – jointly held by VICSES, Council, Goulburn Murray Catchment Management Authority, Agriculture Victoria, Emergency Recovery Victoria, Goulburn Murray Water	Toolamba Community Centre Toolamba (Wren Street)	
Wednesday 2 November 2022	Secondary impact assessments commenced		
Thursday 3 November 2022	Recovery Hub opened to provide support to flood impacted community members and businesses	Senior Citizens Centre Shepparton (Welsford Street)	
Thursday 3 November 2022	First Greater Shepparton Municipal Recovery Committee Meeting convened	Riverlinks – Studio 1 Shepparton	
Tuesday 8 November 2022	Community information update – jointly held by VICSES, Council, Goulburn Murray Catchment Management Authority, Agriculture Victoria, Emergency Recovery Victoria, Goulburn Murray Water	Bunbartha Community Centre Bunbartha (10 Loch Garry Road)	
Wednesday 9 November 2022	Shepparton Emergency Relief Centre closed	McIntosh Centre	
Friday 25 November 2022	Formal transition to Recovery (that is, handover of municipal coordination of emergency from VIC SES to Council)		Signed off by lead agency VICSES, and Council
Friday 25 November 2022	Bunbartha Outreach Recovery – involving Council, Goulburn Murray Catchment Authority, ERV, DFFH and FamilyCare	Bunbartha Community Centre Bunbartha (10 Loch Garry Road)	Social tennis 5:30pm to 7:30pm Community outreach
Friday 25 November 2022	St Pauls African House	St Pauls African House 7:00 to 9:30pm	Community outreach
Monday 28 November 2022	Incident Control Centre closed		
Thursday 1 December 2022	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare North Shepparton - 40 th Anniversary of Community and Learning Centre	North Shepparton Hub 5:00pm to 7:00pm	Community outreach
Thursday 8 December 2022	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare Guthrie St Primary end of year BBQ	Guthrie Street Primary School 5:30 to 7:30pm	Community outreach

Sunday 11 December 2022	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare Murchison Community Carols	Murchison 5:00pm to 7:00pm	Community outreach
Sunday 11 December 2022	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare Toolamba Christmas Carols	Toolamba Hotel 5:30pm to 9:30pm	Community outreach
Sunday 11 December 2022	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare Sikh Temple – St Georges Road	Sikh Temple Shepparton 12noon to 2:00pm	
Sunday 11 December 2022	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare Emerge Festival – Go Tafe / Latrobe	Shepparton 2:00pm to 4:00pm	
Monday 12 or Tuesday 13 December (TBC)	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare South Shepparton Neighbourhood House Christmas Party		Community outreach
Wednesday 14 December 2022	Thank you to the community GSCC Civic reception	Shepparton Art Museum Shepparton (Wyndham Street)	
Sunday 18 December 2022	Carols by Candlelight Outreach Recovery – involving Council, ERV, DFFH and FamilyCare	Shepparton	
Wednesday 11 January 2023	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare Mooroopna Outreach BBQ	Mooroopna (Ferrari Park) – changed to MEAC due to heat. 5:50pm to 7:00pm	Lions Club to cook BBQ
Sunday 15 January 2023	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare Murchison Family Day	Murchison (Riverbank Gardens)	Community outreach
Sunday 22 January 2023	Outreach Recovery – involving Council, ERV, DFFH and FamilyCare Boulevard & Golf Estate & surrounds Community Picnic	Canterbury Park 2:00pm to 4:00pm	Community outreach
Thursday 16 February 2023	Outreach Recovery – involving Council, ERV, DFFH Lenne Street Mooroopna Drainage Improvements project – local residents listening post & BBQ	Smythe Reserve Mooroopna	
Friday 3 March 2023	Flood hard waste kerbside flood waste collection ceased		
Friday 3 March 2023	Secondary Impact Assessments transitioned to 'by appointment'.		

Upcoming events

Date	Event	Location	Other
Monday 23 March 2023	Municipal Recovery Meeting	Riverlinks – Recital room 10am to 12noon	
Monday 23 March 2023	Flood recovery PR actioner workshop (2-5pm)	Wellways GSCC	
Monday 23 March 2023	Community BBQ and conversation session with Dr Rob Gordon (6-8pm) <i>Cancelled due to March 2023 Storm Event</i>	Mooroopna (Venue TBC)	Partners TBC
Saturday 1 April 2023	Mooroopna Community session	Ferrari Park (TBC) 10am to 4pm - TBC	

