



Legislative Council Environment and
Planning Committee: Inquiry into the
2022 Flood Event in Victoria

GREATER SHEPPARTON CITY COUNCIL SUBMISSION

JUNE 2023



GREATER
SHEPPARTON



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Greater Shepparton City Council Submission - June 2023

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Executive summary

Greater Shepparton's natural, riverine environment is a key feature of its appeal and liveability for residents, and has been home to its Yorta Yorta Traditional Owners for millennia.

Greater Shepparton is situated at the confluence of the Goulburn and Broken rivers, and the Seven Creeks system. In flood, these river and creeks spill out into their floodplains.

These floodplains are currently protected and need to be further protected. Provided we do this Greater Shepparton has abundant areas for high quality regional living and development.

Through careful planning, flood risks to life, property and community infrastructure can be minimised and the environmental significance of our floodplains protected.

The October 2022 flood event was the most significant flood event in over a century and impacted Greater Shepparton in many ways, with the communities of Bunbartha, Kialla, Mooroopna, Murchison, Shepparton, Toolamba and Undera all significantly affected.

Many residents' daily lives were affected directly through property damage or isolation, and their health and wellbeing impacted. Residential properties, businesses and farms were impacted. Culturally significant sites were flooded. Local properties, waterways, parks and roadways suffered considerable damage as did several major Council assets. Isolation and damage to community and sporting facilities disrupted the familiar rhythms of life and industry for people of all ages and walks of life.

The loss of the Peter Ross Edwards Causeway connection for a time required the effective management of two emergency responses – on each of the Mooroopna/Tatura, and Shepparton sides of the Goulburn River. This scenario brings the need for a second major river crossing (with flood immunity) for the region into sharp focus.

A changing climate is predicted to bring more frequent, extreme weather events. New thinking about preparedness and resilience for communities and infrastructure is required.

The benefits of high quality flood modelling were amply demonstrated through the flood event, with property impacts generally confined to properties built before the 1990's. Greater Shepparton will continue to invest in collecting finished floor level survey data, and consider how flood modelling and floor level survey data can be used in the community to raise a high level of awareness and preparedness for flood events.

To plan for more frequent flooding brought about by climate change, a further opportunity exists to build the resilience of the Greater Shepparton community to future floods through the implementation of a Government buyback scheme of some of our most vulnerable properties, under the type of scheme developed for the Northern Rivers region of New South Wales.

Recovery is an ongoing process with individual and community dimensions. Council is working closely with Emergency Recovery Victoria, community, business and government stakeholders to guide and support Greater Shepparton's recovery and longer term resilience.



While the disruption and financial impacts on Council have been significant, funding contributions via the Disaster Recovery Funding Arrangements (DRFA), Emergency Recovery Victoria (ERV), and Local Government Victoria are contributing to a sustained local recovery effort.

Council will use the experience of the October 2022 flood event to inform continuous improvement of its emergency management arrangements, with a particular focus on community preparedness and resilience.

The focus of this submission is on elements of the emergency for which Council has a direct role, and opportunities for the way forward.

Emergencies and a changing climate

The intensification of weather events and natural disasters is an anticipated feature of a changing climate. This scenario will require us to work with our environment, build resilience in the community at a number of levels and to continue to implement zero emission strategies.

Multiple strategies will be required to meet this challenge – effective planning controls, improving the resilience of built infrastructure, buying back property in the most flood prone areas, placing greater value on the natural environment, and building community preparedness and resilience to future emergencies.

October 2022 Flood Event

Council made a significant contribution to the emergency response via the Incident Control Centre and elsewhere, supporting the lead agency VICSES to fulfil the following functions:

- logistics coordination
- asset protection strategies, including sandbagging and pumping
- communications and engagement
- establishment and management of emergency relief centres
- mosquito management, food safety, and animal management activities related to the emergency
- completion of secondary impact assessments
- recovery coordination at the municipal level.

Effectively fulfilling these roles required Council staff to manage an intense period of demand on many fronts, with dozens of Council staff working extended periods under pressure and in difficult circumstances, and performing tasks outside of their usual experience.

Rather than address the above roles in detail, the following comments highlight areas for further attention at the local, regional and state levels.

Traffic management

Early in the emergency Victoria Police and Council agreed to engage a traffic management contractor to bolster the ability of Council and Victoria Police to manage motorist safety on a high number of flood impacted roads in the municipality in the midst of dynamic and unpredictable conditions.



While it is difficult to quantify the impact of this decision on motorist behaviour and safety outcomes, this was an important risk management strategy and should be strongly considered for future large-scale emergencies.

Sandbagging

Several sandbagging sites were established throughout the municipality. Whilst Council managed and facilitated these sites, there was a heavy reliance on community members to assist in undertaking the filling of bags. Further assistance was also provided by the Australian Defence Force (ADF). Over 235,000 sandbags were provided at the Shepparton Showgrounds site alone.

Community members and local businesses played an integral part in preparing and distributing sandbags.

Council also provided support to essential agencies (e.g. Powercor, Telstra) in preparing and transporting filled sandbags to various sites in order to protect critical infrastructure.

There were several challenges relating to sandbags noted during the event, including:

- ready availability of empty sandbags, and sand in large volumes
- impact on transport routes for logistics
- ensuring sandbags were available only to residents in most need of them
- timing of delivery of sandbagging machine
- managing public safety, traffic movements, and wait times at sites.

Communication and engagement

The October 2022 flood event highlighted the importance of disseminating appropriate information in a timely and effective manner to Greater Shepparton's diverse community.

Engagement with established communications channels was high, and many agencies contributed to positive outreach and engagement strategies in difficult circumstances.

Council partnered with VICSES and a number of responsible agencies conducted in-person forums throughout the emergency and its aftermath. These sessions were vital to hearing the concerns of community directly and to understand the traumatic impacts of the emergency on the community.

Some communications and engagement challenges noted for ongoing attention include:

- balancing centralised and local grassroots communications mechanisms
- providing timely, and consistent messaging to diverse audiences in the midst of a highly dynamic event
- maximising access to up-to-date messaging through a wide variety of communications channels and formats, in a variety of culturally appropriate formats and languages
- generating interest, and communicating preparedness for a potential (that is, not certain to eventuate) scenario in the weeks leading up to an emergency
- coordination of community agencies in activities such as doorknocking.

There is strength in Greater Shepparton's network of community agencies and businesses. There is opportunity to increasingly leverage these strengths to build engagement with the diversity of the



Greater Shepparton community to prepare for emergencies, and to communicate about emergencies within an established network.

Animal management

Protecting the welfare of domestic animals, livestock, and wildlife was a complex undertaking in a highly dynamic environment.

The emergency highlighted opportunities to further clarify and refine arrangements for animal management in a number of contexts:

- wildlife rescues, and management of injured wildlife
- management of livestock and large animals when presented in emergency relief centre settings
- responsibilities for the welfare of horses in a variety of domestic and agricultural settings.

An opportunity exists to design wildlife responses for declared emergencies.

Providing safe and welfare-driven domestic pet management in emergency relief centres also posed resourcing challenges during peak periods. Greater Shepparton was appreciative of the support provided by other Councils in relation to providing animal rangers.

Relief

Typically, relief is provided during and in the immediate aftermath of an emergency. Recovery is generally a longer-term process for affected individuals and communities.

Relief can be defined as the provision of assistance to meet the essential needs of individuals, families and communities during and in the immediate aftermath of an emergency.

Greater Shepparton City Council coordinated relief and recovery at the local level, supported by state wide coordination via the Department of Families, Fairness and Housing and Emergency Recovery Victoria.

Emergency Relief Centres

Council operated up to four emergency relief centres during the peak of the flood event, with the McIntosh Centre in Shepparton and Ballantyne Centre in Tatura hosting the most significant centres. Over 800 evacuees were accommodated on a single night at the height of the emergency.

The Emergency Relief Centres fulfilled their objective to provide emergency, life-preserving accommodation and support. These centres were complex and sometimes pressurised environments, relying on the positive contribution of many government and community agencies to effectively meet the needs of community members.

It was in these environments that Council worked with our community in some of their most vulnerable moments. Some of the evacuees had complex health needs and specific vulnerabilities related to drug and alcohol use, mental health, and family violence, among other factors. Council's staff worked around the clock for several weeks to provide a high level of support, at times in difficult circumstances.



The emergency highlighted the need for effective individual emergency planning for vulnerable people within the community, and Council is pleased to be supporting the Victorian Government's ongoing work in this area.

Recovery

Under the Victorian Government State Emergency Management Plan, the term 'Recovery' *refers to assisting people and communities affected by emergencies to achieve a proper and effective level of functioning*'.

The municipality of Greater Shepparton formally transitioned to the recovery phase of the flood event on 25 November 2022.

This work is substantially informed by a Municipal Recovery Committee comprising government, agency, and community stakeholders, and sub working groups addressing the social, economic, built, and natural environment pillars of recovery. Council is working with ERV's Aboriginal Culture and Healing Recovery Coordinator and local Aboriginal community stakeholders to identify local impacts and priority actions. This work will culminate in the creation of the Greater Shepparton Flood Recovery Plan in 2023.

In response to the event, Council hosted a recovery hub throughout November that received over 1100 visits. Since that time, a 'mobile' hub model has been used with numerous recovery events held in impacted communities, a response that will continue to evolve.

Waste and clean-up

Prompt clean-up of flood affected waste from properties, streets, and public spaces is an important contributor to community recovery, as well as the restoration of public parks and relatively simple matters such as mowing grass and keeping streetscapes tidy.

A massive community effort contributed to the clean-up of waste in flood impacted areas, with community groups such as the Mooroopna Football and Netball Club playing vital roles in supporting their communities, alongside agencies with a formal role in this area.

Disaster Relief Australia also played a positive role in engaging local volunteers to support the cleaning up process.

Support was provided to impacted residents with removal of flood affected waste from property to kerbside. This support was provided by Council in the first instance. Once mobilised, state-appointed contractors collected the flood affected waste and sand bags from the kerbside of affected properties throughout the municipality.

Public skip bins were also strategically placed throughout the municipality based on the level of impacted properties. The location of these bins included Mooroopna, Murchison, Murchison East, Bunbartha and Undera.

The Environment Protection Authority waived the levy fee at Cosgrove 3 Landfill and to date has seen an approximate of 13,500 tonnes of flood affected waste received. These volumes do not include the volumes collected by the state-appointed contractors.



Secondary impact assessments

Secondary Impact Assessments (SIAs) build on the initial impact assessment baseline information used to assist with identifying community needs to achieve recovery.

Council has conducted over 6000 secondary impact assessments which have indicated 580-900 properties have been damaged at a level varying from total or partial destruction, to a level of damage where residents can safely inhabit dwellings.

Around 80 properties have been totally or partially destroyed, with around 140 properties known to be non-functioning. Three hundred and sixty properties have been assessed as habitable but functioning.

This is in addition to impacts across the municipality to business and the economy, environment and biodiversity, buildings and infrastructure, and people and wellbeing.

Shepparton and Mooroopna Housing Taskforce

The Shepparton and Mooroopna Housing Taskforce was established in November 2022 by the Victorian Government in order to inform and support fast-tracked development and delivery of housing and accommodation solutions for flood-impacted residents of Shepparton and Mooroopna.

Initiatives underway include the Homes @ Home pilot (up to 40 caravans in driveways), temporary housing in the Vara-Ville and Shepparton Holiday Village caravan parks, and the rehabilitation of Aspen Lodge.

Natural environment

Local government has a role in supporting recovery in the natural environment. However, it has become evident through Council's work with its partners that there are gaps in how this area is managed for recovery.

The gaps relate to:

- biodiversity or natural environment secondary impact assessments are not covered by existing funding models or structures
- limited ability to assess or manage flood impacts on privately owned land.

This means there is no cohesive way of understanding the impacts on the natural environment or the actions required to ensure recovery.

Building resilience to future flood events

River crossings – vulnerability of bridge infrastructure

The October 2022 flood event has highlighted once again the inadequacy of our existing road infrastructure. There is now an urgent need to realise Stage 1 of the Goulburn Valley Highway



Shepparton Bypass that will provide for a second river crossing over the Goulburn River providing flood immunity.

During the flood event the only existing Goulburn River crossing option along the Midland Highway (the Causeway between Mooroopna and Shepparton that currently takes over 30,000 vehicles per day) was inundated with water leading to a multi-day closure, effectively severing access between Shepparton and Mooroopna.

This road closure caused significant impacts on rescue and recovery, supply issues, resourcing of people for response and movement of critical workers. A number of bridge closures and changed conditions has had a significant impact on east-west freight movements across the state. Other cities in regional Victoria with significant flooding issues generally have alternative crossings over major rivers. Having a second river crossing in Shepparton will aid in providing safety and security for our community, particularly in emergency situations.

The loss of the Causeway connection required Council to effectively manage two emergency responses – on each of the Mooroopna/Tatura, and Shepparton sides of the Goulburn River.

This response relied on the availability of local staff, and sourcing support from businesses and the community on each side of the Goulburn River.

These impacts were further exacerbated by closures and changed conditions for the Murchison Bridge in the southern end of the municipality. McCoy's bridge just north of the municipal border with Moira Shire Council also experienced closures and flood impacts, further emphasising the need for a flood-resilient, second river crossing.

Flood mapping and planning controls post 1990

The October 2022 floods highlighted the importance of continuously reviewing and updating flood mapping and flood intelligence for the region, and sharing this information with stakeholders and the broader community.

The flood study Shepparton Mooroopna 1% Flood Mapping Project 2021 is an update to an earlier Shepparton Mooroopna Flood Intelligence and Mapping Study 2019. The Shepparton Mooroopna 1% AEP Flood Mapping Project is a technical update that focused on land-use flooding including climate change. And the latter Intelligence and Mapping Study is an update of a 2002 study. The updates are due to significant updates in ground data (LiDAR) and significant advancements in flood modelling techniques.

Because this work had been undertaken prior to the flood, accurate maps could be provided to emergency services and agencies during the flood event.

The availability of flood mapping information for individual properties via the Goulburn Broken Catchment Management Authority portal was invaluable, with residents being able to compare gauge heights with the direct impact on their property and in particular, the height at which they may experience over floor flood impacts. During the flood event, there was some difficulty of accessing this portal due to user loads at times during the emergency.



Communicating the availability of this information outside of emergencies should be an ongoing focus, including for community members who do not access information online.

Flood modelling and flood maps inform the Greater Shepparton planning scheme, ensuring appropriate flood controls are applied to land to guide development that safeguards flood prone land from inappropriate development.

This also assisted to ensure that people who were not going to be impacted were not unnecessarily taking up resources to prepare/relocate/sandbag.

The flood event also highlighted that further work is needed to update local floor level information with new buildings that have been constructed since 2002. Council has applied for Disaster Ready funding to undertake this.

Building flood resilient infrastructure should not extend to building levee banks – Greater Shepparton has not utilised levee banks for at risk urban areas as a means of flood mitigation since the flood studies of early 2000.

Completed flood studies are used to set a “base-case” to test proposed land-use development particularly around large precinct structure plans. The recent flood studies have and continue to guide greenfield development. Development cannot occur in areas that are subject to flooding by more than 300mm, unless hydraulic modelling has been undertaken and development is therefore possible in areas up to 500mm. This modelling dictates the extent of developable area within growth corridors.

State wide planning controls

The implementation of a state wide planning approach to flood modelling, similar to the scheme in place to manage bushfire risks, should be considered at this time.

Such an approach would have a number of benefits. For example it would provide for a consistent approach to reducing the risk to life and property presented by floods, give greater certainty to property developers, minimise the risks of flood mapping and planning schemes falling out of date, and reduce administrative burden in managing schemes and permits.

Buying back vulnerable properties

The notion of buying back properties at risk of repeated inundation is a complex and sensitive one. Nonetheless, avoiding development in the most flood prone areas, applying appropriate planning controls in the floodplain, and retiring our most flood prone assets hold the keys to creating a more flood resilient community by reducing the numbers of properties at risk of future flooding.

A buy-back scheme similar to that implemented in the Northern Rivers region of New South Wales, for properties at severe risk of future flooding, should be implemented to protect the community from the hardships of repeated flooding and associated financial loss, and to reduce the breadth of impact and cost of future events.



It is acknowledged that the implementation of such a scheme must be approached with sensitivity as it involves working with community members who may have built up their homes and assets over many years.

Building flood resilient infrastructure

Mooroopna, Tatura, Murchison and large portions of the region were left without power when flooding breached temporary levees around the Mooroopna Powercor substation in the October floods when Powercor were forced to de-energise the site to minimise risk to the community and prevent significant damage. It is encouraging to see the significant upgrades to this facility to build its resilience to see future flood events.

Further safeguarding of the community's critical infrastructure assets should be pursued as an operational priority by all agencies, including advocacy for funding for this activity where needed.

Drainage infrastructure

The effectiveness of drainage infrastructure in some areas in Mooroopna has been contentious, with some areas prone to flash flooding during rain events, in addition to being vulnerable to major flood events.

Council is identifying priorities for upgrading drainage, penstocks, and pump infrastructure in order to increase resilience to both flash flooding and, where possible, riverine flooding.

The worst impacted areas have been prioritised for investigation and going forward significant investment is required to increase the capacity and reliability of the drainage networks in the regional towns like Mooroopna.

An investigation and design for upgraded drainage in the Lenne Street neighbourhood is underway.

These drainage upgrades will provide additional storage capacity in localised storm events and Council will continue to work closely with the Catchment Management Authority to plan and prepare for future large river flooding events.

The need for resourcing to investigate and improve drainage infrastructure will be ongoing, to enable Council to prepare for future unpredictable weather patterns and flooding.

Rural levees and Loch Garry

Clarification of the legal and policy issues relating to rural levees is required to give greater certainty to property owners and authorities engaged in water and property management in rural areas.

Council supports, and is actively participating in, the review of Loch Garry operations. It is represented on the Reference Committee established to review the service requirements of the Loch Garry Flood Protection District Infrastructure and its operating rules to ensure the infrastructure fulfils its intended purpose.



Local government's role in emergencies

The October 2022 flood event has powerfully illustrated the important role of local Councils in responding to emergencies, and the demands such an event places on Council capability and resources.

Given this central role communities would benefit from local government receiving increased, ongoing resourcing via the Municipal Emergency Resourcing Program or similar programs.

In the context of anticipated intensification of natural disasters as a function of climate change, Council will focus on equipping its workforce to rapidly shift from its usual functions to emergency response, and to then transition back to a more usual mode of operation.

Council will use the experience of the October 2022 flood event to inform continuous improvement of its emergency management arrangements.

An independent after-action review with staff has been completed by an emergency management consultancy. The review identified a number of areas for improvement related to systems, resourcing, training, multicultural community engagement, and cross-organisational business planning.

A further after-action review was conducted with the Municipal Emergency Management Planning Committee in March 2023. The final stage of review will occur with community agencies engaged in the response and relief phases.

Resource sharing between Councils

Greater Shepparton City Council benefited from resource sharing during the flood event, leveraging capability and resources in the areas of animal management, environmental health, emergency relief centres, and emergency management, among other areas.

It provided significant benefits to managing the Secondary Impact Assessment (SIA) process for Greater Shepparton through the Municipal Association of Victoria (MAV) Resource Sharing Protocol. This protocol enables a framework for providing qualified and authorised Environmental Health staff to assist the SIA's of over 6,000 residential properties to support council resources.

The adaptation and support to the program facilitated by the State Government and the Department of Health has enabled continued support to include statutory obligations in relation to registered premises.

Resource sharing strategies at a regional and state wide level have great potential for learning and development, ensuring a consistent and efficient response throughout the emergency, and managing staff fatigue and wellbeing.

The scale of the flood emergency across Victoria presented particular resourcing challenges. Areas for development include strategies for complex and large scale emergencies.



The MAV's resource sharing protocols are a model that have existed for a number of years and adapted over the flood period and Greater Shepparton City Council sees an opportunity to expand this model to other areas of critical response and recovery across other Local Government business units.

Councils require priority access to associated plant and equipment when emergencies are occurring – for example – portable pumps, sandbag fillers and signage. Resource sharing of personnel could potentially be extended to formally include arrangements for emergency plant and equipment. This could possibly be a collaborative approach from Hume councils or a one off grant to councils with a history of floods.

Acknowledgements

Greater Shepparton City Council wishes to acknowledge the many community members and businesses that suffered impacts to health and property in the flood, and the community members who rallied to support them at every stage of the emergency.

The contribution of community agencies and groups was profound and essential in responding to community needs. Particular recognition should be provided to Rumbalara Aboriginal Co-operative, Ethnic Council, Foodshare, Lighthouse/GV Cares, the Red Cross, Salvation Army, the Victorian Council of Churches, neighbourhood houses across the municipality, and the many agencies connected to them.

Many local businesses were engaged by Council during the response and relief phases of the emergency, and they responded with professionalism and a strong sense of community service. In many cases around the clock and under difficult circumstances – we are very grateful for your contribution.

Recognition of the professionalism and expertise of the agencies charged with protecting our community is due. With thanks to VICSES as lead agency for the emergency and Emergency Management Victoria. Thanks also to the Australian Defence Force for bringing their unique capability and expertise to support our community.

Further thanks to the many government agencies, and relief agencies engaged with the Regional and Municipal Emergency Management Planning Committees, and to the Shepparton Search and Rescue Squad and local SES teams, among others.

Many Councils assisted with providing staff and expertise to Greater Shepparton City Council in a variety of emergency management, environmental health, and animal management roles. Particular thanks go to the City of Monash, the Rural City of Wangaratta, and Towong Shire Council.

Finally, Greater Shepparton City Council wishes to acknowledge the significant efforts of Councillors and staff in serving our community with professionalism and commitment.



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CONTACT US

Business hours: 8.15am to 5pm weekdays

In person: 90 Welsford Street, Shepparton

Mail: Locked Bag 1000, Shepparton, VIC, 3632

Phone: (03) 5832 9700 **SMS:** 0427 767 846 **Fax:** (03) 5831 1987

Email: council@shepparton.vic.gov.au **Web:** www.greatershepparton.com.au

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