



Submission to the review of the June 2016 floods in Tasmania

15 November, 2016

1. INTRODUCTION

The Latrobe Municipality covers an area of 600 square kilometres at the eastern end of the North West Coast of Tasmania. The Council area includes the towns/localities of Latrobe, Tarleton, Wesley Vale, Moriarty, Northdown, Port Sorell, Shearwater, Hawley Beach, Squeaking Point, Thirlstane, Harford, Sassafras and Merseylea.

The flood event of June 6, 2016 impacted 121 properties in the Latrobe municipality, with severe damage to road and bridge infrastructure and massive devastation to the Warrawee Reserve, Shale Road Latrobe and Pig Island Reserve at Bells Parade, Latrobe.

There were several large farming properties that were severely impacted by the flooding with large areas of land eroded, thousands of tonnes of shingle deposited on prime agricultural land, large losses of livestock many of which were caught against debris and other flood debris issues.

The impact of this devastation will be felt by many within the municipality for a long time. There are still some residents who are unable to return to their homes, and sadly one local resident lost her life during the floods.



Aerial View of Latrobe, 6th June 2016, Photo © Neil Hargreaves

2. TERMS OF REFERENCE

2.1 The effectiveness of the strategies, preparedness and plans related to managing flood risk in Tasmania that were in place prior to the June 2016 floods occurring; including existing and potential levee systems.

The flood warning systems for the Latrobe area were severely deficient and particularly given the Latrobe flood occurred during darkness. There is no predetermined gauge height for when the Bureau of Meteorology (BoM) will issue a moderate or major flood warning for the Latrobe Township. The BoM use of terminology for this area “exceeds” the minor flood level by a certain height does not provide sufficient advice to determine the level of flood risk. As a consequence, during the flood event on the 5th and 6th June, it was believed Latrobe was dealing with a minor flood when in truth it was a natural disaster of national significance. Unlike Latrobe, Kimberley and Shale Road do have moderate and major

warnings; however the device at Kimberley was destroyed during the event and is yet to be replaced.

There is limited recent significant flooding history for Latrobe and surrounding areas. There was a widespread view that works within the river and catchment, such as the construction of Hydro dams and the removal of disused bridge structures and embankments, immediately below the township would prevent the town from flooding as it had in the 1970's and earlier.

There is an annual report available on the Department of Primary Industries Parks Water and Environment (DPIPWE) with history of significant annual events; however the information provided in the report is very brief with few details. This could be a more valuable report if more detail was included.

Council, SES and Tasmanian Police had access to a study completed by Entura in 2011 which included a list of properties that would be subject to minor, moderate or major flooding. Whilst this study was useful to an extent it was lacking in currency of information and relevant detail such as property identification numbers so Council could promptly contact those people impacted by the flood.

In terms of levee banks, clearly Latrobe was not protected and whether protection or mitigation is possible is yet to be determined, but Council has started the process to explore any and all options.

2.2 Community preparation, resilience and awareness, including awareness of insurance matters relating to major flood events in Tasmania.

The community was unprepared and totally reliant of the SES and emergency services who were somewhat hamstrung by the lack of moderate/ major flood warnings for the Township. The message conveyed via BoM was that Latrobe was about to experience an above minor flood.

There was an expectation from residents for Council to deliver sandbags, including the rain events following the June 6 flood. Residents were not taking responsibility in this area.

In terms of sandbags there needs to be an assessment of priority so these can be disseminated to high risk properties in the first instance. If Council had access to the Rapid Impact Assessment findings with priority areas identified then Council could identify the houses in the immediate risk areas and the number of sandbags required to better utilise time and resources.

Insurance Issues

There were a number of affected persons who were unaware as to whether they had flood cover which added to the trauma they experienced, and many are continuing to navigate through that process to the current day. Through the recovery process a number of properties have been referred to the Insurance Council of Australia and legal representation arranged. Council also organised three insurance forums to better educate the community, not all of which have been very well attended. Policy holders who were initially comforted by the belief they were insured have, in some cases, been devastated to later subsequently

have their claims rejected and to have their long term insurers prove to be less than supportive. Clearly there needs to be some consideration given to simplifying the terminology in policies and in particular the conflict between flood and storm cover. "Inundation from any source" would in Council's view be a much more appropriate term and provide certainty to those policy holders should they choose that option when insuring their properties.

2.3 The causes of the floods which were active in Tasmania over the period 4 – 7 June 2016 including cloud seeding, State-wide water storage management and debris management.

Debris management was certainly a major issue and contributed to the loss of infrastructure. Specifically long term catchment management was lacking and as a result huge amounts of debris were washed into the river, including trees from abandoned former Gunns Plantations Holdings on the flood plain and river banks.

Log jams up against bridges ultimately led to structure failure and collapse and associated surges in the flood levels further downstream. The most significant of which was the massive build-up of water behind the railway embankment and bridge crossing the Mersey River at Kimberley. Once this structure gave way a wall of water was released downstream on top of an already flooded river and this single release contributed to the environmental damage on



rural properties at Merseylea, Native Plains and Latrobe. This same issue apparently occurred in the floods during the 1970's and no appropriate long term fix was seriously considered despite assurances to the contrary given to local property owners at Kimberley during the 1970's. Council is aware that the old rail bridge in Latrobe was pulled out and that was meant to help reduce the instances of flood as has the building of Hydro

dams.

As a result of the June flood events there is now a substantial amount of debris on the river banks that will need to be removed to prevent significant build ups against bridges and infrastructure downstream. Forward debris management needs to be a key focus.

For the past couple of decades Landcare groups have been proactive in removing willows (a declared weed) from the water edge which may or may not have been a contributing factor to the speed in which the water hit the town and the destabilisation of banks. The Landcare Groups also claim that the past removal of native vegetation and replanting with plantation forests has dramatically increased water runoff.

2.4 The use and efficacy of forecasting, community alerts, warnings and public information by authorities in responding to flood events.

The timing of alerts and the number of warnings was inappropriate given the regional emergency evacuation centre was established at midnight in East Devonport. During the early hours of Monday morning (at 1.30am on 6 June) residents of Latrobe were still being

advised they were facing a minor flood and that evacuation was not necessary when in truth, evacuation should have taken place well before that time.

On the radio at 1.00am on 6th June, the flood warning was for minor flooding. At 1.30am water was crossing Gilbert Street near the corner of Twiss Street. At this time Council staff believed evacuation could have occurred. Council evacuated its Sherwood Hall tenants at around 11.00pm that night. Door knocking was undertaken by Mersey SES volunteer staff at Twiss, Madeline, Last (West) Streets and River Road Latrobe to Bells Parade to advise residents of the imminent risk of flooding in the lower areas of Latrobe; however they assured residents they would be okay. It appeared the few SES volunteers on site had little clear direction or support from their hierarchy and were unable to speak with full knowledge and authority. This apparent shortage of resources may have been exacerbated by the fact that much of the North West Coast was impacted by flood events at the time and that significant resources had been allocated to search for a missing person at Bakers Beach that same weekend.

Warnings on mobile phones were woefully late. A text message was sent at 9.00am regarding flood preparation warnings for Latrobe and Railton; however they were already underwater at this time. This was attributed to the time required, which was three hours, to develop the relevant polygon.

There didn't seem to be a coordinated approach and appropriate communication which could have resulted in earlier evacuation had it have been appropriate. The late warnings exacerbated the situation and due to the short timeframes and quick inundation of water, residents could not get out in certain areas.

There appeared a distinct lack of direction, leadership and communication in the early hours of Monday morning (6 June) and this was not rectified until the Command Centre was established at Council some 6 hours later. A clearer structure is required within emergency services of who is in command in the impact zone as well as clearer communication channels. Key personnel at the Command Centre are also essential to improve communication and information sharing. In future, State Growth and the Local SES Unit Manager need to be involved.

SES was made aware of significant flood inundation to the lower end of Latrobe by Police at approximately 7.00am and SES crews were directed at approximately 7.10am to undertake further door knocking. Tasmanian Fire Service support was activated at approximately 7.45am and the Army arrived at 8.30am and were mobilised with SES and Tasmanian Police to evacuate residents. Crews remained on the scene assisting police and the public throughout the day and into the next.

Social media was essential to provide alerts and updates for the community and Council made good use of that platform.

2.5 The effectiveness and transition from response to recovery in the week following the June floods; including capacity and priorities for infrastructure repair, and immediate assistance payments.

The recovery process was without doubt highlighted by the establishment of the regional recovery centre at Latrobe and hundreds of residents were assisted by a cross section of

agency, charity and government departments in the immediate aftermath of the floods. Certainly those who staffed the recovery centre were outstanding in their support and the services provided to flood victims. These same people in many cases were involved in the recovery process on an ongoing basis.

Initial assistance payments were provided in appropriate timeframes and were dispersed to those in need despite, in many cases, a reluctance to accept either payments or support in fear of others who were possibly worse off not receiving that same support. In the weeks and months that followed more financial assistance became available through various avenues.

As Latrobe Council had clear knowledge of the boundaries of those affected by the floods Council could support the distribution of the emergency relief funding.

There was a large gap between rural properties and those 'hobby' farmers that generate less than 51% of their income from their property, in relation to funding support available to assist with recovery.

Many businesses didn't have any loss of income cover and it was some weeks before they were able to get back into their buildings and recommence trade. Small business is a sector that seemed disadvantaged during the recovery process given there were no financial assistance packages or grants designed specifically for that sector.

In terms of infrastructure repairs clearly there is a limited capacity for major bridge reconstruction in Tasmania but that in itself is not an issue unless floods of this magnitude become a more common occurrence. Local Government seems to have worked cohesively and promptly in prioritising bridge repairs in particular, but unfortunately the same cannot be said for State Growth and in particular, their delay in deciding what to do and when to do it in the case of Hoggs Bridge at Native Plains. The delays and subsequent impact on local residents could have and should have been minimised with more prompt action and decision making.



Support from State Growth during the event and the days that followed was inadequate. There was limited personnel available to provide support during this time and they did not attend the meetings held at the Command Centre at the Council Chambers with key personnel and organisations for sharing of information and updates.

In relation to traffic management, no support or signage was provided by State Growth for roads under their control. When council staff contacted State Growth regarding signage they were advised by all levels that they were too busy. Contractors should have been bought in to provide and install appropriate signage. The lack of signage on State Growth roads caused serious concerns, particularly for SES and the police as there were no warnings for road users driving unassumingly into flooded areas before they were ultimately stopped by the flood waters themselves.

During the flood events and days following, Council had no details of the SES rapid impact assessments. The information being received by Council on road blockages was based on

people's opinions as opposed to facts which led Council to send out resources to areas where they weren't required. It would be useful if Council could have access to the photos and information from SES via the COP system in an earlier timeframe to make accurate decisions and better utilise its resources.

2.6 Consideration of the detrimental environmental effects of the flooding upon the landscape, and what effective mitigation measures may be necessary to avoid similar events.

Given the extent of environmental damage it is impossible to adequately consider what mitigation measures could have prevented or minimised the amount of damage along the length of the Mersey River.

Levee banks, detention basins and even banks of vegetation all would have some impact on the catchment further downstream and no matter what we do in terms of mitigation the measures taken need to be part of an overall plan for the Mersey and associated tributaries. Whilst the plan may take a number of years the repair and mitigation initiatives will probably take decades and many millions of dollars.



The severe environmental damage to rural properties, including major washouts and erosion has cost farmers significantly and funds to abate issues are required in a timely manner. Should farmers be entitled to the same assistance as councils e.g. 2 for 1? As custodians of the land for future generations support to farmers is critical. Major infrastructure such as new bridges and roads will be required in the future if new waterways are allowed to cut through the existing landscape.

It is entirely appropriate that money be made available from either state or federal government funds to undertake repair and mitigation work. There is a real concern that there will not be enough funding to enact mitigation measures via the Natural Disaster Mitigation fund.

Council have heard reports of property owners undertaking works (e.g. embankments) in flood plains that may be detrimental to others. Part of this issue is the absence of organisations for approval or follow up for these types of work. There is no real direction for land holders in relation to rivers and creeks. Can DPIPWE provide information on rehabilitation and works on the Mersey and embankments etc.? Currently the state doesn't take an active role in managing the river system and there are no clear channels for individuals or councils to go to for expert advice or assistance.

The dynamics of the Mersey River have changed dramatically and Council now has little or no accurate information on which to base plans and responses to similar flood events in the future.

2.7 And any other matters relevant to the terms of reference including matters relating to the floods in Huonville.

The evacuation process was not suitably resourced in terms of the numbers and clear identification of responsibility. Communication to residents at the time by Mersey SES was also inappropriate as the message to evacuate was not clear and many residents believed they would be fine, only to awake early the next morning to water inundation.

Once residents were finally evacuated out of the impact zone they were not accounted for which also caused its own issues. There needs to be a registration point for evacuees at a set down location. Registration only occurred to those reaching the evacuation centre.

Some residents chose not to self-evacuate and ultimately had to be rescued taking-up valuable resources.

To improve the evacuation process the development of a generic checklist for evacuees should be developed. A form where the top section details the property address, name, how many people in the household, where they are going to and a contact number while the bottom section of the form can be torn off and given to residents to remind them to take essentials such as prescriptions, phone chargers etc.

Another issue identified during the flood event was that the power was still on at the bottom end of Latrobe. An assumption was made that as there was no service on Shale Road that it also affected Latrobe. Once TasNetworks were aware of this, technicians were immediately arranged to turn all power off to all affected properties.

3. CONCLUSION AND RECOMMENDATIONS

There are three key areas for improvement required to prepare for future emergency events, including the need to provide more efficient and effective warning and alert systems, improved community education and long term program of river maintenance. Improvements in these areas would ensure better use of time and resources of key personnel and organisations so an effective coordinated approach could be implemented to minimise the impact of emergency.

Warning and Alert Systems

It is critical that communications be more accurate and timely, with better early warning systems.

To enable this to happen, improvements need to be made to preparedness and planning for flood events. Definitions of minor, medium and major flood heights need to be quantified with specific relevance to the Mersey River.

It is recommended that current data be gathered on the flood levels of each household, particularly given the dynamics of the Mersey River and associated tributaries has changed. The previous minor flood level for Latrobe was 3.9m but due to the changes in the river it is now 3.2m.

Council also suggests that a potential cross council register of vulnerable properties and their current contact details including the inclusion of property identification numbers be kept for prompt notification to those high risk properties.

Community Education

The community needs to be better educated about the risk of flooding if their property is situated in a flood affected area with regular reinforcement of the steps to prepare for instances of flooding and evacuation if required. While Council attempt to keep the community informed and aware of what to do in emergency and how to better prepare, it's not always guaranteed that we will reach everyone or that they will take notice of the information they receive.

Long term program of river maintenance

Council also believes that the severe flooding and environmental impacts have highlighted the need to have a long term program of river maintenance, with particular emphasis on the removal of logs and management of riverside forestry operations/plantations. Consideration also to be given to the management and/or the planting of appropriate vegetation on riparian reserves.

In conclusion, Council would like to acknowledge the work done during the flood response by the many emergency personnel and volunteers, particularly in the Latrobe Township and are grateful that their efforts prevented a greater loss of life that could otherwise have been the case. The Latrobe Fire Brigade, Council employees, Army Reserve, SES and in particular the Police officers who not only led the response but also were involved in the majority of evacuations and rescues, deserve the greatest of praise and recognition.