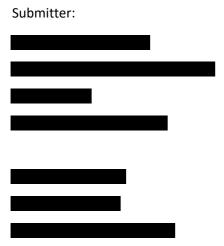
Submission to Melbourne Water, Maribyrnong River Flood Review 2023



Summary

To understand the effects of the Maribyrnong River Flood of October 14 2022, my position is that it is important to understand: both social and technical aspects of flood mitigation; the demographics of the local community; and have comprehensive local knowledge of both current and historical events that can inform strategic decision-making.

I contend that:

- Communications were tardy, inconsistent and inappropriate
- Incident Control was exercised without a holistic understanding of local conditions and history
- The local SES response unit, VICSES Footscray, was under-resourced and suffering low morale after having been threatened with closure only 2 months beforehand
- VICSES' chain of command and management of the event was confused and inadequate. This was partly based on inaccurate information and predictions from Melbourne Water.

Understanding the Community

The City of Maribyrnong is one of the most diverse in Australia (Census 2016), with:

- residents who come from 135 countries,
- 80 languages spoken,
- 50% of people born overseas,
- 61% have both parents born overseas,
- 50% speak a language other than English at home
- only 11.8% identify their origin as 'Australian', with China, Vietnam, India and Italy making up large groups

So a long term process of multi-disciplinary, multi-lingual engagement is needed if the community is to be adequately informed about their exposure to risk. Such engagement has not taken place, although all emergency agencies have community engagement plans. But how relevant are those plans, if residents are:

- From refugee, migrant, or CALD groups who may not belong to or engage with a
 particular social demographic that assumes a certain levels of education, literacy
 (even in their own language), IT skills and equipment, English language, economic
 means, employment patterns that enable them to attend community meetings, etc.
- Do not know of the existence of VICSES, EMV, BoM nor their websites, phone apps such as Vic Emergency App (if they even have a smart phone)
- May be distrustful, because of past experience in home countries, of authority figures, people in uniforms, police et al
- Have never been exposed to information about the risk in their own language
- Do not have the financial means or family support to seek any back up if they are caught up in an emergency

The 2022 VCOSS report Valuing Strengths Building Resilience states:

Emergency preparedness starts with the premise of shared responsibility. For this principle to be fully realised, Victorian communities – in all their diversity – need support to prepare for, respond to and recover from emergencies. For this support to be effective, it needs to be culturally responsive, context specific, community-led and strengths-based.

(Valuing Strengths Building Resilience: Improving emergency management outcomes for multicultural communities in Victoria ECCV, VCOSS Sept 2022, p12)

The residents affected by the Maribyrnong flood event can justifiably feel that they have not been supported effectively and that the particular demographics and social context were not adequately considered in emergency strategic planning. This will negatively affect their short and long term recovery.

1. The specific effects of the 14 October 2022 Maribyrnong River flood

The Maribyrnong River Flood of 14 October 2022 has had a catastrophic effect on

- · local residents' material and psychological well being,
- property loss and damage,
- loss of public amenities,
- degraded community cohesion,
- loss of confidence in agencies which are tasked with mitigating such events,
- loss of trust in government, emergency agencies and their employees.

There is extensive research in the sector which demonstrates the long term detrimental effects of major floods and loss of homes and personal possessions, including PTSD, depression and anxiety, divorce/relationship breakup, altered belief systems, substance abuse, imposition and stress on extended family members or friends who may assist. There are short term challenges like how to find new accommodation, loss of connection to neighbours and friends, financial difficulties, bureaucratic challenges dealing with government, insurance, service providers or other entities, decisions about rebuilding or relocating (and if there are viable options for these), legal matters, etc.

This research into continuing effects of major floods is in the public domain and should be at the centre of all investigations and mitigations around this event; the enquiry should be people-centred. There is nothing new about this, but countless studies have produced reports and recommendations which have not been translated into effective action in communities (see for example: VIC Emergency Management Reform White Paper IGEM 2012, Emergency Management Diversity and Inclusion Framework EMV 2016, AJEM 2019, 10 Years of Reform in Victoria's Emergency Management Sector IGEM 2020, Working Together in Place Policy Framework Vic Gov 2022, Valuing Strengths and Building Resilience:

improving emergency management outcomes for multicultural communities in Victoria ECCV, VCOSS 2022).

I suggest that the enquiry should adopt a society-first approach; that is, to apply a range of social, psychological and learning measures to reduce risk, and to consider social forces and structures including social capital, vulnerability, and the interrelationship of communities with institutions and organisations (see also Dufty N. 2016 A Society-first Approach to Flood Mitigation).

2. The flood's duration and extent

There may be some simple estimates used to calculate the duration of the flood (e.g. it lasted 24 hours). But the whole of the flood event lasted much longer. It is my opinion that the **whole event** should be analysed: before, during and after.

Duration

Although some local affected residents first knew of the flood between 4am and 6am on October 14 when they were being doorknocked to evacuate immediately; others had no warning at all and woke up to find themselves flooded.

However, authorities had many days' notice of the impending event, but in my opinion they failed to adequately inform, warn and assist the communities.

According to the VICSES (community meeting, 15 December 2022), the procedure for issuing warnings is as follows:

- 1. Melbourne Water (MW) provides predictions and intelligence, including crafting and generating warnings which they pass onto the BoM
- 2. BoM issues the warnings by publishing them on their website, through social media and emergency broadcasters.
- 3. VICSES engage with MW around the intelligence that has been passed on, and what the impact on the community might be, using this information as the basis for their operational decisions.

So the flow of information and resultant actions to be taken rests fundamentally with the MW "predictions and intelligence". It is the contention of myself, many other residents and interested stakeholders, that this information was erroneous and contributed in large part to the failure of other agencies' actions (not wholly, they also had the capacity to take alternative or complementary courses of action).

In this event, expert hydrologists have undertaken independent investigations and asserted that the predictions and intelligence gathered by Melbourne Water was deeply flawed, including that the flood flow calculations from Deep Creek, Darraweit Guim, was half to one third underestimated; that the systems of gauges had not been maintained; that the Rivervue Apartments at Keilor had been built in contravention of existing land use zoning and that there had been a faulty process used to re-classify the land so that developers could build on a flood plain; and that Melbourne water had changed their required 100 year flood level for flooding levels for permits.

When did people receive information about the potential for catastrophic flooding? Who gave them this information? Was it accurate? Were they able to make an informed decision?

In order to assess the efficacy of actions taken based on MW predictions and intelligence, I suggest that a much longer term view needs to be taken, one which encompasses

- past historical data and practices,
- the interrelationship of council, other agencies and emergency services,
- the capacity of local SES Units to effectively plan, practise and respond,
- 'anecdotal' local knowledge as well as 'professional' technical knowledge

The situation

In simple terms, the situation was this:

- 1. Australia was experiencing the third La Niña year in a row
- 2. The landscape was already saturated due to persistent high rainfall, including a very wet winter and the highest October rainfall on record (BoM)
- There was a high tide due in the lower reaches of the Maribyrnong River (Maribyrnong Township) on Friday 14 October at around 6am

- 4. Anecdotally, the river was 'overdue' for a major flood, as it floods regularly, with major floods every 10-20 years (this is advised in the 2012 SES Local Flood Guide but is omitted in the revised version of 2022).
- 5. All of Australia was alert to flood dangers since SE Queensland and Nth NSW had started flooding at the end of January 2022, then more and more disastrous floods flowed down the waterways from N to S of the eastern seaboard the same conditions as the major Victorian floods of 2010-2011.

These five factors were enough for some local residents to discuss the possibility of major flooding again. You did not need to be an expert hydrologist or a trained emergency incident controller to put two and two together; this might be the 'big one' many had been anticipating for years.

So did the authorities and emergency agencies act early, engage with communities, deliver adequate and timely warnings and advice, and ensure everything possible was done to mitigate the coming disaster? No. I contend that the actions were limited, too late and ineffective, but that it did not have to have been that way; they could have done more.

Extent of the flood

To date, there is no accurate accounting of the number of people affected, number of properties and how many of those are condemned or uninhabitable, what the cost to insurers is and the personal costs for those not insured.

There have been repeated figures that are inaccurate, and which downplay the scale of the flood. For example, even today 17 March 2023, I heard an ABC radio report that said 200 people were affected and dozens of homes. VICSES have issued figures of 245 properties - even though the 2013 doorknock covered 430 properties and this flood was more extensive than the area covered then. **Residents groups have calculated the number of properties affected at 606.** This is an enormous discrepancy.

To accurately assess the scale of the disaster, surely timely and comprehensive surveys should have been conducted shortly after the event, to check every property and gain a better understanding of the damage to community. This has not been done. An assessment

by hydrologist of the MW Maribyrnong Flood Survey data fact sheet published on 9 March 2023 states:

- 1. Not a single flood level or floor level was surveyed for the 20 or more residences flooded in Ascot Vale or large number of community sporting and recreation facilities flooded.
- 2. Not a single flood level or floor level was surveyed on the north side of the Maribyrnong in the Essendon North-Aberfeldie area.
- 3. Only one flood level and floor level was surveyed in Kensington.
- 4. A total of 74 flood levels were surveyed, 66 @ Maribyrnong, 4 @ Rivervue, 3 @ Keilor and 1 @ Kensington.
- 5. A total of 150 floor levels were surveyed, 92 @ Maribyrnong, 53 @ Rivervue, 4 @ Keilor and 1 @ Kensington.
- 6. Of the 53 floor levels surveyed at Rivervue 48 were lower than the minimum 100-year flood level of 6.60 m AHD (personal correspondence)

In other words, this survey is incomplete and does not account for the extent of the flood

My experiences during the week of the flood

I include here a timeline of the week of the disaster, from my experience and perspective as an and leader of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of including membership of strategic groups at local, state and national level; experience as a frontline responder; former leader in the properties of the

Note: all information and warnings are issued following MW predictions of flood heights at the Chifley Drive gauge, Maribyrnong Township.

Flood levels are: minor 1.7mAHD, moderate 2.3mAHD, Major 2.9mAHD

1. Monday 10 October

I received a call from a Maribyrnong council employee to discuss possible flash flooding due to heavy rainfall and possibly blocked drains. I referred this conversation to the rostered VICSES Footscray for consideration in case we might need to put crews on notice.

That evening, I attended our regular Monday night SES training from 18:30-21:30. The Footscray Unit has 2 IRBs (Inflatable Rescue Boats) with trained boat rescue crews and coxswains, and until recently had 2 4WDs to tow them, and 2 medium rigid rescue trucks. Our 2 trucks had been removed by SES because of a statewide issue with the SES fleet (chassis cracking). That night, volunteers from another Unit came to take away one of our IRBs to take to Pakenham Unit as their boat was being serviced.

We were left with one IRB and two 4WDs (one of which would have to be used to tow the boat if needed). That left one 4WD for general rescue activities. As volunteers are not permitted to use their private vehicles for SES rescue callouts, that meant the unit had capacity to fit 4-5 people in one 4WD, and only one rescue boat instead of two for flood rescues (the Unit has more than 30 active responders). Our second IRB was not returned during the course of the next 4 days, although I am not aware that Pakenham Unit needed it at all and it could have been returned and been on standby and then utilised for the Maribyrnong flood.

2. Tuesday 11 October

MW prediction was a 3.3mAHD flood level (major flood level being 2.9mAHD). Flood watch issued by BoM.

The City of Maribyrnong Storm and Flood Emergency Plan identifies activation triggers, but relies on SES (who relies on BoM and MW) to liaise and advise of conditions which may lead to activating the plan. The activation considerations list a Readiness Level (RL) as 'Very High' in the case of moderate flood levels, 'Severe' for major flood warnings, and 'Extreme' for two or more flood warnings. The levels were major on both Tues 11 and Wed 12, moderate on Thurs 13 and major, 2nd warning, on Fri 14. I am not sure if, how and when the plan was activated. As the RL is listed for even moderate flooding, it might be expected that the plan was activated from Tues 11 September.

Some limited action was taken. According to VICSES , an SES doorknock was conducted of 100 residences in Maribyrnong. I am not aware of any SES report of how many people were actually at home, whether they were in the area that was at high risk or if they understood what they may have been told.

Although I believe there should be a report: in 2013 when the Maribyrnong council developed a comprehensive and award-winning community engagement strategy and involved SES in doorknocking residents about flood risk (not during a flood event), the SES included a report sheet, the 'Door Knock Area Result Log', which was used to identify, for example, whether contact was made, if notices were left, if there was no access and if an interpreter was required.

Also, considering the prediction was for a major flood, I would question why more homes were not doorknocked. There was time and opportunity. The 2013 flood doorknock teams visited 430 properties in Maribyrnong, Aberfeldie and Ascot Vale. VICSES planners may refer to this number of properties being affected only in a '1 in 100 year' event, but even with a less catastrophic major flood event, SES advises 232 properties are at risk (2022 LFG, 3). The classification of a '1 in 100 year' event is also confusing, it holds little meaning for most communities, other than them thinking a major flood would not happen in their lifetime, since there had been one in 1974.

There were no SES members from the local Unit (Footscray) on that doorknock. I am advised by council that it was 2 SES staff members and 2 volunteers. I am advised by one resident who was doorknocked that the advice they were given was that the Angler's Tavern might be affected and perhaps half a dozen homes nearby. For a prediction of a major flood level, this seems desperately inadequate advice.

The VICSES also reported that the SES had engaged with the Angler's Tavern: "That started our engagement with the local facilities in the area, so particularly Angler's Tavern and the like, where we were in conversation with them for several days in that space and assisting with sandbagging and the like around that area" (Community meeting 15 Dec 2022).

At this community meeting of Dec 15 2022, residents were angered that the Angler's Tavern had been assisted by SES but not them, or the few who had been doorknocked had received no sense of urgency, being given the impression that there was little to worry about except around the tavern.

3. Wednesday 12 October

MW prediction now has the flood level at 3.4mAHD (rising).

The prediction of upper end of Deep Creek was 8mAHD

SES warning 'advice' community meeting 15 December 2022)

Considering that water flows downstream from Deep Creek to Maribyrnong township, did this not ring any alarm bells? What action was taken by VICSES to inform residents on this day? None that I am aware of, so even though the prediction was increasing, nothing further was done to communicate with residents, apart from continuing to update advice on the SES website. There were no more doorknocks, no communications with residents. Why not? Is there an inherent perception in emergency service staff that the general public cannot be trusted with information? The Vic Emergency Management Reform White Paper of 2012 refers to this: "While there is no single path to developing community resilience, there are essential principles and approaches. These include recognising that communities are inherently resilient, have many strengths and capabilities, and can be trusted to know what they need and how to meet that need".

The consequence of not trusting communities was detailed in the inquest into the death of a women who died in the Mersey River flood in Tasmania in 2016. There were no evacuation warnings prior to the flood. The SES did did not issue an evacuation notice because "if you issue a warning too regularly, then the public become disenchanted and will ultimately disregard when there is a critical one" ABC online 10 March 2023).

Residents I have spoke to have unanimously agreed that they would rather have an early warning and have the chance to take action, even if that advice were later rescinded.

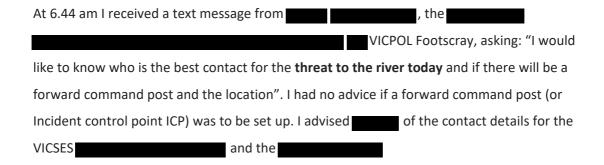
In Maribyrnong in 2022, did the SES staff who were operating the Incident Control Centre not suspect that they should be taking more decisive action based on the predictions and

intelligence? It is only pure luck that no lives were lost, including lives of SES volunteers who were tasked with 31 boat rescues in dangerous conditions and fast-flowing water during the event. The debris washing down the river at speed included a whole pontoon, a shipping container, numerous industrial bins. One SES IRB with only a 25 HP motor could not hold against the flow. VICSES Footscray Unit IRB has a 40HP motor which was powerful enough to keep control in the conditions. I have been advised by an SES staffer that SES are replacing these larger motors with the less powerful ones this year, which would make them unfit for purpose in a similar flood event.

4. Thursday 13 October

MW prediction now has the flood level at 2.5mAHD (moderate).

Expert independent hydrologists have estimated that the MW flow data monitored at Deep Creek was underestimated by a half to a third.



At around 10am a 'watch and act' alert was issued for the Deep Creek Upper catchment and an 'Advice' message was issues for the Maribyrnong Township. This was subsequently upgraded to a 'watch and act' (as mentioned previously, there may have been limited understanding of what these alerts mean). On hearing of this alert on the emergency broadcaster, I composed a draft email to send to all volunteer members in case we would be called out to a possible flood event. At 10.03 am I sent a text message to the VICSES

Footscray asking if he would like me to write an email to all members about the flood warning for the river and about being prepared for the ongoing weather event. The rang the SES staff NW first and then replied to me that he had asked our to send an email (which is his responsibility, not mine). I sent a further text advising the that I was working from home and available to help with any emails and advice to him. As a former that I was ready to assist. I also coordinated

the 2013 Flood doorknock and had extensive experience in large scale events. The was very grateful for my offer and advised that boat crews had been placed on standby and were ready at the Unit LHQ.

SES set up a sandbag collection point at Bunnings Highpoint and communicated this through their website and social media. Most residents were unaware of this, as they had not been adequately informed of the "threat to the river today" were at work and were not checking the SES website (if they knew what that was). Some residents did collect sandbags, although they were rationed. Because of the widespread flooding across the state, SES said they had almost run out. I am advised by some residents that they were allowed 6 sandbags each, which may be used to block the toilet or shower drain. This would be completely ineffective in a major flood.

I was also advised by the Maribyrnong council that SES had advised they had no more stocks of sandbags. However, this was incorrect. There are large bales of more than 8,000 sandbags at the Maribyrnong Council Operations Centre where the VICSES Footscray Unit is housed. They belong to SES and have been there for some years, ready to be used in case of a major flood. It appears that SES were unaware of their own stock of sandbags, and that the community missed out. Those sandbags remain there on the storage shelves, unused.

Similar to the previous day, there were no doorknocks conducted by SES, although there was time and opportunity. Again, the second VICSES Footscray IRB remained at Pakenham.

At 18:00 hs the Incident Action Plan issued at the ICC lists the Maribyrnong River situation: "3 x houses in Van Ness Ave sandbagged and prepared but likely impacted, 6 properties in Flora St Keilor isolated for 48 hours but high and dry, 12 properties in Flora Ave and Ailsa St need monitoring will have yard flooding and not above floor with current prediction": a massive underestimation of what was to occur.

At around 21:00 hs the 'watch and act' was upgraded for the upper end of the Maribyrnong catchment to a 'Major flood' warning. As the water flows downstream, one might have thought this would have activated SES. As VICPOL were clearly already planning an ICP and council were involved, there must have been some discussion at a strategic level. But why

did it not include the residents? Even if they had commenced warning residents on Thursday evening, they could at least have saved some belongings and made plans to evacuate. As it was, most of them went to bed completely unaware of the imminent danger and the first they knew of the flood was when it was already at their door in the middle of the night, and too late to save anything.

I did not know it at the time, but was later advised by the VICSES Footscray
that a DivComm (Division Command) post had been established at the VICSES Essendon
LHQ, which is on the opposite side of the river. This LHQ is pre-set as a Div Comm, with
enhanced communications, equipment and facilities. The advised me that it had
been running during the week but it had been closed by SES staff on Thursday night.

5. Friday 14 October

At 02.25hs MW issued an updated warning with potential for major flooding at Maribyrnong Township. This information was passed on to BoM and SES, which were operating an Incident Control Centre (ICC) at Dandenong (I did not know this at the time). There is an Incident Control Centre in Sunshine, which has been used as an ICC in the past for emergency exercises, such as 'Operation Noah', a Maribyrnong council exercise with a scenario almost exactly the same as what occurred on 14 October. The advantage of the Sunshine ICC is that it has a store of equipment and resources, it is pre-set with extensive IT and communications equipment, it is close to the Nth and Western suburbs and would be able to coordinate responses and re-supply if needed locally, especially is access is cut off by road closures in the event of a major flood. The VICSES Flood Emergency Response Plan also states that the ICC "should be located as close to the flood incident as practical to ensure control is exercised at the lowest effective level and takes account of local experience and knowledge" (p31).

At around 3am SES activated crews for doorknocking (note: this is not doorknocking in advance of an event to warn people, it was an 'evacuate immediately' direction).

Council was alerted to open the relief centre.

At 4am, evacuation orders were issued for various streets.

I am not sure of the following times and actions, but I record them as told to me by the later in the day:

- VICPOL had set up an incident control point (ICP) on the street in Raleigh Rd.
- The VICSES Essendon was despatched as the SES and and operated out of his SES vehicle, tasking crews with doorknocking residents and asking them to evacuate immediately.
- Shortly after, additional police arrived and relocated the ICP to the relief centre in Randall St due to approaching floodwaters.
- SES crews were stood down from doorknocking and moved back to the relief centre.
- Some residents were arriving. (NOTE: it is unusual for emergency response activities
 and evacuations to be co-located. People need food, clothing, bedding. In major
 events there may be fatalities and confidential operational matters to discuss.
 Separation of operations and the public is desirable. I understand the operations
 were coordinated in separate rooms at the relief centre).

At 5.30am I heard announcements of street evacuations on ABC radio. I got up and cycled to the river. On the Ascot Vale side, Woods St, near the golf course and sports fields, the river had breached its banks, but was still far from residences. There were many people out walking their dogs, like a normal morning (it is a popular walking, jogging, cycling path and dog walking area). The road was closed at the Raleigh Rd bridge, with police there managing traffic.

At 6am, MW advised of increased river heights and a second emergency alert was issued via SMS, landlines.

Many residents have advised that they did not receive any alert on their phones, that they were not doorknocked, or that they did not hear the door, that they saw no police cars and that they heard no warning sirens. They remained oblivious to the disaster (audience comments, community meeting 15 December 2022).

RE sirens: the LFG states that "during some emergencies, we may alert communities by sounding a local siren" (p6). SES vehicles are equipped with loudspeakers; announcements can be made and amplified from inside the vehicle. Police cars and emergency vehicles have car horns – did no-one think to make a noise to wake people up?

At 6.30 am the river was exceeding the major flood level.

Around 7am I observed some residents being saved by a group of local tradesmen wading though the water and carrying them to safety one by one. I observed one resident driving her car through floodwater (above wheel height) and turning onto the Raleigh Rd bridge. She appeared in shock and almost drove into some pedestrians.

I returned to Woods St and spoke with people there. The waters were approaching. I asked them if police had attended, if they had received any warnings and if they had been advised to evacuate. The answer was no. I advised they would be flooded (this area is on the Maribyrnong Flood plan maps) and encouraged them to alert neighbours and evacuate.

I returned to the police traffic management point at the bridge and advised the officer there that Woods St would flood and that people needed to be evacuated. The officer checked with me the location on google maps and said they would communicate that back up (the chain of command, presumably). I was not in my SES uniform, I had no official capacity, so whether local residents or police heeded my warnings is unknown.

(The following day, I checked back with some residents in Woods St. One person described to me that their father, who is frail elderly and does not speak English, was traumatised. He had remained in the second story of his home because he could not get out but it was all destroyed underneath. Others said they climbed over their back fences to higher ground to escape).

Note: as noted earlier, in the MW Maribyrnong Flood Survey data fact sheet published on 9 March 2023, no properties in Ascot Vale are included.

At around 8am I received a phone call from the VICSES Footscray

They were overwhelmed and in distress, and asked if I could take over. I said I could not, as I did not have a pager (the system on which all our emergency requests for assistance are notified from ESTA). There was no other available to help. The was extremely stressed and I was concerned for their mental health and safety and my assessment was that they was not fit to continue in that critical role. I counselled them to notify the further up the chain of command, a paid staffer) that they was unable to continue and that the should find someone to cover the role.

At this point, I was uncertain what the Chain of Command was, as VICSES had earlier in the year undergone a restructure, which had been scheduled to be implemented by July but was being implemented this same week as the flood. I did not know which staff occupied which positions. I rang two senior staffers, no answer, then rang the staffer who is NW Metro

I advised that the Footscray was not fit to continue and needed to be stood down. She did not advise me of the arrangements in place at the relief centre or the current situation.

It was not until the following 17 October that sent an email regarding internal SES arrangements, which stated "With the current levels of activity, most BAU activities have ceased and normal staff contact is going to be a little problematic for the next little while..." and "Unfortunately this event (the flood) has occurred with the 'go live' of the new operating model...we are still trying to understand our roles and relationships...We haven't had any handovers from the 'old' teams either". (Was there internal chaos that contributed to the poor communications?).

The situation was that the SES volunteer commander at the ICP was managing all incoming RFAs in our area, triaging them, and despatching crews. The Footscray was unaware of this and was simultaneously triaging the same RFAs, received on the pager alert system; double handling. They had gone to our LHQ to manage operations, but the LHQ is not fit for purpose, especially in a large scale event. For example, our office is a portable building inside a large warehouse (a tin shed inside a tin shed), creating a Faraday Cage effect which intermittently disrupts signals and communications. The was having to rush outside to get mobile reception as calls came in. By 10.09 in another call to after insisting on the seriousness of the state of our confirmed with her that our could stand down. However, another was not sourced for the Unit until 5pm.

I assisted as much as I could by phone (the river was impassable from the Ascot Vale side, so it was impossible to get to LHQ in West Footscray). From 8am to 1pm I made a total of 43 calls and sms, to and from the the the theorem, SES staff, and others. Several Unit volunteers rang me wanting to assist operationally, but as I had no idea of the arrangements I could not task them – I referred them to the who was at his workplace.

Feedback later was that, considering the scale of the event, members were disappointed that they had not been called out en masse. Many were available and waiting at home, expecting to be called. The was not managing available personnel as they were conducting rescues in our IRB. Footscray Unit was left uninformed.

At 11am VICSES SITREP at the ICC recorded that "the major flood warning triggered the evacuation of approximately 60 houses" – completely inaccurate, the township was underwater by then.

At 12.06 the river peaked at 4.216mAHD

Local Unit Operational capability

In all major events, one local Unit cannot handle the scope of work and SES crews are called from across Melbourne to assist. However, local Units pride themselves on standards of operational readiness and being able to deploy as many people and resources as possible in a major event.

Was the local Footscray Unit capable of responding effectively to this event?

The Unit has lost its 2 rescue trucks and other resources have come and gone. During the week of the event, VICSES removed its 2nd IRB. The LHQ is not fit for sustained activities or able to handle communications, and is also a health risk identified in 3 environment reports (nuisance dust issue classed as industrial waste category C). The Unit's older, experienced membership has become depleted in recent years, due to Covid and inexperienced leadership issues. VICSES has blamed the Unit for falling standards. In July 2022

threatened the unit with closure within 12 months if we did not improve. With no benchmarks for improvement set and no further discussion, the was informed his position would not be renewed and in December VICSES installed a new from outside the area (Monash).

The Unit has provided service to the community for 60 years. It previously had effective practices that emphasised preparedness and capability, for example:

Unit members were continually educated about the river and flooding, especially
with graphic video footage of the 1974 flood taken by a local resident amateur
filmmaker, and through training exercise on and around the river

- Unit members responded to river flood events in 2010-2011 and other smaller events
- In forecasts of high rainfall or potential flooding, unit members were rostered on over a 24-hr period to check the gauge at Chifley Drv.
- With predicted large scale weather events, the UDO would chart a phantom roster, organising for additional crews to be on standby
- The Unit has a loudhailer for communicating (outside, to groups etc.) if power and phone lines are out
- The Unit had keen cyclists and worked to form a bicycle squad who could quickly access off road areas in an emergency (e.g. Maribyrnong River trail etc.)
- The Unit ran the 2013 community doorknock campaign, visiting 430 residences and
 educating people about flood risk. NOTE: there has been consistent talk since 2013
 about running another doorknock campaign, but VICSES (as the responsible entity –
 not the local unit) has failed to do this.

Warnings and Communications

Who was warned? When? How?

As discussed earlier, there was time and opportunity on at least Tues 11, Wed 12 and Thurs 13 to communicate with residents and get them prepared. But it seems that VICSES relied on the community informing themselves and having the capability to take appropriate action. There has even been comments made on SES facebook pages blaming the residents that "they shouldn't live on a floodplain then" and "some people had chosen not to relocate in the early phases" (VICSES community meeting 15 Dec 2022).

Given the earlier stated demographics of the community, is the process of warnings appropriate and effective? Certainly not at 2.25-3am on Friday 14 October when people are asleep. Nor are they effective if the potentially affected people are not from a similar social demographic as the people who produce the information about emergencies for example, those predominantly white, literate, male, middle aged, middle class public service-type groups.

There is inconsistency in the types of warnings and how well they may or may not be understood by the community. The BoM terminology is 'Flood watch' and 'Flood warning (minor, moderate and major categories). The SES terminology is 'advice', 'watch and act' and

'emergency warning'. Leaving aside local social demographic factors outlined earlier, I suggest it cannot be reasonably assumed that an average reader will understand the definitions and differences of this terminology. The similarities of word usage in 'flood watch'(BoM) - 'watch and act' (SES) or 'flood warning' (BoM)-'emergency warning' (SES) do not assist the reader in understanding that they mean different things.

Published information: Local Flood Guides

Information published in VICSES Local Flood Guides has changed over time, for example: According to the 2012 VICSES Local Flood Guide (LFG) for Maribyrnong, "SES activates the Maribyrnong River Flood Response Plan" at 1.7m. The revised LFG of 1 August 2022 does not contain this information, that is, no indication of the SES triggers/actions are mentioned.

The 2022 LFG refers to the minor, moderate and major flood levels but gives no useful information that individuals can apply to their own situation. The 2022 guide lists no information against the minor level, while the 2012 guide listed both 'Floodwatch', and 'SES activates Flood response plan' and also lists 1.68m as 'the river breaks its banks. Minor flooding occurs and the Anglers Tavern becomes inundated'.

At the moderate level the 2022 LFG lists 'Maribyrnong River trail flooded at various locations. Burton Cres reserve impacted'. The 2012 version lists at 2.68m Raleigh Rd crossing first becomes covered by shallow water. The number of homes/businesses isolated by the floodwater increases to 63. Houses become inundated'.

At the major flood level, the 2022 guide lists 'Tram services along routes 57 and 82 and bus services 468 and 952 along Raleigh Rd likely to be impacted', where the 2012 guide had listed 'flood levels above 3.8m result in major increases in the number of houses affected. Dynon Rd, Farnsworth Ave and Smithfield Rd all become inundated at 3.78m'.

In other words, the printed information tells me this: in 2012 I may have had a clear indication that many houses would be flooded. In 2022 I have an indication that the river trail may be a bit wet and the public transport would be affected.

The 2012 guide lists predicted heights and their effects on the local community (e.g. "At 2.68m Raleigh Rd crossing first becomes covered by shallow water..."). The 2022 flood guide

instead gives examples of past floods (e.g. 3.83m, 15 September 1993, Anglers Tavern lounge and bistro area under nearly two metres of water...").

So instead of giving a prediction of what might occur at certain heights which people can personally factor into their processing of current information, the revised LFG lists historic examples; the assumption being, one supposes, that residents can translate that information to their own current circumstances.

Local Knowledge

In all after-disaster reviews, royal commissions, enquiries etc, a consistent theme is understanding and incorporating local knowledge. One way this occurs is through having Municipal Emergency Management Planning Committees (MEMPCs) with a strong local membership, including community representation.

This has been the case at the Maribyrnong council. Local representation from the VICSES Footscray Unit has been consistent for more than 10 years, contributing to emergency planning, informing on Unit capability and activities, and participating in exercises. This cannot be said for VICSES staff representation. Although there has mostly been a VICSES staff member of the MEMPC, during the same period that a volunteer SES member attended almost without exception, there has been at least 10 different SES staff members who have attended (some of whom were just sitting in until an SES staff position was filled), and in some meetings SES staff have been absent. As there has always been a high turnover of SES staff, it cannot be assumed that corporate knowledge has been passed down or among those 10+ staffers. They also do not live in the area so may have a limited understanding of local conditions. This may have been a factor in the lack of foresight leading up to the October 2022 flood.