

Local Flood Guide Enhancement – Milestone 1 Report

Prepared for VICSES
October 2023



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About the research



Background

Victoria State Emergency Service (VICSES) provides emergency assistance to minimise the impact of emergencies and strengthen the community's capacity to plan, respond and recover, when emergencies occur.

Local Flood Guides (LFGs) are publicly available documents, developed by VICSES. They aim to:

- Increase understanding of flood risk and flood warnings; and
- Raise awareness of how to prepare for a flood event and increase intention to prepare for floods in the future.

There are over 140 LFGs in circulation and more in development. LFGs serve as an essential community engagement tool.

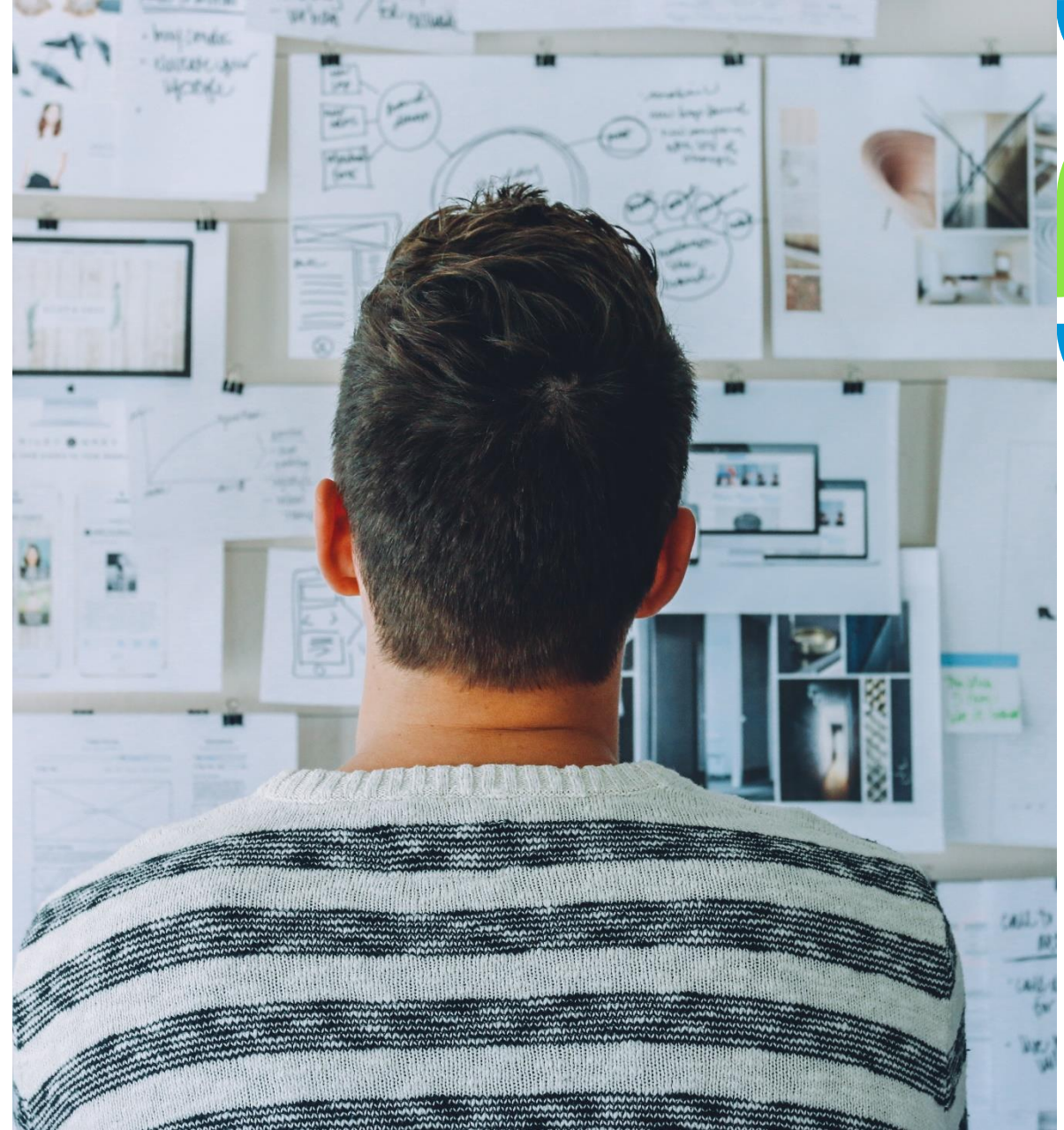
Recognising the importance of addressing community feedback, it was determined that a thorough review of the LFGs was necessary to inform work to enhance their accessibility, comprehensibility and positive impact on community resilience.

Research objectives

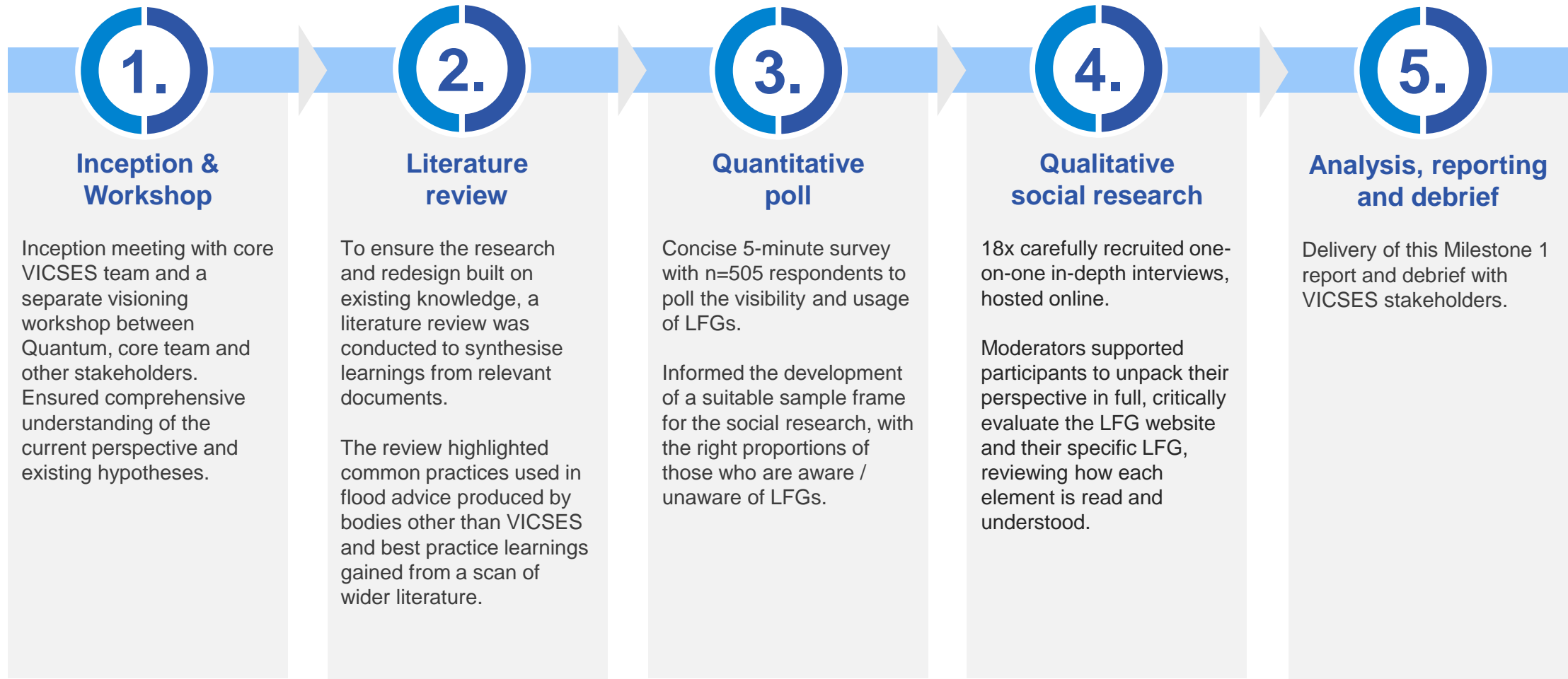
This research sampled Victorian people who resided in areas covered by Local Flood Guides to undertake a community review of the Local Flood Guides and recommend enhancements to inform a redesign.

The specific objectives were to:

1. Understand of the existing awareness and engagement with local flood advice, and with Local Flood Guides specifically.
2. Learn how to increase usage and optimise the effectiveness of Local Flood Guides in achieving their objectives.



Overview of Milestone 1



Poll methodology



Online survey with final sample size of n=505
All respondents lived in an area covered by an LFG



Fieldwork was mid-September 2023



5-minute survey



The survey was representative of the population in the area covered by LFGs by age, gender and location.

The project was carried out in line with the Market Research International Standard, AS ISO 20252.

Technical information:

- The maximum margin of error (at the 95% confidence interval) for the total sample size is +/- 4%. In other words, if the survey returns a result that '5% agree with X', we can be suitably confident that the true proportion within the whole population lies between 46% and 54%. This is a very high degree of reliability for these purposes.
- Where significance testing has been shown, results are significant at the 95% confidence interval.

Social research methodology



18x people who lived in an area covered by an LFG



Fieldwork was late-September 2023



Up to 75 minutes



Participants received a \$120 incentive

Sample information:

The final sample suitably represented the communities within the areas covered by the LFGs. This included people:

- Of different ages, genders, regional / metro status, house owner/renter status.
- Who spoke a language other than English at home.
- Had a disability.
- Identified as Aboriginal and/or Torres Strait Islander.
- With representative levels of awareness and usage of local flood guides, informed by the poll outcomes.

Local Flood Guide coverage in Milestone 1 social research



In total, 15 LFG areas were represented in Milestone 1's social research. Participants reviewed the LFG that covered their suburb during the research interview.

LFGs reviewed:

- Benalla (**Highly impacted in 2022 floods**)
- Bendigo, White Hills, Long Gully
- Echuca (**Highly impacted in 2022 floods**)
- Frankston and Seaford
- Ballarat East
- Golden Square and Kangaroo Flat
- Lara
- Maribyrnong Township (**Highly impacted in 2022 floods**)
- Maroondah (**Highly impacted in 2022 floods**)
- Melton West
- Rochester (**Highly impacted in 2022 floods**)
- Rosanna and Macleod
- Rosebud and McCrae
- Warragul
- Whitehorse



Latent perceptions of flood risk

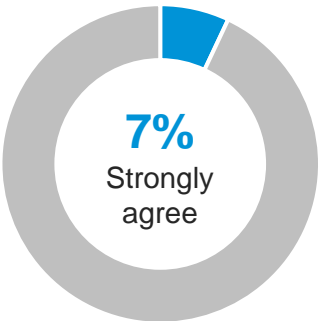
Victorians separate the flooding which happens on the news from the flood risk which is present for them

Victorians are cognisant that devastating flood events happen in Victoria. There is high awareness that:

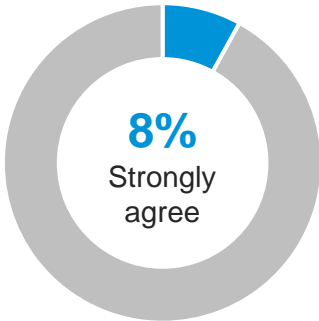
- Parts of Victoria have recently experienced some of the most significant flooding on record.
- Flooding can cause widespread damage and even loss of life.
- Climate change may lead to future flooding events which are bigger and less predictable.

However, Victorians tend to think the flood risk in their own local area is significantly less pronounced.

- If thought of at all, it is linked to minor logistical disruptions or limited loss among a minority of properties in the lowest lying areas.
- Victorians tend to think their own property would escape harm.



I worry that my house could flood

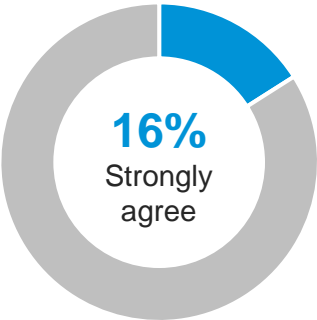


I feel prepared for a flood if one were to happen

For most Victorians, flood risk is not a top-of-mind concern. There is no widespread sense of urgency to improve preparedness.

Q23 - To what extent do you agree or disagree with the following statements?

Most Victorians have not experienced flood damage first-hand; there is a latent sense of security when it comes to flood risk



I'm aware of the risk and potential impact of flooding in my area

We've lived in Lara for 4 years. There is often water flooding over the main roads, but our house has never been affected.
Lara resident

Few Victorians believe they have personally experienced flood-related harm first-hand.

- The absence of recent flooding from their local area, or flooding which directly impacted their own property, may falsely increase Victorians' sense of security.

With no lived experience to go off, Victorians tend not to be well informed of the risks and potential impact of flooding. Rather, they work off a set of assumptions about floods and flood advice.

- Floods are believed to have long lead-times, with climate and weather forecasting, monitoring in the upper-catchment, and several days of unusually heavy rainfall, providing a period of forewarning preceding any flooding event.
- The prevalence of emergency management organisations provides a sense of security that Victorians will be protected from the worst effects of flooding. Victorians may not fear loss of life etc., believing emergency services will keep them safe.

In effect: Victorians believe that information, advice, and to some extent support, will be available at short notice. This further limits appetite for proactive information seeking.

Q23 - To what extent do you agree or disagree with the following statements?



Engagement with flood advice

Victorians tend to have only partial awareness of flood warning systems

There is a general assumption that, preceded by high rainfall, flood advice will be available via community, friends, traditional media, social media, VicEmergency, BOM, organisations like VICSES on-the-ground, etc.

- In general, Victorians do not monitor any one channel for flood advice. Rather, they expect that they would hear warnings if needed through one or more channels in the lead-up to a flood.

Victorians believe that basic flood advice is generally common sense, including:

- Do not attempt to drive / wade through storm water.
- If a flood emergency warning is in place, avoid rivers / creeks / drains and follow official advice of where else is out-of-bounds.

I vaguely know about some advice around flooding... I feel like most of it is just common sense, like don't drive through water of unknown depth and all that.

Frankston resident

There is a status quo whereby it is common for Victorians to be at ease with having minimal information or preparedness for flood risk.

While VICSES are well-respected as first responders, they are not always front of mind when seeking information on flood risk

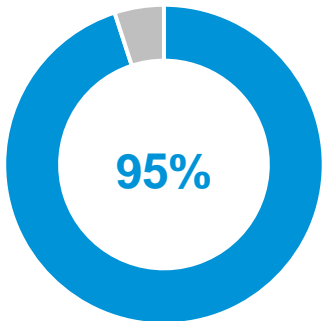
Victorians have high awareness of VICSES as first responders:

- VICSES are seen as well-respected, helpful and trusted in an emergency.
- Regional Victorians in particular have regular contact with VICSES and high awareness of their broad range of activities.

However, Victorians may not think to access VICSES resources for advice outside an emergency.

VicEmergency and BOM are the principal sources of flood information, and focus on forewarning rather than preparation or management.

In general, as Victorians’ own property tends not to be affected, their main concern is logistical disruption. Beyond these two apps they may also use news coverage (TV, radio and social media), to stay informed and out of harm’s way.



I have heard of VICSES



Yeah I know the SES. They have a big community presence in Shepperton and Bendigo. My neighbour used to volunteer.

Long Gully resident

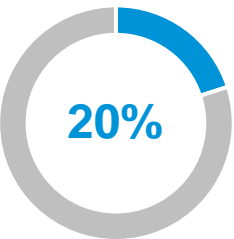
I have the VicEmergency app and get notification about floods through there.

Frankston resident

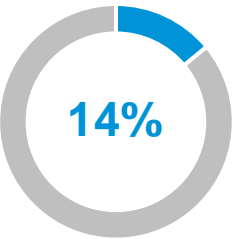
To encourage Victorians to access Local Flood Guides prior to a declared incident, there is a need to communicate their value for preparedness.

Q10 - Have you heard of the Victoria State Emergency Service (VICSES)?

Around one in five are aware that VICSES publish Local Flood Guides with area-specific information



Aware VICSES publish a Local Flood Guide for my area



Have accessed a Local Flood Guide before

Given that, in general, Victorians perceive their personal flood risk is low, and have only partial awareness of flood warning systems, it is logical that four out of five are not aware of Local Flood Guides.

Those who are aware of the guides often confuse them with collateral produced by their local council – e.g. articles in monthly newsletter, updates on post-flood management.

Of those who have accessed their Local Flood Guide, it was most often through the VICSES website, VICSES social media, or through a Google search.

Most often, they were compelled to access it because they wanted to: ‘Understand how they can best prepare for a potential flood’; ‘Increase their awareness of their local flood risk’; and / or ‘Get information during a flood / when a flood was imminent’.

I wasn't aware they did educational resources. I see them as a rescue service, like the ambulance.

Rosanna resident

I Google searched something like ‘McCrae flood risk’, and it confirmed our thinking that we needed to prepare.

McCrae resident

Q11 – Were you aware that VICSES publishes a Local Flood Guide for your area?
Q12 – Which of the following best describes your engagement with the Victoria State Emergency Service (VICSES) Local Flood Guide, for your area? (Re-based to show proportion of total sample)
Q13 – What prompted you to access your Local Flood Guide?
Q14 – Where did you access your Local Flood Guide?

In general, Victorians anticipate that resources provided by VICSES will pertain to emergency response

Once made aware of the concept of Local Flood Guides, Victorians anticipate they will be concise documents that include information required in an emergency (rather than day-to-day preparedness).

They expect the guide will be similar to bushfire advice:

- What are my risks?
- What do I need to do? When should I leave in a flood? Where are the safe spaces?
- Who do I need to contact in the case of an emergency?

Victorians distinctly assume that published flood guides would be most relevant to those at high-risk and/or actively responding to an incident.

By extension, as they self-identify as not at such immediate risk, they misjudge that published information may only be of passing interest to them.

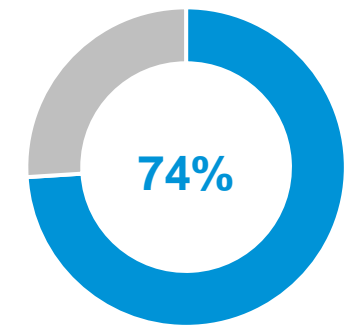
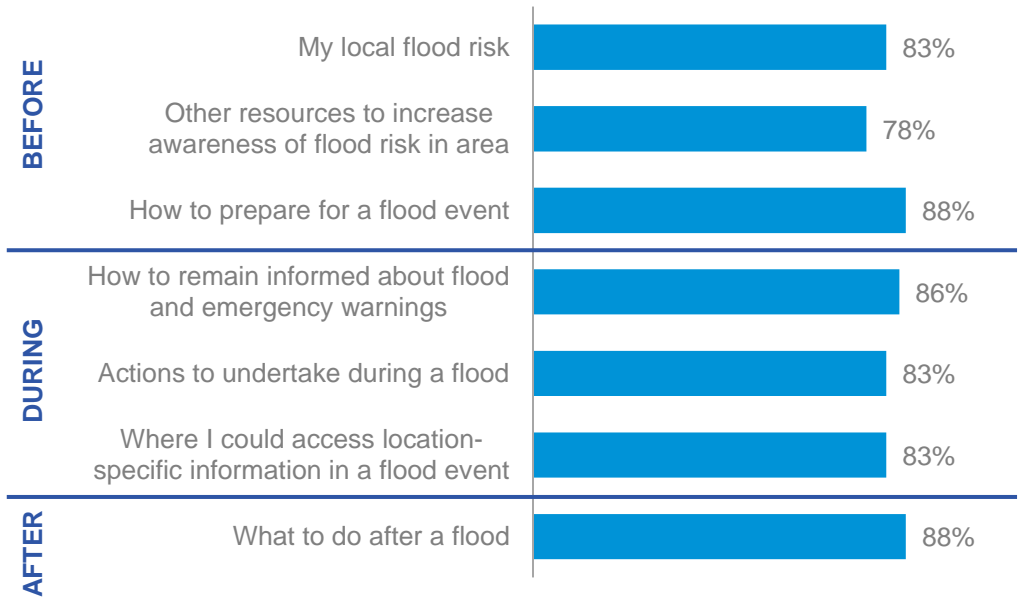
I would expect a guide would tell me how much risk my house is at if there was a flood, and the steps to protect my house and myself.

Baywater North resident

There is a need for Local Flood Guides to clearly state their intent upfront, ensuring that those who access them understand they are about more than responding in an emergency.

When they are accessed, current Local Flood Guides increase awareness of risk, warnings, preparedness and intention to act

Of the 14% (n=65) of Victorians who have accessed an LFG in the past, many report the guides increased their awareness of:



The LFG resulted in me undertaking emergency preparedness action

It's good to read. I'm a blank slate, so any information is good for me.

Rosanna resident

It gives me first-hand information so now I know more about my local area and action plans if we were to flood.

Heathmont resident

Victorians who engage with Local Flood Guides self-report that the guides are broadly achieving their communication objectives.

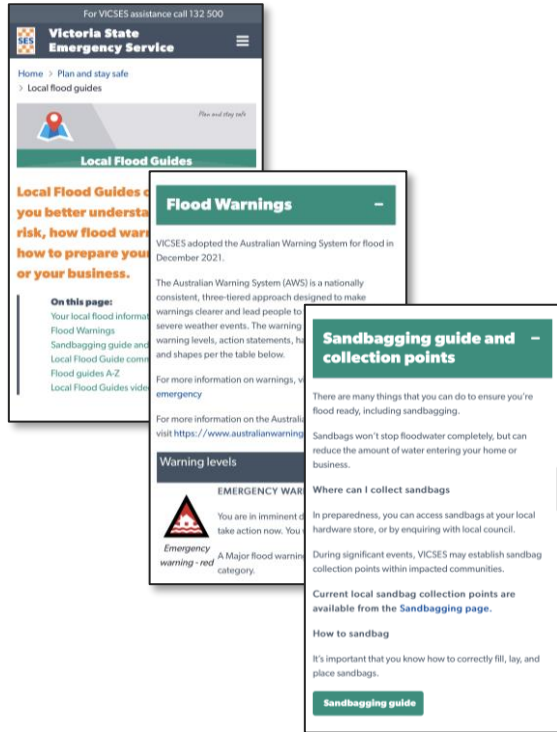
Q15 / Q16 – To what extent do you agree or disagree that the Local Flood Guide increased your awareness of / provided you with... [Asked to those who have accessed a LFG in the past (n=65)]



Attitudes toward LFGs

Local Flood Guide homepage

In general, Victorians are unsurprised by what they find on the Local Flood Guide homepage



The content and tone is as expected, particularly that it appears to pertain to high-risk situations.

Highlights relating to emergency situations, or those at immediate high-risk, lead Victorians to infer that this information is **primarily relevant in the event of an elevated flood risk situation**.

- Descriptions of ‘evacuations’, ‘sandbagging’ etc. pertain to acute need in an emergency situation.
- Descriptions of ‘create an emergency plan’, ‘when to call VICSES’, etc. pertain to those who are in high-risk settings.

‘Know your hazards’ and ‘Plan and stay safe’ feel more relevant, but Victorians tend to believe much of the information will be common-sense.

- Visitors gravitate towards ‘Quick links’ as they assume these are important pages.

There's lots of info here. It's hard to identify what is relevant because I'm not in a crisis.

Benalla resident

Confirming pre-conceptions that the guides primarily relate to high-risk situations encourages visitors to mentally switch off, as they assume they are not high-risk and therefore feel the information is of only passing interest to them.

There is a need to clearly set expectations of the LFGs (which includes awareness / preparedness) upfront.

The structure of the page prompts visitors to jump around rather than read in a logical and complete way

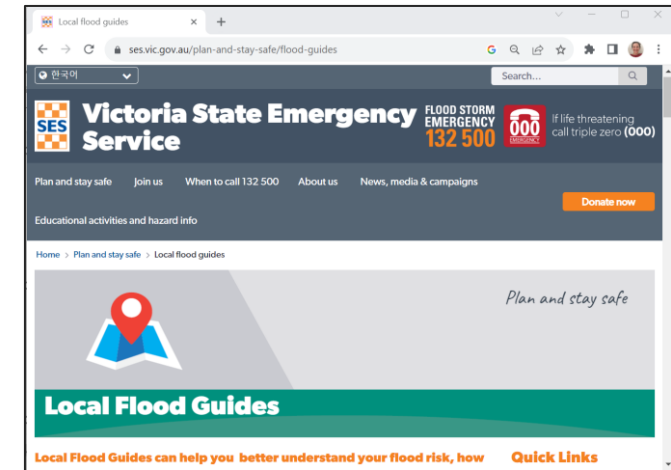
While the page is titled 'Local Flood Guides', it is not immediately obvious where to get the local information.

- It's not apparent that local flood guides are accessed by entering a postcode. As all the individually relevant information lies behind this link, engagement falters when visitors do not notice it.
 - Note: As the postcode search bar isn't visible when visitors first navigate to the page, some mistake the top-right search bar for LFG search location.
 - Having located the correct search bar, 3 of the 18 participants found that their suburb and postcode were not recognised. To navigate beyond this point, they needed to type in their council. For those less committed, this barrier was impassable.

Information on this page is otherwise too cluttered to be read in full.

- The conflation of advice during emergencies, planning advice for those at high risk, planning advice for all others, and general education on the warning system is overwhelming.
- Visitors skim through the high quantity of information to find something relevant to them.
- Placement of the LFG video at the base of the page, after the council list, means it is typically not seen.

There is a need to simplify and structure this information so that key points are landed. There is also a need to put the postcode entry front and centre.



This is a landing page, but I'm not seeing what I'm looking for – local flood guides.

McCrae resident

Municipality landing page

Municipality-specific information is often too long-winded to capture interest and content is out-of-step with visitors' needs



Info is very general, map isn't telling me anything, I don't want a history lesson.

Maribyrnong resident

While each municipality page is unique, the Flood History section is generally quite lengthy, providing information as far back as the 19th Century.

- Lengthy content in the municipality flood history section pushes individual LFGs further down the page. This acts as an inhibitor to visitors clicking through to their own LFG as visitors may believe the municipality page is the intended LFG information and may not see their own.
- When flood history dates too far back (e.g. to the 19th Century), it is seen as irrelevant. Visitors do not infer a meaningful connection. This dilutes / distracts from the more relevant information.

In addition, the sense of urgency in this section is out-of-step with those visiting for general advice.

For example, “the lead time to respond to a storm and flash flooding events may be limited”, whilst technically accurate for some areas, doesn't feel relatable from the point-of-view of most Victorians. As such, it confirms pre-conception that advice is for those at high-risk / in an emergency, and as such not directly relevant.

Inclusion of a map is highly engaging and valuable to comprehension; however, there is room to enhance clarity

The map showing the municipality boundary is a valued cue to illustrate that visitors are on the correct page, and that the information pertains to their local area.

However, the current maps are limited in several ways:

- There are two maps typically shown in this section – a council map showing ‘wards’ and a flood perimeter map. Each of these have issues:
 - Many Victorians do not know which ward they are in and rely on knowledge of the council geography (which isn’t always common) to locate their own homes. As the LFGs themselves aren’t divided by ward, inclusion of this term is unnecessarily confusing.
 - Flood perimeter maps provide a black and white interpretation of risk. Victorians infer from the map that they’re ‘not at risk’ (as they lie outside the 1% boundary), and thus lose engagement. As explained fully in the next section, the technical language and map legend is beyond resident understanding and leads to confusion.
- Low-resolution map images mean that even when visitors click-to-enlarge, they face a blurred image.
- Once a map is enlarged, the only way to return to the municipality page is to close the tab or ‘click back’ which does not return you to the point on the page where you clicked into the map. This is confusing for those who are less committed to finding information and/or not tech savvy.



This is quite blurry. I've got my glasses on and even then I'm still struggling to read road names.

Melton West resident

Local Flood Guide documents

The photo on the title page is impactful. However, the page overall allows latent assumptions to continue



A photo of local storm water is a sobering reminder that flood risk is real, and that the information is important. This is a powerful inclusion and should be retained.

Some images, for example in the McCrae & Rosebud, Whitehorse and Warragul LFGs, look like surface-level flooding and, as a result, do not deliver such a sobering reminder. However, as they're locally recognisable, they still draw interest, attention and set the tone that the information is relevant.

Absence of navigation information / table of contents means visitors do not know what the document is intended for. This means the latent assumption remains that it is principally relevant to those in high-risk settings, and those in an emergency.

This significantly reduces engagement, especially because readers then often skip the general location introduction and jump straight to mapping, which shows the vast majority of people outside the 1% Annual Chance Flood Extent area. Victorians infer this to mean they are not at risk and do not need to prepare in advance. Hence this reinforces that they have no need for the document.

Hits home when you see streets that you recognise, seeing an image of them flooded.

Warragul resident

Victorians are quick to skip over the text in the general location section as ‘common knowledge’

In most LFGs, this section contains several detailed paragraphs and then a map. Victorians are quick to skip over the text and focus on the map.

- Jumping straight to the map, visitors often do not bother returning to read the full text in this section. At a glance, Victorians assume this section is an introduction about the town / suburb, rather than the flood-related information.

After reading the text, Victorians often deem it to be ‘common knowledge’ and too word-heavy.

- Victorians conclude this section includes information they already know and is therefore not worth their close attention. It is seen as detail-heavy and often not particularly useful. This section is more likely to be read through when it incorporates dot points to break up the text and is no more than two paragraphs.
- In addition, this section uses terms which are beyond the average Victorian, further encouraging them to disengage – e.g., watercourse, floodplain, explanation of 1% flood event.
- Reference to Indigenous names is needlessly word-heavy and distracting.

Ballarat East

This guide covers the areas of Eureka, Ballarat East and Canadian. The area is growing with new houses being built and development of industry. The Canadian Creek system includes Canadian Creek itself as well as a number of smaller creeks which feed into Canadian Creek.

Canadian Creek is the major waterway in the area. It flows from Mt Helen (in the south) to the

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Rosebud

Rosebud, Rosebud West, McCrae & Boneo are located approximately 60km (straight line distance) south of Melbourne's Central Business District. Both suburbs are primarily rural area with established residential zones toward the coast.

The town of Rosebud is wedged between the lower slopes of Arthur Seat, the shores of Port Phillip Bay and the plains of Boneo. Rosebud is the second largest town on the Mornington Peninsula, and a very popular tourist destination containing multiple lookout points, gardens as well as cafes and restaurants.

Waterfall Creek & Murray Anderson Creek are the prominent watercourses in the area, flowing from the inland hills around Arthurs Seat.

The map below shows the impact of a 1% flood in the McCrae and Rosebud area. A 1% flood means there is

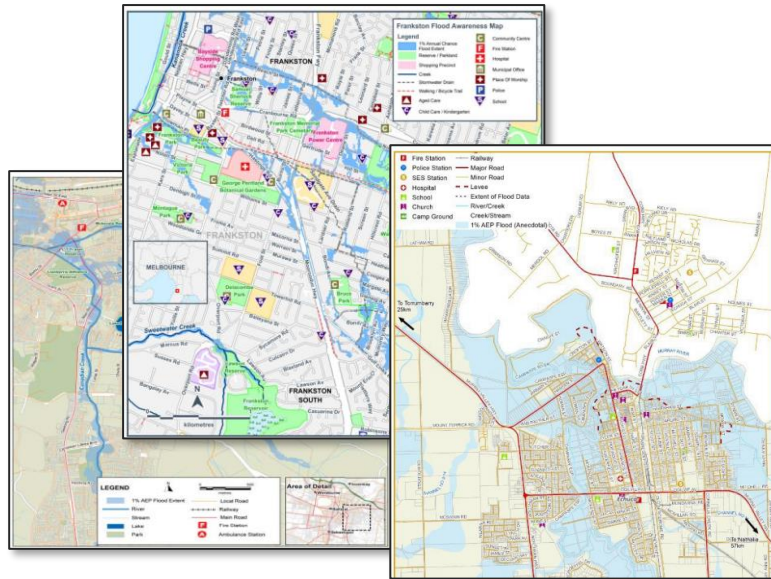
A lot of information, a lot of having to read, nothing super useful.

Forest Hill resident

I'm generally in favour of such things, but can't see any need for me to read here what the Indigenous name of the Campaspe is. I find it time wasting.

Rochester resident

Engagement with maps is high, however they can be confusing to navigate



The map doesn't make sense to me. I can't find my house. It looks a lot different than Google Maps I'm used to.

Maribyrnong resident

For most Victorians, this is the first time in the LFG that their interest is truly sparked.

- The visual draws the eye and Victorians recognise the location as relevant to them. They quickly move on to try and locate their home on the map. For some, this is a simple task. For others, navigating the busy map, poor image quality and lack of ability to zoom, makes this a challenge. When they look to the legend for guidance, they feel lost.
- Victorians suggest having a zoom function similar to Google maps, and improving image quality, allowing visitors to easily see major road names and understand the legend.

The technical language and presentation of information assumes knowledge and adds unnecessary confusion.

- The term '1% annual chance' (or similar) is jargon for most Victorians. They infer from the map that they're 'not at risk' if they lie outside the 1% boundary, and then disengage from the rest of the document, deeming it not relevant. This type of interpretation reinforces Victorians' sense of security and lack of preparedness.
- In addition, the legend uses several shades of blue to communicate different things – 1% annual chance of flood extent, waterbody and waterway. This too adds confusion.

The sub-title ‘Are you at risk?’ draws focussed attention, however Victorians are quickly overwhelmed with information

Indication of risk is considered vital among Victorians. However, the presentation of information here is overwhelming.

- Dot points, call out boxes and a table are useful ways to break up the text. However, Victorians are still overwhelmed by the detail-heavy text here.
- However, the word heaviness, lack of variation in visuals means the page generally lacks interest and intrigue, thus many Victorians scroll past.
- Some LFGs include a table of areas that are at risk of flooding. While these are well-received if the list is short, Victorians point out that longer lists are hard to consume. For example, the Rosebud & McCrae LFG (shown bottom right) includes 56 streets that are not in alphabetical order.
 - Note, similar to the map, if Victorians are not able to see themselves on the roads listed in this section, they dismiss the document as not of direct relevance to them.
- For some, this section left unanswered questions – e.g., Is there a time of year that floods are more likely? What are the signs that a river will flood? Where will road closures info be available in an emergency?

Are you at risk of flood?

With three main rivers either bordering or near the township, Echuca and its surrounding areas are vulnerable to cross country overflows of water because of the flat nature of the local countryside.

- There have been more than 16 significant floods since 1867 in the Campaspe Shire, caused by overflows from the Campaspe, Murray and Goulburn rivers.
- Flooding can occur on one river by a combination of all three rivers. Historically the worst floods are...
- Up to 300 properties in East Echuca to the West of the Campaspe are at greater risk of flooding.
- Areas of Echuca to the West of the Campaspe are susceptible to flooding from the Campaspe River.

Some of the town's levees were constructed for protection to the town's central business district.

However, no levee is flood proof and protection is not guaranteed.

If you live or work close to a creek, river or low-lying area you may be at risk from floods. Even if you are not directly affected, you may still have to detour around flooded areas.

Knowing what to do can save your life and help protect your property.

Community Infrastructure likely to be impacted during a 1% AEP (100yr ARI) Hoon Heath Aged Care Facility on Waterfall Gully Road.

Community Infrastructure likely to be impacted during a 20% AEP (5yr ARI) Rosebud Retirement Village on Hove Road and Rosebud Foreshore Caravan Park along Nepean Highway.

No major isolation risks exist for areas around Rosebud & McCrae. Some localised short-duration isolation may occur closer to the coast due to flash flooding. Rosebud & McCrae contains one retarding basin at Bayview Avenue.

No formal Pumping Stations, Levees or Weirs exist around Rosebud, Rosebud West & McCrae.

The following roads are subject to closure during flooding around Rosebud & McCrae within a 1% AEP (100yr ARI) event:

Armstrong Road	Highfield Road	Elizabeth Drive	Murray Anderson Road
Austin Avenue	Hillman Avenue	Elvers Road	Nixon Street
Banks Street	Mallawa Street	Fairway Grove	Parkedge Circuit
Barrie Street	May Vista Court	Fowder Court	Point Nepean Road
Bass Street	Rose Court	Goodgowne Street	Rosemore Road
Bayview Road	Sunhill Avenue	Greenhill Road	Shorewood Avenue
Beacon Rise	The Avenue	Herman Street	South Road
Bentley Road	Wattle Road	Hove Road	Spensley Street
Bowen Street	Baroda Street	Hove Road	St Andrews Avenue
Cairn Road	Bayview Road	Laurens Street	Sunningdale Road
Cinerama Crescent	Beth Court	Madura Street	Vickie Court
Eddystone Street	Burunda Road	Martin Street	Waterfall Gully Road
Flinders Street	Carrahoth Avenue	Mon-Pen Freeway	Wiggin Road
Gillbrand Street	Onessa Avenue	Mount View Road	Woodvale Grove
			Yarrhill Avenue

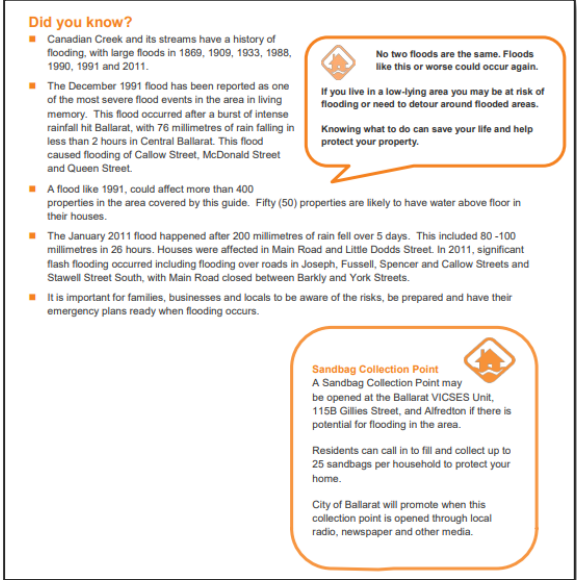
I can see the different areas that are at risk. By seeing that I'm not on these roads, I can effectively switch off and say 'that's not me'.

Melton West resident

This generally looks great, but I want to know when I should worry.

Long Gully resident

Although ‘Did you know?’ provides useful tips, Victorians are lost as to how to use historical information



Although the probability information is useful, I want to know the learnings and developments from the past.

Heathmont resident

‘Did you know?’ includes pieces of information that readers find useful:

- Call out box that notes ‘No two floods are the same’.
- Note on the risks of sanitation during a flood.
- Sandbag Collection Point.
 - Note: This is an example of information that Victorians are searching for when looking through a local flood guide – **practical, action-oriented steps that they personally can take to protect themselves**. Note, the majority of guides do not include this information.
 - Having this information in the bubble is attention-grabbing and pulls focus, Victorians are naturally drawn to it and suggest important information is displayed using this format.

Victorians struggle to understand how to use historical information in practice:

Use of the phrasing ‘did you know?’ implies the section will include trivial facts that are nice to have.

Whilst there is some understanding that historic information may give an indication of what a flood will look like in the future, it’s unclear how this information should be used in practice. This is confounded as Victorians assume (as the document says) that ‘no two floods are the same’, especially not if the flood being compared to is decades ago, since which time urban development, infrastructure and flood controls are completely new.

Flood gauge information requires foundational knowledge to be understood

Those with little existing knowledge of flood gauges, and especially Victorians with English as a second language, are left confused about what the flood gauge table is illustrating:

- Most are unsure how to make sense of the table and what to do with the information provided. Unless the reader knows what a flood gauge is and where it is located, the table becomes redundant and is seen as a repeat of flood history information.
 - Some gauge tables (e.g., Carisbrooke guide to right) also require the reader to be aware of the impact of past floods to be meaningful.
 - Terms such as ‘watercourse’, ‘pumping station, levees or weirs’, ‘essential infrastructure’, ‘1% AEP (100yr ARI)’ and ‘20% AEP’ are all beyond the average reader.
- Victorians with English as their second language struggle the most to decipher the flood gauges tables. The order of the table, whether it’s showing flood history or current risks, and the concept of a gauge itself is confusing, meaning nothing of value can be reliably inferred.

For those with existing knowledge of flood gauges, especially those in recently flood affected areas, this section is well received but still has gaps:

- Viewed as an effective resource to visually show how severe a flood is, what to expect at certain heights and what’s been done to help mitigate flood risk.
- As the gauges only indicate the height of the flood, Victorians are left wondering how much time they have before water rises to these heights.

Maribyrnong River flood levels at the Maribyrnong Gauge	
When the Bureau of Meteorology (BoM) issues Flood Warnings, they include a prediction of the flood height at the Chifley Drive gauge. While no two floods are the same, the following table can give you an indication of what you could expect at certain flood heights, including when your access may be cut off and when your property may be affected.	
Height (metres)	Impact/level
4.50m	8 September 1906 Highest recorded flooding affecting the
4.26m	22 September 1916 Second highest recorded flooding
4.20m	14 May 1974 Although the third highest flood level damage to residential, industrial and
3.83m	15 September 1993 Anglers Tavern lounge and bistro are residences flooded over floor level
2.9m	Major flood level Tram services along routes 57 & 82 are impacted.
2.83m	10 November 1954 Maribyrnong River breaks its banks and then 60 rescued by Army boats
2.3m	Moderate flood level Maribyrnong River Trail flooded at various
2.21m	14 January 2011 Flooding of the lower floor at the Ang Plantation Street and nearby adjoining and have reduced the risk of similar
1.7m	Minor flood level

Flood levels at Carisbrook	
While not monitored, nearby gauges and rainfall gauges can provide information about flooding and give you an indication of what you might experience during a flood. There are three relevant water height gauges for Carisbrook:	
Carisbrook Gauge on McCallum Creek – a water height gauge located four kilometres upstream. This gauge was washed away during the 2011 flood and has since been reinstated.	
Tullaroop Creek at Tullaroop Reservoir – a water height gauge located approximately seven kilometres south east of Carisbrook.	
Maryborough Gauge – a rainfall gauge in Maryborough, which can provide information about rainfall, levels in the area. The Maryborough Gauge recorded 215 millimetres of rain leading up to the 14 January 2011 flood event.	
The table below shows the impact for the Carisbrook Gauge on McCallum Creek	
Height (metres)	Impact/level
Unknown	January 2011 flood The January 2011 flood caused significant damage to the area, including washing away the Carisbrook gauge.
1% flood	Height shown on map on page 2. This is commonly referred to as a 1% flood, as there is a 1% chance of a flood this size occurring in any year. A flood event between September 2010 and January 2011.
5.46m	September 2010 flood event (estimated)
5.39m	May 1956 flood 5.07m
5.07m	February 1973
4.94m	Overland flooding from the local catchment begins to affect some residences and businesses.
4.47m	December 1999 flood
4.23m	Floodwater begins to rise and affect houses.
4.14m	September 1983 flood

I don't know what a flood gauge is... What do I do with that information? I'm not sure how to make sense of this.

Melton West resident

The ‘Stay informed’ section is viewed as crucial, with Victorians questioning why it isn’t higher up in the guide

Staying Informed and Further Information			
■ Current warnings (VicEmergency)	emergency.vic.gov.au	1800 226 226	
■ Bureau of Meteorology (BoM)	bom.gov.au/vic/warnings	1300 659 217	
■ VicRoads Traffic	traffic.vicroads.vic.gov.au		
■ Emergency Broadcasters	ABC 774AM SKY NEWS Television		Life-threatening Emergency 000
■ VICSES Social Media	facebook.com/vicses twitter.com/vicsesnews		
■ Preparing for Flood Emergencies	ses.vic.gov.au/plan-and-stay-safe		
■ Creating an Emergency Plan	redcross.org.au/prepare		
■ Melbourne Water	melbournewater.com.au	131 722	
■ Maribyrnong City Council	Maribyrnong.vic.gov.au	9688 0200	

Reviewed: 1 August 2022

As Victorians imagine themselves using the guide in a midst of an emergency, they perceive the information in this section as high priority:

Due to the lack of perceived flood risk, Victorians perceive that the principal time they'd consult the flood guide is when there is an imminent risk. Consequently, Victorians believe that important contacts should be at the top of the guide, as it is crucial information that needs to be quickly and easily accessible.

This information is also a reason to save the Local Flood Guide for quick access at a later date.

The layout means the information is difficult to read:

The layout – horizontally displaying organisation and details – adds unnecessary cognitive load, with Victorians having to run their finger across the screen to line up the details. A format that allows for quick interpretation is preferred.

This should be a lot further up. I'd save this this type of information or pin it on my fridge.

Forest Hill resident

‘Warnings’ section is easy to interpret, but there are missed opportunities to make it more directly relevant to Victorians

The warnings are easy to interpret and are a key piece of information that help Victorians understand the severity of a flood.

Whilst they are considered useful to have, the warnings leave Victorians with the lingering question of ‘where would I find these’:

- Victorians need to know where they would see these warnings in effect for them to truly make sense. More context needs to be supplied around the avenues in which the warnings would be communicated, such as the news, the VicEmergency app, etc.
- Note, due to the lack of perceived flood risk, Victorians have little motivation to spend much time on the ‘VICSES Warnings’ sub-section. They note it is good to know it is there and that they will know where to remind themselves to look if a flood is imminent.

Accompanying images can assist Victorians to understand what a flood at each of the warnings may look like in their area:

Different levels of flooding aren’t as meaningful to those who haven’t experienced a flood before. Supporting information e.g., a map showing different degrees of flooding, would enhance the user experience and allow Victorians to envision what the warning could mean for them.

VICSES Warnings

VICSES utilises the VicEmergency app, website and hotline to distribute flood warnings and emergency information in Victoria. Communities can also access this information through VICSES social media channels and emergency broadcasters.

VICSES warnings aim to provide you with information to help you, your family. The warning level is based on severity, conditions and impact on the community.

WARNING LEVELS

	EMERGENCY WARNING You are in imminent danger and need to take action. A Major flood warning usually fits into this category.
	WATCH AND ACT An emergency is developing nearby. You need to be prepared. A Moderate flood warning usually fits into this category.
	ADVICE An incident is occurring or has occurred in the area. A Minor flood warning or Flood Watch usually fits into this category.

EVACUATION

If an evacuation is recommended, you will be guided to do so in the following ways:

	PREPARE TO EVACUATE/ EVACUATE IMMEDIATELY An evacuation is recommended or procedures are in place.
--	--

ADDITIONAL MESSAGES

	COMMUNITY INFORMATION Can be used as a notification that an incident is occurring in the community, or to issue a newsletter containing emergency information.
	EMERGENCY ALERT During some emergencies, we may alert communities by sending an SMS to mobile phones or a voice call.

Bureau of Meteorology Warnings

Warnings are issued by the Bureau of Meteorology (BoM) to tell people about possible flooding.

A **Flood Watch** means there is a developing weather pattern that might cause floods in one or two days. This service covers the whole state.

A **Flood Warning** means flooding is about to happen or is already happening. There are minor, moderate and major flood warnings. This service is only available where flood warning systems are in place.

A Minor Flood Warning means floodwater can:	A Moderate Flood Warning means floodwater can:	A Major Flood Warning means floodwater can:
Spill over river banks and cover nearby low lying areas.	Spill over river banks and cover larger areas of land.	Cause widespread flooding.
Come up through drains in nearby streets.	Reach above floor levels in some houses and buildings.	Many houses and businesses are inundated above floor level.
Require the removal of stock in some cases.	Require evacuation in some areas.	Cause properties and whole areas to be isolated by water.
Cover riverside camping areas and affect some low-lying caravan parks.	Affect traffic routes.	Closes major roads and rail routes.
Cover minor roads paths, tracks and low level bridges.	Require the removal of stock in rural areas.	Require many evacuations.
Affect backyards and buildings below floor level.		Affect utility services (power, water, sewage etc).

Severe Thunderstorm Warnings

Thunderstorms are classified as severe when there is potential to cause significant localised damage through wind gusts, large hail, tornadoes or flash flooding. Severe Thunderstorm Warnings are issued to the community by BoM.

Severe Weather Warnings

These warnings are issued to the community by BoM when severe weather is expected that is not directly related to severe thunderstorms or bushfires. Examples of severe weather include damaging winds and flash flooding.

Flash Flooding

- Flash Flooding can occur quickly due to heavy rainfall. You may not receive an official warning.
- Stay informed- monitor weather warnings, forecasts and river levels at the [BoM website](#) and warnings through [VicEmergency](#).

Where would I find the Flood Warnings? It doesn't say and the guides aren't updated daily so I know it's not on here.

Maribyrnong resident

‘Your emergency plan’ is seen as useful, actionable advice that could be further emphasised and built upon



For me, this section includes so really important points that haven't been mentioned elsewhere – e.g. that I shouldn't wait until an official warning.

McCrae resident

This feels like an after-thought tacked on at the bottom of the page.

Forest Hill resident

Of those who consider themselves to have a risk of flooding, few have an emergency plan in place. Therefore, this section is seen to provide useful, actionable advice.

- In particular, the acknowledgement that residents may not always receive an official warning is novel and highly valuable. This is seen as crucial information that should be highlighted throughout the guide – emphasising that **Victorians should be autonomous and not wait for advice on how to act.**
- However, being at the bottom of the Warnings page (which is full of icons and visual stimulation), this section is easily missed.

For some, this section left unanswered questions.

Victorians wanted to know places of safety, travel routes when in an emergency, location of emergency services, and how to prepare their property to minimise damage (e.g., correctly sandbagging, rearranging furniture, etc.).

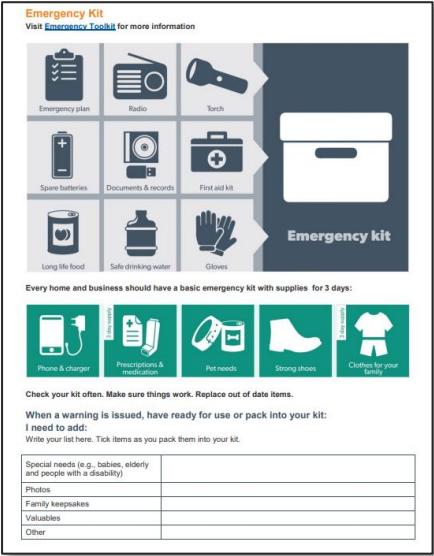
‘Emergency kit’ is seen as a highly useful call to action that should be highlighted earlier in the LFG

The toolkit is clear, easy to understand, universally relevant, practical, actionable advice. However, there is a lack of urgency due to placement in LFG:

- At first glance, readers find the toolkit useful and favourable to have in an emergency setting. The use of visuals is helpful and clear.
- However, Victorians reflect that the prioritisation of the kit should be higher in the guide. Despite being among the more relevant, engaging and influential sections, it is currently on page 8.
- This kit is the most likely of any information to generate intention to act as a result of reading the guide. To further instil a sense of urgency, the text could be more explicit that all Victorians in areas covered by the LFG should have an Emergency Kit organised.

There are minor accessibility concerns:

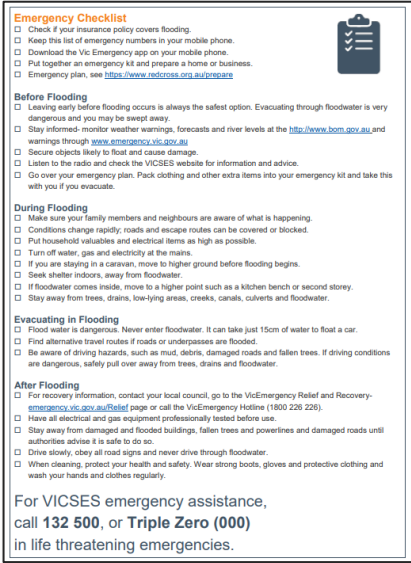
- Crucially, the text hyperlinked in this section – ‘Visit [Emergency Toolkit](#) for more information’ – leads to a Microsoft sign in page. This is a considerable barrier as some do not have a Microsoft account and others do not see it as a big enough priority and so would disengage.
- Victorians note that the term ‘special needs’ feels outdated and that it being included at the bottom of the page could be read as an afterthought. Instead, they suggest it should sit with other essentials.



It makes you think about what you could need. It's worth putting things away well before a flood could happen.

Heathmont resident

‘Emergency checklist’ is deemed highly relevant section that should also be provided earlier in the guide



Use of a checklist format is familiar and immediately comprehensible. Readers are drawn to read line by line and internalise the content.

- The checklist quickly conveys an extensive list of relevant things to think about when eliminating or controlling flood risk. Furthermore, this page is among the information most likely to make the LFG a document Victorians intend to refer back to again, particularly during times of flood.
- **Victorians reflect that such relevant, actionable advice should be prioritised within the guide. The current sequencing, which prioritises a generalised preamble, is not as engaging as this information.**

The checklist is well understood, however Victorians identify some apparent gaps:

- The checklist provides audiences with what to do but not exactly how to perform or where they can find resources. In particular, readers aren’t clear on where to look for the location of evacuation centres / places of safety / where to access sandbags. Others seek information on how to evacuate if they don’t have a car.

I like the checklist, it’s good to have but I wish there was links as how to acquire stuff.

Echuca resident

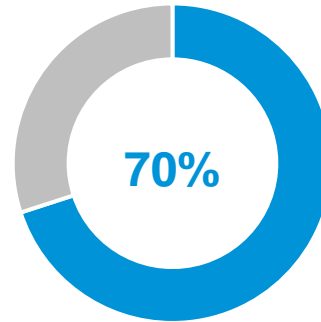
Local Flood Guide formats and distribution

Victorians see the value in having a printable guide

Making the guides printable has multiple advantages for Victorians:

- Victorians are intuitive that power / cell service may go out during a flood. Having the guide printed mediates any barriers to accessing them in an emergency.
- Some information, e.g. the checklist, benefits from being tactile (i.e. can 'tick it off').
- Being able to print it out means that they can display the important information (e.g. on their fridge) and help ensure the entire household is informed.

Note: Some Victorians express intent to only print the pages that they deem as important (typically the checklist and emergency contacts).



Of those that are likely to use the LFG in the future would be likely to print it out

I would print a household copy, and then the kids can read it and we can work as a team.

Long Gully resident

Q22 – If you were to use a Local Flood Guide in the future, how likely would you be to print it out? [Rebased to those who were either Somewhat or Very likely to use their LFG in the future (n=366)]



Victorians see value in providing the guides through additional channels, however VICSES must be cautious of version control

Victorians suggest Local Flood Guides should be distributed using multiple channels:

- On the **VicEmergency app**, so they're convenient to access in an emergency.
- On **social media**, to reach a wider range of people.
- **Letterbox drops** in high-risk areas.
- Continue to work with **local councils** to have copies on their website and having physical copies in council buildings, as this is where residents would go if proactively seeking flood advice.
- Providing physical copies to **schools**, as a way to educate children and get the LFG to parents.
- Advertising through **news channels** when there's a warning out.

Currently, when Victorians search online for a specific Local Flood Guide, there is a risk they will open an old version.

For example, searching for 'Lara Local Flood Guide' or 'Maribyrnong Local Flood Guide', the first results are an outdated LFG from the VICSES website¹ or the council website², respectively.

Letterbox drop has been effective for me in the past with community group sharing info about flooding.

Lara resident

The local council website is the first place I would look for this type of information.

Warragul resident

¹ <https://www.ses.vic.gov.au/documents/8655930/9320067/Lara+Local+Flood+Guide.pdf/5c397177-1078-e428-3905-41655f64053e?t=1619677905505>

² https://www.maribyrnong.vic.gov.au/files/assets/public/council-plans-reports-and-publications/emergency-management/cd-17-20032-maribyrnong_footscray_yarraville-web.pdf



Additional notes on those in recently flood affected areas

Those in recently flood affected areas are relatively better informed



I have seen lots of information from the local council, from Melbourne Water, this guide, all after the [2022] floods.

Maribyrnong resident

Those who had been affected by floods were more likely to have seen a LFG before, as well as plenty of other flood advice.

However, it is common that they only became aware of this flood advice *after* a major flood, and were not aware before.

The different pieces of advice – e.g. from VICSES, council, water company, searching online – are conflated and it is difficult for residents to distinguish the individual impact of LFGs specifically.

Reviewing the LFGs, flood affected communities are satisfied that they play the role they should in providing information.

Two key areas for improvement are commonly suggested:

1. Some found the most recent floods (i.e. 2022 floods) aren't included in the flood gauge information and noted this made the guide feel outdated and reduced credibility.
2. Information on how to prepare your property long term if you repeatedly experience flooding, e.g. consideration of inserting flood control channels.



Summary of recommendations

Summary of 4 key themes

Readers land on the VICSES site with the preconception that any resources will principally be for use in emergencies.

As resources are intended to be used before, during and after a flood, there is a need for a clearer 'mission statement' upfront (on the homepage and as an introduction to the LFG), as well as an indexing or contents page to support readers' expectation of the coverage and how they should use the document.

Readers who see they are not within the 1% boundary quickly infer they're not at risk, confirming their preconception that the LFG is not immediately relevant to them.

There is a need to better communicate what is intended by the 1% boundary.

In addition, there is a need to clarify that the LFG is useful to those who do not fall within the boundary, as well as what information is relevant to them.

Sequencing of the LFG means the document opens with generalised preamble. The LFG is also lengthy and dense. Combined, this incites 'skim reading' behaviour and reduces meaningful take-aways.

There is a need to re-sequence the document so that the most valued, practical advice is upfront.

There is a need for more design-thinking around the content and use of visuals in the document.

There are a number of highlighted opportunities to simplify the language.

Readers are principally interested in practical take-aways which increase their sense of control before, during or after a flood.

Use of an 'emergency checklist' format is highly effective. Likewise, 'emergency kit', 'emergency plan' and 'stay informed' sections all contain meaningful content. There is an opportunity to better engage Victorians by featuring these sections earlier in the document.

The mapping tool features highly practical, meaningful advice, but there are highlighted opportunities to improve the design.



Principles of content, prioritisation, language & tone and format & visuals can help guide the enhancement of future LFGs

Content

- **Less is more:** Long and unnecessary sections discourage Victorians from reading the complete webpage / document. Keep it bite-sized to allow for easy digestion.
- **Be clear who you're talking to:** Content needs to clearly identify who the document is relevant to.
- **Emphasise the “why”:** Identify early what readers will get out of engaging with the content.

Prioritisation of information

- **Don't make them work:** Include the most important information at the top of each webpage / LFG.

Language & Tone

- **Keep it simple:** Try to avoid overcomplicating advice. As the material is intended for a lay audience, the simpler the better. The current language largely achieves this, except for the inclusion of technical language.
- **Be bold and realistic:** The current tone is perceived as direct and to the point, which Victorians view as appropriate for a resource such as this.

Format & Visuals

- **Make it consistent:** All sections within the LFG should have consistent formatting – font size, bolding, colour, etc.
- **Make it pop:** Visuals like icons, graphics and colours engage readers. Not only are visuals more engaging, but they also enhance comprehension. They act as important aids for those with low English proficiency or people with disability.

Considerations for webpages

LFG Landing page

- **State explicitly who the content is intended for, when it is relevant, and what they should expect to get out of it.**
- **Remove the 'Plan and stay safe' banner and ensure the LFG search box is front and centre:**
 - E.g. "Find your local flood guide: enter your suburb / postcode"
 - Ensure search results show for all suburbs, postcodes and municipalities covered by an LFG.
 - If a visitor attempts to search for a suburb, postcode or municipality that doesn't have a corresponding guide, show an error message. E.g. "We haven't produced a Local Flood Guide for your area yet. Please see a list of other resources in our Quick Links section."
- **Reduce the total amount of information to something comprehensible at a glance. In particular, consider removing general information from this page and instead link them via the 'Quick links' section.**
 - Once general information is moved to different pages and are accessible via the 'Quick links', the 'On this page' links can be removed.

Municipality landing page

- **For each LFG drop-down: Prioritise information which is concise, practical, and actionable by those who are seeking advice. Otherwise, the direction should simply be to click-through to the Local Flood Guide itself.**
- **Improve map quality.**
 - Use suburb names in maps, rather than wards.
 - Change enlarging feature so visitors are able to return to where they opened the map on the municipality page, rather than closing the tab or 'clicking back' to top of the municipality page.
 - Consider whether it is necessary to show flood perimeter maps here or whether general map of council is possible. Currently, flood map encourages readers to disengage if they are outside the 1% flood area.
- **Remove Flood History section here, or move to below guides.**

Considerations for the LFG document

Cover page

- Retain opening photos which show obvious and severe flooding.
- Add indexing (i.e. table of contents of some kind).
 - To reinforce purpose, intended audience and what readers will gain.

General location information

- Shorten this information to a minimum and remove technical language.
- Consider alternative section title phrasing to make the “why” clear.
 - Existing phrasing implies that the information will be common knowledge.

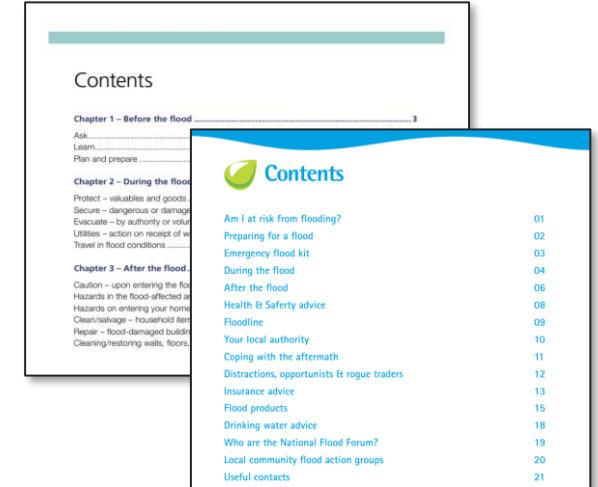
Map

- Create an interactive experience to allow Victorians the ability to zoom and explore.
- Consider showing different levels of risk with different colours.
- Work on legend to remove technical jargon and ensure multiple overlapping blues are used less confusingly.
 - Helping Victorians to better understand this map will provide clarity and confidence.

Table of Contents examples

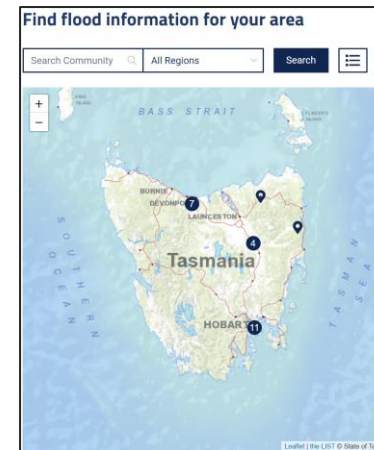
Australian Government. (2005). *What to do before, during & after a flood*

National Flood Forum. (2014). *Ready for flooding. Before, during and after.*



Contents	
Chapter 1 – Before the flood	
Ask.....	
Learn.....	
Plan and prepare.....	
Chapter 2 – During the flood	
Protect – valuables and goods	
Secure – dangerous or damaged	
Evacuate – by authority or voluntarily	
Utilities – action on receipt of a	
Travel in flood conditions	
Chapter 3 – After the flood	
Caution – upon entering the flood	
Hazards in the flood-affected area	
Hazards on entering your home	
Clean/salvage – household items	
Repair – flood-damaged buildings	
Cleaning/restoring walls, floors,	

Contents	
Am I at risk from flooding?	01
Preparing for a flood	02
Emergency flood kit	03
During the flood	04
After the flood	06
Health & Safety advice	08
Floodline	09
Your local authority	10
Coping with the aftermath	11
Distractions, opportunists & rogue traders	12
Insurance advice	13
Flood products	15
Drinking water advice	18
Who are the National Flood Forum?	19
Local community flood action groups	20
Useful contacts	21



Interactive map example

Tasmania State Emergency Service. (2023). *Community Protection Flood Guides.*

Considerations for the LFG document

Are you at risk?

- **Prioritise the most important information, break up text and add visuals / colour to heighten interest.**
- **Address information gaps.**

Did you know?

- **Consider alternative section title phrasing.**
- **Remove, or highlight the “why” of historical information.**

Flood gauge information / Flood history

- **Remove technical language and assumed knowledge.**
 - To increase accessibility, ‘Impact / Level’ can’t assume knowledge of past floods. Instead, consider using flooding of local landmarks as a reference point.
- **Explain the “why” of understanding information about past floods, and how the information should be used in practice.**
- **Add visuals to support understanding.**
 - E.g. images and infographics.

Using visuals / colour to break up text

Government of Western Australia, & Department of Fire and Emergency Services. (2022, September). *Flood Smart*.



Using visuals to support understanding

Government of Western Australia, & Department of Fire and Emergency Services. (n.d.). *During a flood*.

Considerations for the LFG document

Stay informed

- **Move section towards the top of the guide.**
 - This is a key piece of information that makes the document useful as a reference, and which Victorians feel they'll want in an emergency.
- **Enhance formatting.**
 - Horizontal layout of the information creates a cognitive load for readers. Consider organising information in a way that doesn't require readers to slide their finger across the screen to read details.

Warnings

- **Explain where warnings are displayed / hosted.**
- **Increase comprehension by including images or a map which correlate to minor / moderate / major flooding.**

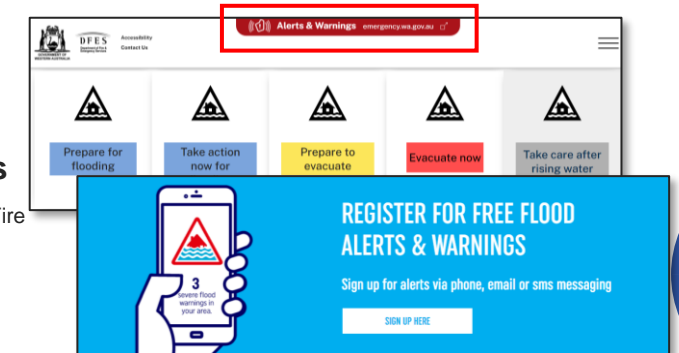
Your emergency plan

- **Update formatting to ensure important points stand out to readers.**
- **Address information gaps relating to evacuation routes, places of safety and how to prepare property.**



Formatting example

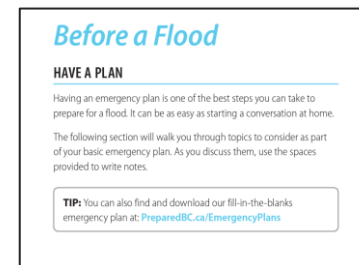
Government of Western Australia, & Department of Fire and Emergency Services. (2022, September). *Flood Smart*.



Identifying where to get warnings

Government of Western Australia, & Department of Fire and Emergency Services. (n.d.). *Prepare for a flood*.

Living with Water. (2023). *Why do I need to be flood aware?*



Formatting example

Prepared BC. (2023, May). *Flood Preparedness Guide*.

Considerations for the LFG document

Emergency kit

- **Move section towards the top of the guide.**
 - This is a key piece of information that makes the document useful as a reference, and which Victorians feel they'll want in an emergency.
- **Tell Victorians when to create a kit to instill a sense of urgency.**
- **'Visit Emergency Toolkit' must be made publicly available (without the need to log in).**
- **Update 'Special needs' wording and placement.**
 - If kept separate, the formatting of this table should be enhanced to be cohesive with the look and feel of the rest of the guide.

Emergency checklist

- **Move section towards the top of the guide.**
 - This is a key piece of information that makes the document useful as a reference, and which Victorians feel they'll want in an emergency.
- **Address information gaps.**
- **Consider including icons or visuals to increase comprehension.**



Using visuals to increase comprehension

Prepared BC. (2023, May). *Flood Preparedness Guide*.

South Australian State Emergency Service. (n.d.). *Be prepared for a flood*.



Appendices

1. Literature review key findings and guides reviewed

Literature review key findings

Common practices include:

- The flow of information tends to follow: Before, during, and after a flood event.
- Webpages and flood guides tend to begin with a succinct summary about flood events and the severity of them. This can be a string of facts or just emphasising the importance of flood preparedness.
- Webpages and flood guides include important phone numbers, such as the number to call when there's a flood event or flood-related emergencies and the countries emergency number (e.g. 000).
- Incorporating pictures, infographics and/or icons to break up information for the reader. It tends to be ensured that these are readable in black and white should the user print in greyscale.
- Bolding or enlarging key information to capture attention.
- Listing essential tips for readers, such as “5 key tips...”
- Incorporating checklists so that users can print and physically check items off, or just used to lay out information for a user to read over.
- For webpages, most have minimal information up-front and index information in accordions that open, or additional tabs.
- Flood guides are usually in PDF form and the information they include can be dependent on the target audience.
- Most include additional resources linked at the bottom of the page for further reading. Some webpages have a significant number of redirection and download links.

From literature:

- Individuals who have experienced a flood event in the past are more prepared and have greater anxiety around the flood risk in their area.
- Having the community involved in the development of emergency education resources increases engagement.
- Formatting a flood guide using ‘before a flood event’, ‘during a flood event’ and ‘after a flood event’ sections is the most efficient way to convey information.
- Common knowledge gaps include pet care, adequate preparation of medicines, and creating an effective family plan.
- Educational materials are most effective when developed in consultation with diverse communities.

Guides reviewed

ACT Government, & ACT Emergency Services Agency. (2019). *Floods*.
<https://esa.act.gov.au/be-emergency-ready/floods>

Australian Government. (2005). *What to do before, during & after a flood*.
http://www.bom.gov.au/water/floods/document/What_todo_floods.pdf

Government of Canada. (2023, March 16). *Get Flood Ready*.
<https://www.canada.ca/en/campaign/flood-ready.html>

Government of Western Australia, & Department of Fire and Emergency Services. (2022, September). *Flood Smart*. <https://publications.dfes.wa.gov.au/publications/flood-smart-brochure>

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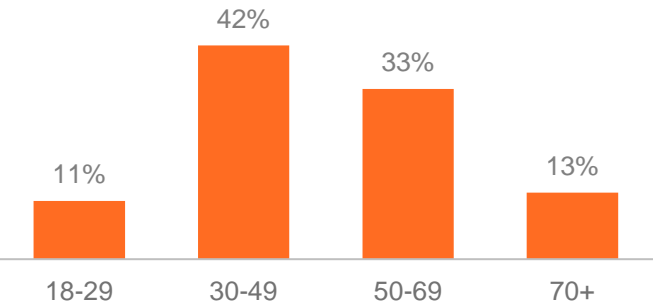
2. Additional poll results

Sample profile – Those living in an area covered by a Victorian LFG

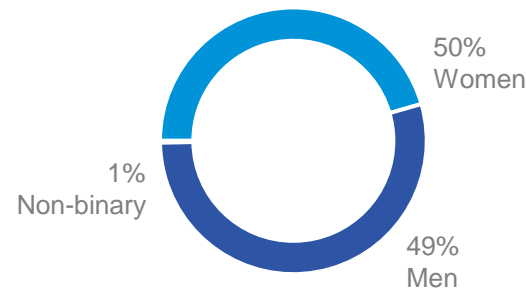
Demographics

All respondents (n=505)

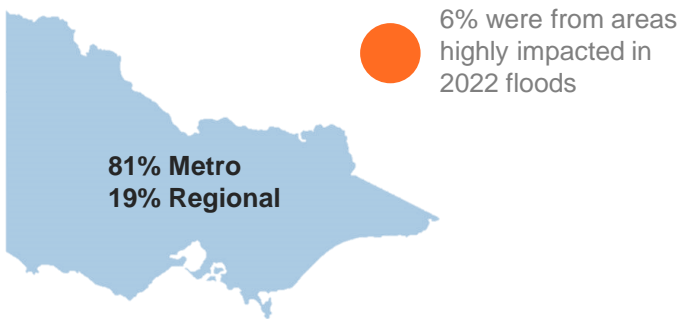
Age



Gender



Location



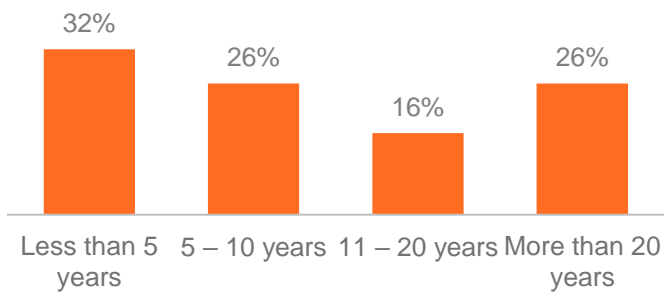
House ownership situation



Household structure

Living with partner and children or just children	40%
Living with partner only	28%
Living alone	23%
Living with parents, guardian or in shared accommodation	8%
Another situation	1%

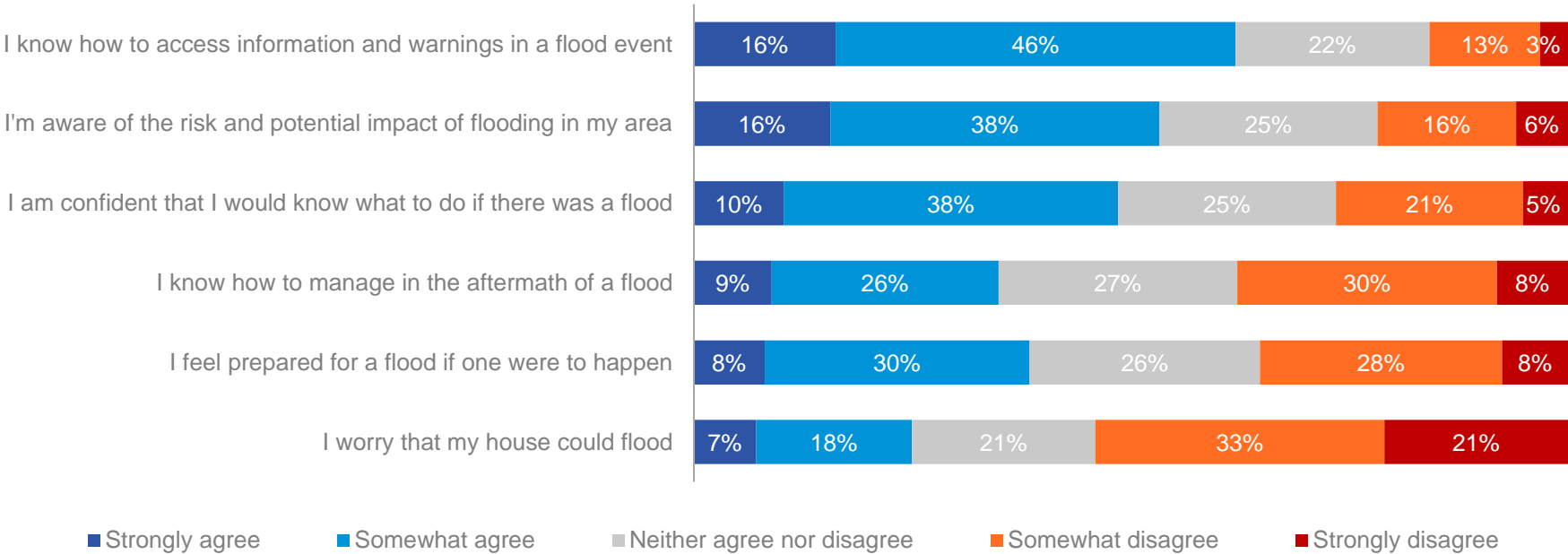
Time living in postcode



One in six (16%) strongly agree they know how to access information and warnings in a flood event

Attitudes / perceptions of local flood risk

All respondents (n=505)



- Those in areas highly impacted by 2022 floods are more likely to agree that they're aware of the risk and potential impact of flooding. Interestingly, this is the only significant difference for this cohort across the entire poll, all other responses are similar to those in unaffected areas.
- Men are more likely to agree they are aware of the risk and potential impact of flooding in their area, they are also more likely to feel prepared for a flood if one were to happen, to feel confident they would know what to do if there was a flood, and to say they know how to manage in the aftermath of a flood.

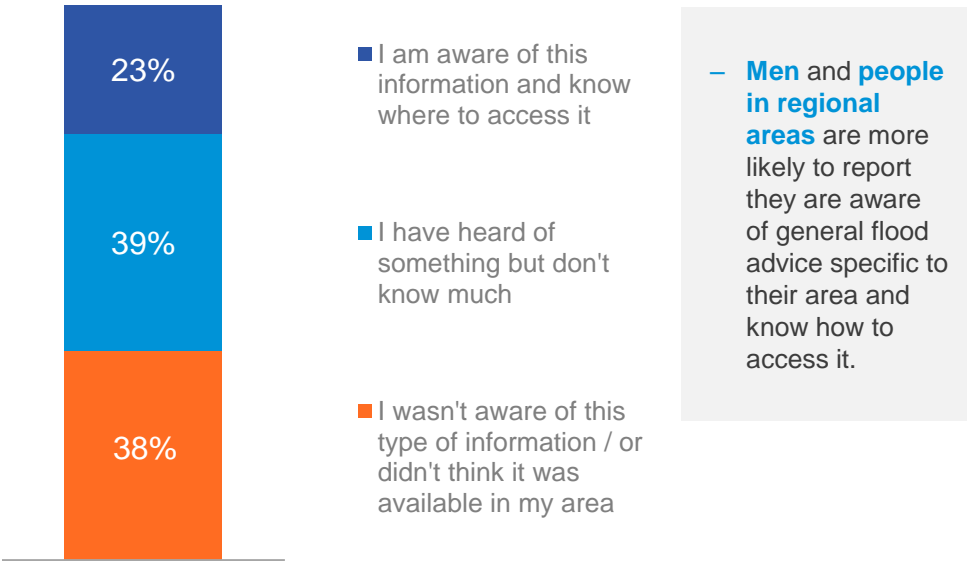
Q23 – To what extent do you agree or disagree with the following statements?

One in four (23%) know there is publicly available flood info specific to their local area and know where to find it

Awareness and engagement with flood advice specific to their area

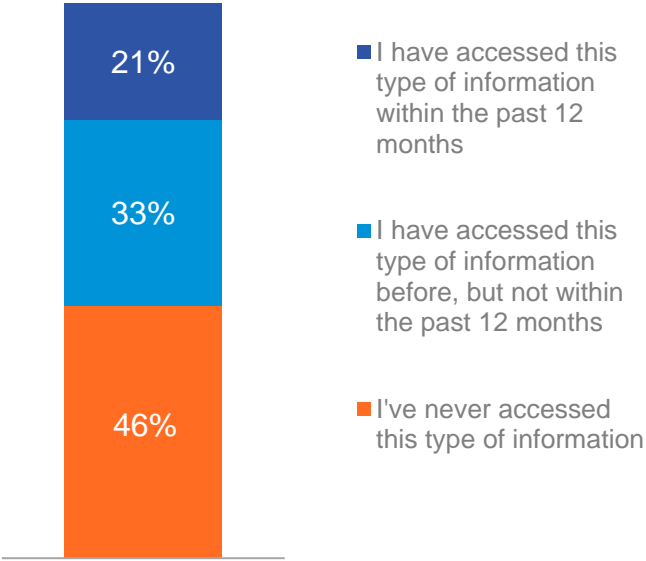
Q8 – All respondents (n=505); Q9 – Those who have at least heard of something but may not know where to find it (n=314)

Awareness



Q8 – To what extent are you aware of any publicly available flood information specific to your local area?

Engagement

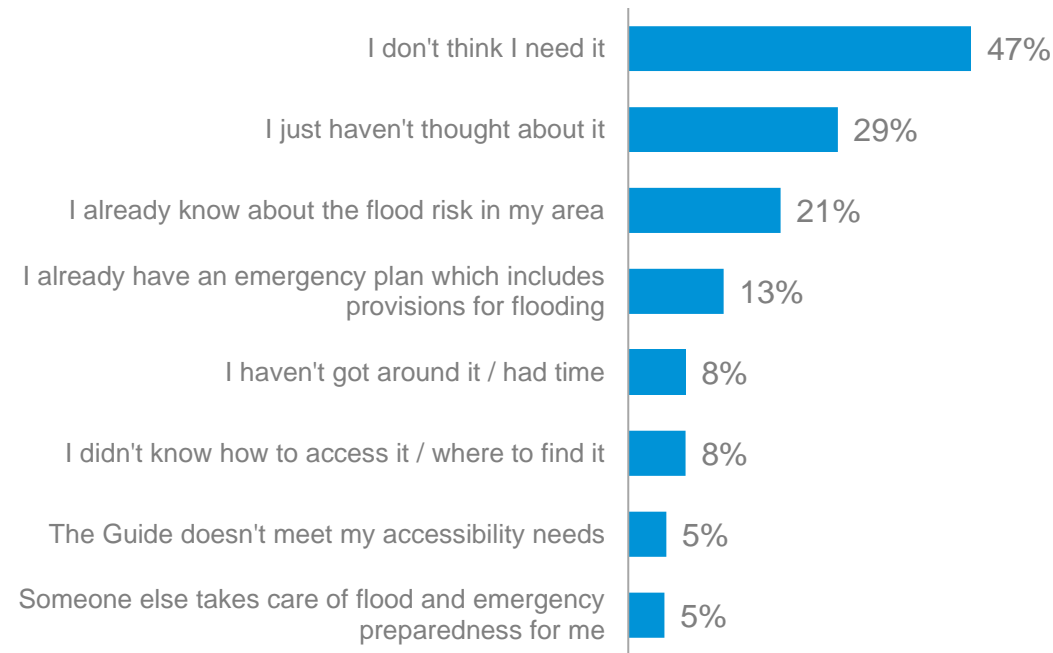


Q9 – Which of the following best describes your engagement with this type of information, specific to your local area?

For those who were aware of LFGs but hadn't accessed them, half (47%) thought they didn't need it

Reasons for not engaging with LFGs despite being aware of them

Respondents who were aware of LFGs but hadn't accessed them (n=38)

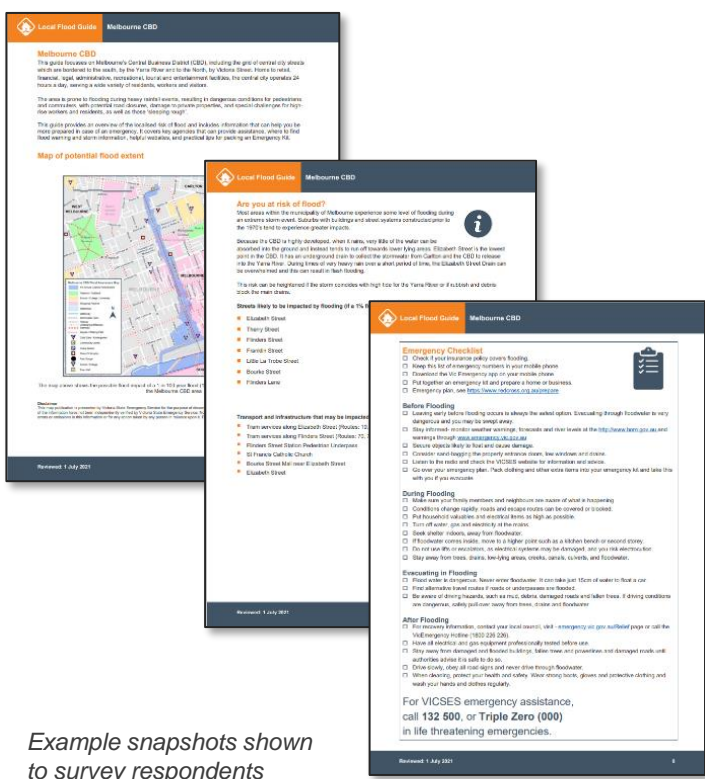


Q17 – You mentioned that you are aware of the Local Flood Guide but haven't accessed it before. Why haven't you accessed your Local Flood Guide?

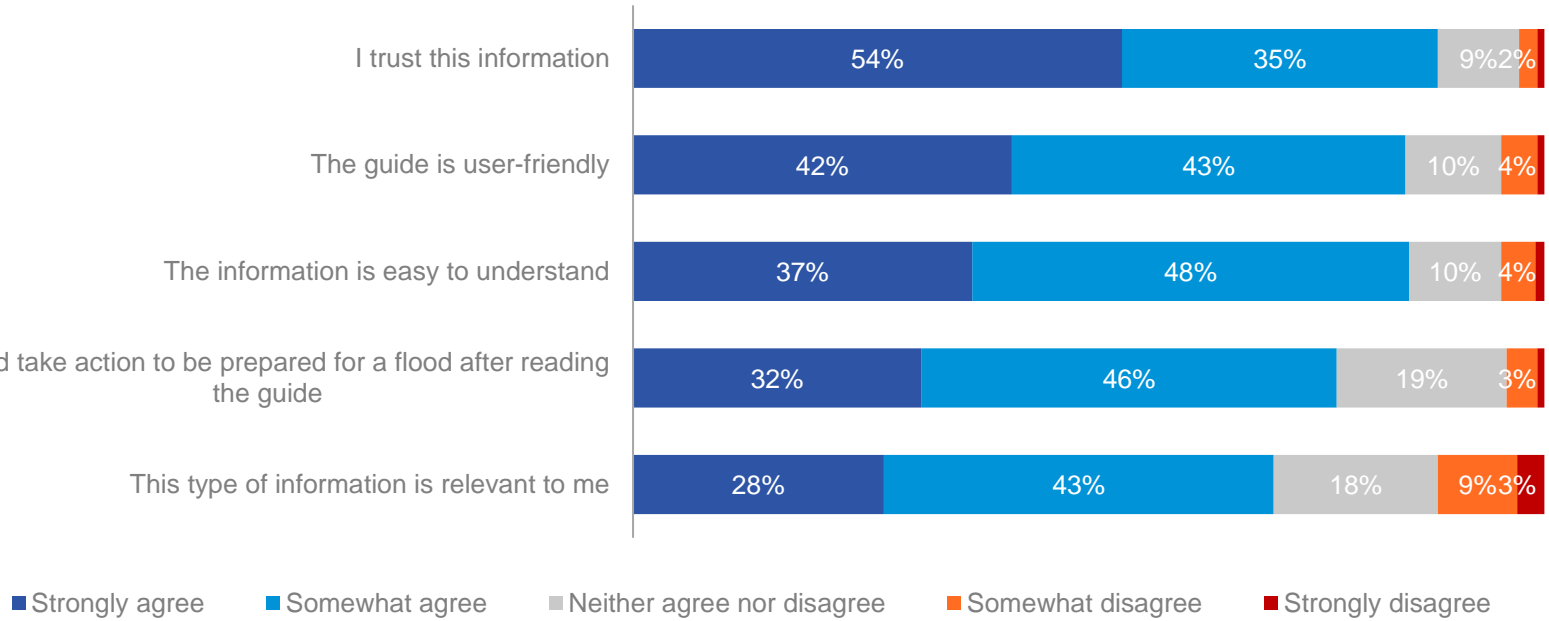
Once shown example snapshots from a LFG, Victorians reported high trust, ease of use and comprehension

Attitudes / perceptions of VICSES Local Flood Guides after being shown example snapshots

All respondents (n=505)



Example snapshots shown to survey respondents



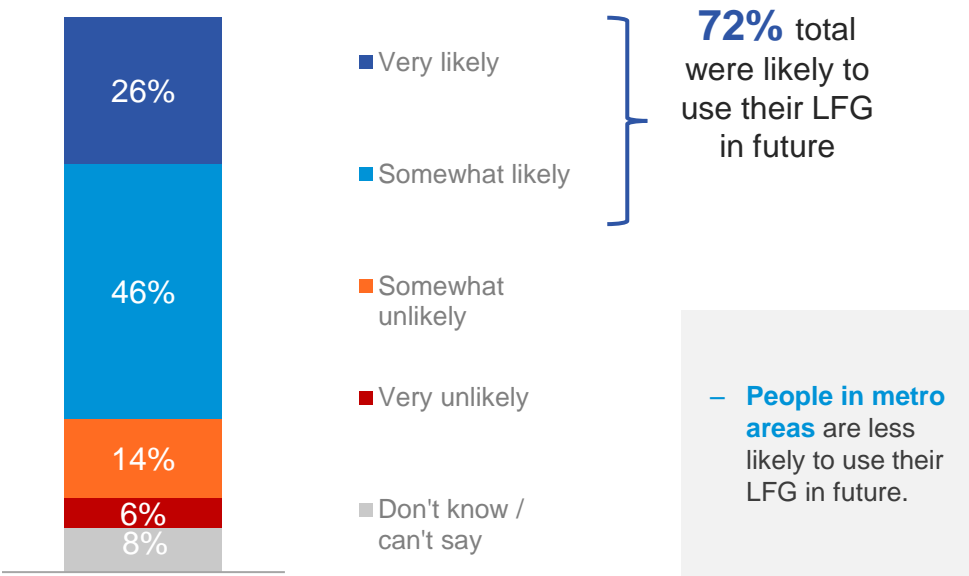
Q18 – Thinking about the overall information available in the Local Flood Guide, to what extent do you agree with each of the following?

Once they knew it existed, three in four (72%) self-reported being likely to use their LFG in the future

Likelihood of using VICSES Local Flood Guide in future

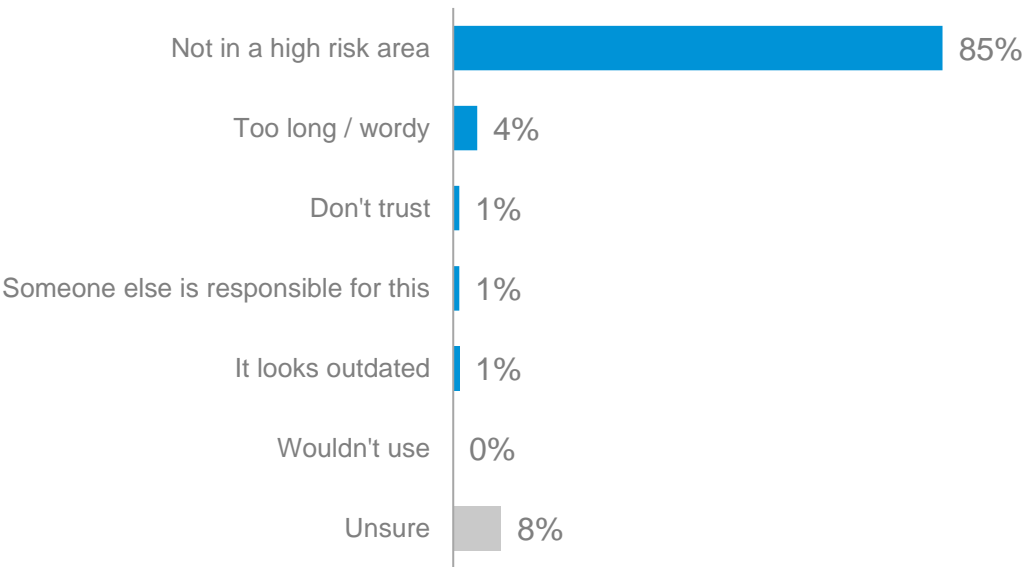
Q19 – All respondents (n=505); Q20 – Those who were Somewhat or Very unlikely to use LFG in future (n=97)

Likelihood of using LFG in future



Q19 – How likely are you to use your Local Flood Guide in the future?

Reasons given for being unlikely to use LFG in future



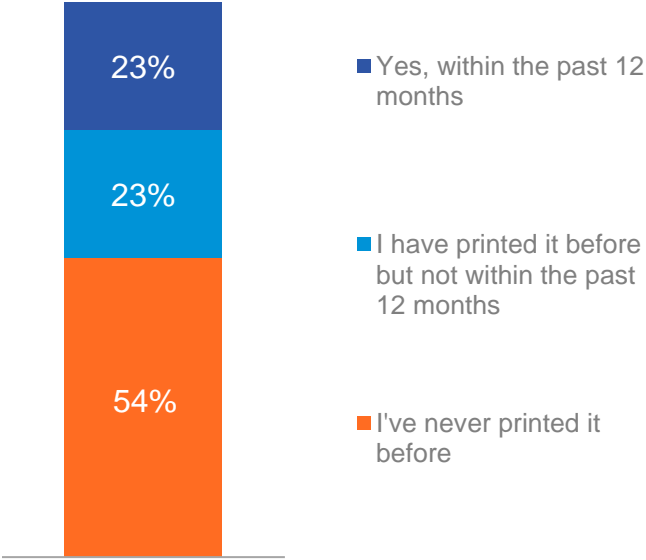
Q20 – You have said you are unlikely to use your Local Flood Guide in the future, why is that? Open ended response – Coded

Printability is important for both past and future users

Printability

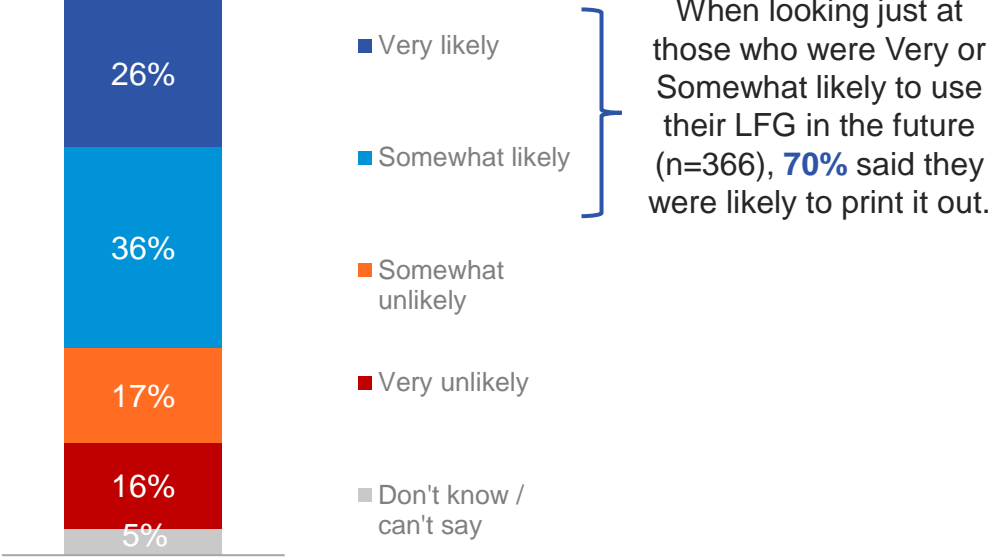
Q21 – Those who had used an LFG previously (n=65); Q22 – Those who were Very likely, Somewhat likely or Somewhat unlikely to use their LFG in the future (n=437)

Have previously printed



Q21 – Have you previously printed a copy of your Local Flood Guide?

Likelihood of printing it they were to use in the future



Q22 – If you were to use a Local Flood Guide in the future, how likely would you be to print it out?

3. Poll questionnaire

VICSES

Survey type: Online

Project consultants:	Tom, Meg and Eleanor
Total number of interviews to be completed:	500
Definition of target audience:	<ul style="list-style-type: none">Individuals living in an area covered by a Victorian LFGMust have responsibility for a dwellingAged 18+
Panel Provider (panel sample only):	PureProfile
Fieldwork to close by:	22/09/23
Data to be merged with a previous datafile?	N
Questionnaire reviewed by Director of Advanced Methods	Y
Does this job require a representative sample?	Y – Within catchment area, need representative sample (completes) by age and gender
Any quotas on the sample? If yes, specify below	N/a

Any additional variables that should be tracked in the portal (aside from quota variables):

- Q.8
- Q.9
- Q.11
- Q.12
- Q.15

Weights to be applied: None

Introduction – Online

Thank you for taking part in this survey.

This survey is about flood preparedness. It should take no more than 5 minutes to complete.

Please be reassured that this survey is anonymous, and we will never use your individual responses on their own. Quantum is an independent market research company and complies with the Australian Privacy Act 1988 and The Research Society's Code of Professional Behaviour. Our privacy policy can be found [here](#).

Screener

The first few questions are to check if this survey is relevant to you.

ASK ALL

Q.1. How old are you? SR

Under 18.....	1	[TERMINATE]
18-24.....	2	
25-29.....	3	
30-39.....	4	
40-49.....	5	
50-59.....	6	
60-69.....	7	
70-79.....	8	
80+.....	9	

ASK ALL

Q.2. What gender do you identify with? SR

Male.....	1
Female.....	2
Non-binary.....	3
Another gender (please specify):	4

ASK ALL

Q.3. What is your postcode?

[TERMINATE THOSE OUTSIDE VICTORIA]

[TERMINATE THOSE NOT IN LFG AREAS – SEE LINKED EXCEL: [Postcodes in scope LFG.xlsx](#)]

ASK THOSE WITH POSTCODE = 3024, 3032, 3040, 3134, 3579

Q.3a Which suburb do you live in?

DROP-DOWN LIST WITH THE FOLLOWING OPTIONS:
Aberfeldie
Ascot Vale
Kerang
Warrandyte South
Warranwood
Ringwood

Ringwood North
Maribyrnong
Maroondah
Murrabit
Benjeroop
Wyndham Vale
Ascot Vale
Essendon
Essendon West
Manor Lakes
Maribyrnong

None of the above 1 [TERMINATE]

AUTOCODE USING RESPONSE IN Q.3 + Q.3A

Q.4. Record user type.

[IF Q.3=SEE APPENDIX] HIGHLY IMPACTED IN 2022 METRO	1
[IF Q.3=SEE APPENDIX] HIGHLY IMPACTED IN 2022 REGIONAL	2
[IF Q.3=SEE APPENDIX] NOT HIGHLY IMPACTED IN 2022 METRO	3
[IF Q.3=SEE APPENDIX] NOT HIGHLY IMPACTED IN 2022 REGIONAL	4

ASK ALL

Q.5. Which of the following best describes your living situation? SR

Own your home outright	1
Own your home, paying off a mortgage	2
Pay rent for private housing.....	3
Pay rent for public / government housing.....	4
Live with parents / family / friends and not primarily responsible for the property	5
Other situation (please specify):	6

TERMINATE
TERMINATE

END OF SCREENING

Section 1: Basic information about dwelling

ASK ALL

Q.6. Which of the following best describes the home you currently live in? **SR**

Stand-alone / separate house	1
Semi-detached house, row or terrace house, townhouse	2
Unit	3
Flat or apartment	4
Other (please specify):	98

ASK ALL

Q.7. How long have you lived within your current postcode? **SR**

Less than 5 years	1
5 – 10 years	2
11 – 20 years	3
More than 20 years	4

Section 2: Extent of LFG awareness

Next, we have some questions on finding information about flood risk in your area.

ASK ALL

Q.8. To what extent are you aware of any publicly available flood information specific to your local area?

This may include any information that is there to support you to understand local flood risks, prepare for, and manage the risks of a flooding event. **SR**

I am aware of this information and know where to access it	1
I have heard of something but don't know much	2
I wasn't aware of this type of information / or didn't think it was available in my area	3

ASK THOSE AWARE (CODES 1-2 AT Q.8)

Q.9. Which of the following best describes your engagement with this type of information, specific to your local area? **SR**

I have accessed this type of information within the past 12 months	1
I have accessed this type of information before, but not within the past 12 months	2
I've never accessed this type of information	3

ASK ALL

Q.10. Have you heard of the Victoria State Emergency Service (VICSES)? **SR**

Their logo:



Yes	1
No	2
Don't know / Unsure	99

ASK ALL

Q.11. Victoria State Emergency Service (VICSES) publishes a Local Flood Guide which is specific to your local area. This flood guide is there to support you to understand local flood risks, prepare for, and manage a flooding event.

Were you aware that VICSES publishes a Local Flood Guide for your area? **SR**

Yes, I was aware of this	1
No, I was not aware of this	2
Don't know / Unsure	3

Record user type.

[If 1] LFG aware (incl. users and non-users)	1
[If 2-3] LFG non-aware	2

ASK LFG AWARE (Q.11=1)

Q.12. Which of the following best describes your engagement with the Victoria State Emergency Service (VICSES) Local Flood Guide, for your area? **SR**

I have accessed it within the past 12 months	1
I have accessed it before but not within the past 12 months	2
I have accessed Local Flood Guides, but not for my area	3
I have never accessed these Local Flood Guides	4

Record user type.

[If 1-2] LFG user	1
[If 3-4] LFG non-user	2

ASK LFG USER [Q.12=1-2]

Q.13. What prompted you to access your Local Flood Guide? MR; RANDOMISE, BUT LOCK CODES 2+3 TOGETHER, 3 TO APPEAR AFTER 2

To get information during a flood / when a flood was imminent 1
 Local Victoria State Emergency Service (VICSES) staff / volunteers suggested I look..... 2
 Another emergency service or organisation suggested I look at it..... 3
 To increase my awareness of my local flood risk..... 4
 To understand how I can best prepare for a potential flood..... 5
 I looked out of curiosity..... 6
 A friend / family member / colleague referred me to it..... 7
 I received it in the mail / through the door..... 8
 Other (please specify) 9
 Don't know / can't say..... 99

ASK LFG USER [Q.12=1-2]

Q.14. Where did you access your Local Flood Guide? MR; RANDOMISE, BUT LOCK CODE 1+2 TOGETHER, 2 TO APPEAR AFTER 1

On the Victoria State Emergency Service (VICSES) website and/or social media 1
 On another business/organisation's website and/or social media..... 2
 Using an online search engine 3
 Received a printed copy 4
 Saw it posted somewhere (e.g. in a shop window) 5
 Somewhere else (please specify) 6
 Don't know / can't say..... 99

ASK LFG USER [Q.12=1-2]

Q.15. To what extent do you agree or disagree that the Local Flood Guide increased your awareness of...? SR PER ROW; DO NOT RANDOMISE

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
My local flood risk	1	2	3	4	5
Where I could access information specific to my location in a flood event	1	2	3	4	5
How to remain informed about flood and emergency warnings	1	2	3	4	5
How to prepare for a flood event	1	2	3	4	5

ASK LFG USER [Q.12=1-2]

Q.16. To what extent do you agree or disagree with the following statements about the Local Flood Guide? SR PER ROW; DO NOT RANDOMISE

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
It resulted in me undertaking emergency preparedness action	1	2	3	4	5
It provided me with actions to undertake during a flood event	1	2	3	4	5
It provided me with information on what to do after a flood event	1	2	3	4	5
It directed me to other resources to increase my awareness of my flood risk and how to prepare and respond	1	2	3	4	5

ASK LFG NON-USER [Q.12=3-4]

Q.17. You mentioned that you are aware of the Local Flood Guide but haven't accessed it before. Why haven't you accessed your Local Flood Guide? MR; RANDOMISE

I already know about the flood risk in my area..... 1
 I already have an emergency plan which includes provisions for flooding..... 2
 I just haven't thought about it 3
 I haven't got around it / had time..... 4
 I don't think I need it..... 5
 I didn't know how to access it / where to find it..... 6
 Someone else takes care of flood and emergency preparedness for me 7
 The Guide doesn't meet my accessibility needs 8
 Other (please specify) 9
 Don't know / can't say 99

Section 3: Topline perceptions

Next, we'll show you an example of a Local Flood Guide. This example may not be from your suburb / town, but the content will be similar to what is available in your Local Flood Guide.

These guides are typically 8-12 pages. They focus on a specific suburb or town and include information on flood risk, maps of high-risk areas, and what to do before, during and after a flood in your area.

Please take some time to consider the below example. **Click on each image to enlarge.**

ASK ALL



- Q.18. Thinking about the overall content / information available in the Local Flood Guide, and imagining it is specific to your local area, to what extent do you agree with each of the following? [SR PER ROW; DO NOT RANDOMISE]

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly Disagree
This type of information is relevant to me	1	2	3	4	5
The information is easy to understand	1	2	3	4	5
The guide is user-friendly	1	2	3	4	5
I trust this information	1	2	3	4	5
I plan to take action to be prepared for a flood after reading the guide [SHOW IF LFG USER (Q.12-1-2)]	1	2	3	4	5
I would take action to be prepared for a flood after reading the guide [SHOW IF LFG NON-USER (Q.12-3-4)]	1	2	3	4	5

ASK ALL

- Q.19. How likely are you to use your Local Flood Guide in the future? SR

Very likely	1
Somewhat likely	2
Somewhat unlikely	3
Very unlikely	4
Don't know / can't say	99

ASK THOSE WHO SELECT CODE 3 OR 4 AT ALL Q.19

- Q.20. You have said you are [somewhat unlikely / very unlikely, pipe response from Q.19] to use your Local Flood Guide in the future, why is that? OPEN COMMENT

Section 4: Printing of LFG

ASK LFG USERS (Q.12-1-2)

- Q.21. Have you previously printed a copy of your Local Flood Guide? SR

Yes, within the past 12 months	1
I have printed it before but not within the past 12 months	2
I've never printed it before	3

ASK IF Q.19=CODE 1-3

- Q.22. If you were to use a Local Flood Guide in the future, how likely would you be to print it out? SR

Very likely	1
Somewhat likely	2
Somewhat unlikely	3
Very unlikely	4
Don't know / can't say	99

Section 5: Broad attitudes towards / perceptions of local flood risk

ASK ALL

- Q.23. To what extent do you agree or disagree with the following statements? SR PER ROW; RANDOMISE ROWS

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I worry that my house could flood	1	2	3	4	5
I feel prepared for a flood if one were to happen	1	2	3	4	5
I am confident that I would know what to do if there was a flood	1	2	3	4	5
I'm aware of the risk and potential impact of flooding in my area	1	2	3	4	5
I know how to access information and warnings in a flood event	1	2	3	4	5
I know how to manage in the aftermath of a flood	1	2	3	4	5

Validation question

ASK ALL

- Q.24. To check you have been completing the survey thoughtfully, please indicate whether each of the following is correct for you. SR PER ROW

Please select one response per row

	Yes it's correct	No it's incorrect
Age: 25	<input type="radio"/>	<input type="radio"/>
Gender: Female	<input type="radio"/>	<input type="radio"/>
Postcode: 3682	<input type="radio"/>	<input type="radio"/>

Demographics

And finally, just a couple more questions about you, so that we can understand how different people have answered these questions. As this is market research, it is carried out in compliance with the Privacy Act 1988 and the information you provided will be used only for research purposes.

ASK ALL

Q.25. Which of the following **best describes your household structure?** **sa**

Living alone	1
Living with partner only	2
Living with children only	3
Living with partner and children	4
Shared accommodation	5
Living with parents / guardian.....	6
Other situation	98

Online thanks

End with thanks (all):

Thank you for assisting us today. Your response to this questionnaire will be kept strictly confidential and will be used only for research purposes. If you have any queries or concerns, please contact us on surveys@qmr.com.au

All data and information collected from the survey will be stored appropriately and in accordance with the Australian Privacy Act 1988 and the New Zealand Privacy Act 2020. Our Privacy policy can be found [here](#).

Quantum
Market
Research

13

Appendix: Postcodes and their classifications

Click linked Excel: [Postcodes in scope LFG.xlsx](#)

Quantum
Market
Research

14

4. Social research interview guide

FINAL (18/09/23)

Local Flood Guide Enhancement

Job No.: 23083QL

Discussion Guide

Research objectives:

- To gain an understanding of the existing awareness and engagement with local flood advice, and then specifically with Local Flood Guides created by Victoria State Emergency service (VICSES).
- To learn how to increase usage and optimise the effectiveness of Local Flood Guides by collaborating with the communities that will utilise them.
- To inform Local Flood Guide content and design in order to help it achieve its own objectives, which are:
 - To educate the community on their local flood risk and flood and emergency warnings.
 - To guide the perceptions around flood preparedness and resilience to risk.
 - To aid emergency services in helping a community before, after and during a flood.
 - To successfully influence individuals' future intentions of flood preparedness and search for further information around flood risk and preparedness.

Overview of methodology:

- Round 1 of N=18 in-depth interviews.
- 75min.
- Online.

Concise summary of sample/target audience:

- Individuals that live in an area of Victoria covered by a Local Flood Guide (LFG).
- Mix of those in metro and regional areas.
- Mix of those highly impacted by 2022 floods, and those not.
- Mix of awareness/usage of LFG.
- Mix of age.

1

Reminder to moderators - Trauma-informed approach:

As we are dealing with a sensitive topic (flood emergencies), we must take an empathetic and ethical approach to every interview. To have a trauma-informed approach, we must ensure that we're considering the following throughout any interaction with the respondent:

- *Respect, understanding and empathy* – Understanding and respecting that everyone is different, and should be allowed to express themselves at their own pace.
- *Transparency* – Clearly communicate the subject for each section.
- *Participant choice* – Giving participants choice where the interview is held, the length of the interview, what is discussed, and the language used to refer to them within reporting.
- *Psychological safety and avoiding retraumatising* – Be conscious of potential triggers and anything that may be distressing. Discontinue the interview if the participant should be impacted emotionally.
- *Referrals protocols* – Provide contact details for support services.
- *Right to withdraw at any point* – Ensure the participant is aware that they can withdraw from the interview at any time.
- *Strengths-based* – Focus on strengths and resilience, as opposed to just challenges.
- *Person-centred* – Remembering that everyone has unique needs, backgrounds, experiences, and identities.

Section 1: Introduction (5 mins)

- Thank-you for participating.
- Session will last up to 75 minutes.
- Anonymous and confidential.
- Being audio recorded – for market research purposes only. You may opt out if you prefer.
- Going to talk about your opinions. No right/wrong answers.
- You will receive a \$120 e-gift card as a thank-you for your time which will be emailed to you in the coming week.

Interviewer read out:

I'm a researcher for Quantum Market Research, a third-party research agency, and I have the privilege of chatting to people every day about a wide range of topics. I encourage you to speak openly and honestly – I'm completely impartial, non-judgemental and really value your input. All of your input will be kept anonymous and confidential – I'll only report back what people told me at an overall level and the client behind this research will never know who I spoke to specifically.

2

Section 2: Participant context (5 mins)

Objective: To get familiar with the participant and create rapport.

- Tell me about yourself?
 - Where do you live? Who do you live with?
 - What do you do for work?
 - How would you describe your lifestyle?
 - What attracted you to the suburb you live in? How long have you lived there for?
 - What type of home do you live in? How long have you lived in that home? Do you own / rent / another arrangement?

Section 3: Top-of-mind perceptions around flood (5 mins)

Objective: To understand the participants surface level perceptions around floods; their local flood risk, flood warnings, and their preparedness

Thank you, it's great to learn a bit more about you. Today we're going to be talking about flooding. Due to the nature of this topic, if there's anything you'd like not to answer for any reason throughout this interview, that's perfectly fine. You do not need to explain your reasons to me, please just let me know that you don't wish to answer and we can move onto the next question.

I will also pop some support services in the chat so you've got them if needed.

Support services:

[Beyond Blue](#)
24/7 mental health support service
1300 22 4636
[headspace](#)
Online support and counselling to young people
aged 12 to 25
1800 650 890 (9am to 1am daily)
For wechat visit
<https://headspace.org.au/headspace>
[Lifeline](#)
24/7 crisis support and suicide prevention
services

13 11 14
[Mensline](#)
24/7 counselling service for men
1300 78 99 78
[QLife](#)
LGBTI peer support and referral
1800 184 527 (6pm to 10pm daily)
Online chat 3pm to 12am daily
[13YARN](#)
24/7 crisis support for Indigenous Australians
13 92 76

3

- When I say "flooding", what comes to mind for you?
 - What about "flood risk"?
- How often do you think about flood risk?
- Compared to elsewhere, what's the flood risk like in your area?
- And compared to other properties in your area, what's the flood risk like for your home?
- Have you experienced flooding in your area recently (last 5 years)?
 - How prepared were you at that time?
 - What kind of information would've helped you the most at this time?
- Now, let's think about your preparedness for floods. Let's do a rating exercise, where 1 = Very low / very little and 5 = Very high / very much...
 - What is your awareness / familiarity with flood risk?
 - What is your awareness / familiarity with how to keep up to date with flood risk?
 - How prepared are you for a flood?
 - Why do you say that?
 - How confident do you feel you'd know what to do if there was a flood?
 - Why do you say that?
 - Does their feeling of preparedness depend on the extremity of the flood?
 - What would be your first reaction if you knew a flood was imminent?

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Section 4: Awareness and engagement with flood advice (5 mins)

Moderator note: Don't mention LFG here unless they bring it up spontaneously (this will be discussed in the next section).

Objective: To understand how participant may previously have interacted with flood advice and uncover the sources more commonly used to receive advice for flooding events.

Now that I understand your perceptions around flooding and your sense of preparedness, I'd like to move on to your experience with 'flood advice'. Flood advice is any advice that relates to flood preparedness, how to handle a flood emergency when one happens, and how to recover from a flood. So think of it as any advice or information about what to do before a flood, during a flood, or after a flood.

- Do you know where to look for this type of information?
 - Where would you go first if you were to look for it today?
- Have you seen or heard advice on floods and preparing for a flood before?
- Where have you seen / heard flood advice before? List off all the places for me, as many as you can think of.
 - *Prompt if needed: This can be formal (online from official websites, from government agencies, emergency services) or informal (friends, family colleagues, social media) sources.*
 - **Moderator to make a list of all sources.**
- What led to you seeking out flood advice / what led to you discovering that information about flooding (dependent on the situation)?
- What did the advice tell you?
- How informative/helpful was it? What impact did it have?
- Of everything, which was most influential? Why?
- What information was missing?
 - Do you have any idea where you could have found that information?

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Section 5: Awareness and engagement with LFGs (5 mins)

Objective: To gauge current awareness and engagement levels with Local Flood Guides specifically.

We're going to get more specific and begin to talk about the flood advice produced and shared by Victoria State Emergency Services (VICSES).

- Have you heard of Victoria State Emergency Services (VICSES) before today?
 - Where have you come across them?
 - How familiar are you with the educational resources that they provide to communities?
 - *(If familiar)* how did you learn about VICSES?
- Are you aware that VICSES publish information to support your community to prepare for and manage flood risks?
 - Have you accessed this type of information before?
 - Which resources are you aware of?
 - Have you accessed any resources by VICSES with flood advice before? Which ones?

VICSES publishes a Local Flood Guide which is specific to your local area. This flood guide is there to support you to understand local flood risks, prepare for, and manage during a flooding event.

- How familiar are you with the Local Flood Guides that VICSES produce and share with the community?
- **If familiar with Local Flood Guides...**
 - To what extent do you feel they are...
 - Relevant to you?
 - Practical / useful?
 - Credible / trustworthy?
 - Where did you come across it?
 - Tell me about the journey you went through to find and use the Local Flood Guides.
- **If not familiar with Local Flood Guides...**
 - Where do you think would be the best place to provide them in order for you to see them?

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Section 6: Expectations and usage of LFGs (15 mins)

Objective: Learn what expectations participants have for flood advice documents and how they would use them in real life scenarios.

- Hypothetically, you're in a situation where you're looking for local flood information. What type of information would you be looking for?

Please could you now open your search engine? Once you've done that, please could you share your screen with me?

- Please search "VICSES local flood guides" (Direct them to the VICSES website <https://www.ses.vic.gov.au/plan-and-stay-safe/flood-guides>).
 - At first glance, what do you think of this webpage?
- Now you're on this page, please explore at your own pace and just let me know your initial thoughts as you go through the information. Tell me what catches your eye. Let me know of any parts you particularly like or dislike, any questions you have or points of confusion.
- Go through each of the LFG sections and probe to understand the below points:
 - General location information
 - The map
 - Are you at flood risk
 - Did you know (flood history)
 - Flood gauge information (Show [Carisbrook LFG](#) if this section isn't included in your LFGs)
 - Stay informed
 - Warnings
 - Emergency Plan
 - Emergency Kit
 - Emergency Checklist
- [LFG](#), the ease, clear, logical order, design etc.
- What is it telling you? How easy is this to understand?
- Is it relevant to you? Which bits are more / less relevant?
- Is it useful? What's it useful for?
- Who do you think this resource is made for?
- Have you learned anything new from this that you didn't know before?
- What additional questions does it raise?
- What's missing?
- What could improve to make it more relevant or useful for you?
- Explore reactions to the specific:
 - Content
 - Language
 - Tone
 - Sequencing / prioritisation of information
 - Format / visual layout

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- Use of images, diagrams, and illustrations.
- Is there any information that is confusing?
- Is there any information you believe isn't necessary to include?
- Explore above for:
 - The LFG home page <https://www.ses.vic.gov.au/plan-and-stay-safe/flood-guides>
 - Their municipality page (eg. <https://www.ses.vic.gov.au/plan-and-stay-safe/flood-guides/casey-city-council>)
 - Their LFG document (eg. <https://www.ses.vic.gov.au/documents/8655930/9320043/Casey+Local+Flood+Guide+%28LFG%29+-+Aug+2020+v2.pdf/bf72e2f0-3844-8c77-bac6-d5d893cc4bb3?t=1619589522870>)
To find which LFG is relevant to your participant, check this doc: [Postcodes in scope LFG.xlsx](#)
- Note not have flood gauge information. This is generally a short spiel and accompanied by a table, please see an example on page 4 of the [Carisbrook LFG](#). If their LFG doesn't have flood gauge information, ask them to navigate to the [Carisbrook LFG](#) and get their feedback on this.

Section 7: Impact of LFGs (5 mins)

Objective: To explore the impact that viewing the LFGs has on the participants awareness and understanding of flood risk, warnings and preparedness and anticipated future behaviour.

I want to understand whether or not they're meeting their objectives. Let's go through them one by one to understand whether or how well you feel they've done their job. Remember that there's right or wrong answers, I'm completely impartial here. If there is no change, that is just as interesting to me.

Having looked at these materials, have they...

- Increased your understanding of your local flooding risk?
- Increased your understanding of flood and emergency warnings?
 - How confident would you be interpreting flood warnings tomorrow, if you had to?
- Changed how you understand flood preparedness?
- Beyond understanding and awareness, have they changed how you think you'll actually behave?
 - How you will prepare your home for a flood?
 - Where you will seek further information? Where and what information?
- Based on what you said previously about what you expect from a flood guide, how well do you feel these guides reached those expectations?
- How do you think your flood plan will change after viewing the guides?
 - If no change, why?
 - What do you think the guides could've done better to help you prepare?

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Section 8: LFGs practicality and formats (5 mins)

Objective: To get a handle on what the LFGs need to do in a practical sense to be useful for the community.

Thanks so much for your feedback on the Local Flood Guides. Now, I would like to focus on the practicality of them.

- Imagine that there's a flood emergency, how usable do you think these guides would be for planning?
 - What would you use them for at this stage?
 - What could be done to make them more usable?
- What formats do you think would be valuable for Local Flood Guides to be promoted and published on?
- In this scenario, how valuable do you think it would be, to have printable versions?
 - Are there certain sections of information that you'd want to print, and others that you feel you wouldn't need to?

Section 9: Wrap-up (5 mins)

Objective: Close the discussion whilst eliciting any final contributions.

- In summary, we've spoken about:
 - Your general flood knowledge...
 - As well as the Local Flood Guides and how they could be improved...
- Are there any other ways it could be improved that we haven't spoke about yet today?
- Is there anything I haven't asked but which you thought it would be valuable for me to know?

Thank & close

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