



FLOOD RISK AWARENESS PROGRESS REPORT

2018 EVALUATION

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1. EXECUTIVE SUMMARY

In order to evaluate the progress of Melbourne Water and VICSES towards flood preparedness and awareness KPIs, as well as conduct a behavioural investigation of flood preparedness drivers and barrier, Melbourne Water and VICSES have undertaken this second wave of Flood Preparedness research building on the 2015 benchmark research. This involved n=1,036 online interviews with Port Philip Westernport Catchment residents generally, supplemented with n=519 CATI interviews amongst flood prone residents. The research also included a qualitative phase exploring triggers, drivers and barriers to flood preparedness actions in depth amongst flood prone residents.

Overall, there has been no real movement in flood risk awareness, which now sits at 44% amongst residents of flood prone areas. Further, there has been no shift in how flooding is viewed in PPWP in general, with perceptions of most measures remaining steady from the 2015 benchmarking phase including perceived preparedness, amount of preparedness actions taken, perceived likelihood of flooding at their property, and perceived impact of flooding.

The research identified correlations between awareness and preparedness action, as well as between action and perceived preparedness. To investigate these links in more detail we utilised the Protective Action Decision Model (a behavioural change model) as a basis for analysis. This identified a number of challenges along the behaviour pathway:

The **physical and social environment** informs what information residents are using to make their decision. It is clear that flood education information generally is not cutting through (only 10% recall seeing any information over the past few months), and it unclear where to find it (only 30% agree they would be able to find information). Additionally, flood preparedness was shown to not be a social norm (inhibiting action). There is very little conversation with others (only 18% of flood prone respondents speak to others about it every 6 months or more), and little perception that others in the community are taking flood preparedness actions.

Flooding is not seen as a major **threat**. Only 13% feel it is likely that flood waters will enter their home any time in the next 10 years and only 5% feel any flooding at all is likely within their area in the next 12 months. In addition, the severity of the threat is also misunderstood. Residents continue to view 'low level' flooding, including flood waters 2-3cm up the ground floor of their home, as 'just a hassle'.

While many **actions** have been taken, only 32% of residents agree they would know what to do to protect their homes in case of flood. For those actions which have been taken, the main driver is the ease of the task (62% who completed a task said they did it because it was easy). For those who do not take action many simply state they never got around to it or have forgotten. This highlights the need to educate residents about actions, but also to follow up and trigger behaviour.

In the **stakeholder** space, government and insurance are seen to hold a great deal of responsibility and are expected to inform residents of their risk (91% say government has an obligation), and inform residents if they are not covered (insurance's responsibility). Despite this, individuals do accept their own and the community's responsibility to help prepare, but some lack self-efficacy (only half of flood prone residents are confident they could take the actions required to protect their home).

When it finally comes time to act, individuals often need some assistance crossing the gap from intention to action. Potential triggers (facilitators, sparks and signals) can prompt individuals to take action.

Relative importance analysis highlights which aspects are most important. Interestingly, in generating action self-efficacy and the perception of the threat are the most likely to determine action. In other words we must bring the threat home to residents, while giving them the tools to respond. If either piece is missing action is less likely. This also highlights the fact that awareness is only the first step.

To drive perceptions of preparedness, self-efficacy (confidence they can find information and do what it takes) is key, as is having an economic (insurance) and social (talking to friends) safety net.

Effective communication in this context will include emotional messaging to grab attention and put residents in the context, simple messaging / information / calls to action to reduce cognitive load (one task, simply displayed), timely reminders to maximise uptake and careful language to ensure residents can relate to, and genuinely understand, the threat.

Key areas of focus:

- Help residents understand the severity of the threat for them.
- Boost their self-efficacy so they feel they can act.
- Make those actions simple so they are actually undertaken (bridge the gap).
- Shift the narrative to ensure insurance is not just the easy fall back, with a focus on items that cannot be replaced

2. BACKGROUND AND OBJECTIVES

2.1 BACKGROUND

The threat of flooding continues to increase around the world, driven in part by climate change and population growth. In Victoria alone, flooding costs \$450 million every year¹ and untold emotional distress, with the threat only expected to increase in coming years. To combat the financial and emotional impact of flooding, extensive research identifies community preparedness as a key element in reducing tangible and intangible damage, as well as assisting in a speedy recovery².

To that end, Melbourne Water, in partnership with VICSES, have developed a number of community resources and education campaigns, including FloodSafe, local flood guides and awareness programs, emergency kit checklists, and even major campaigns such as '15 to Float'. Despite these efforts, in many communities belief in flooding risk remains very low (42% aware of their risk in 2015)³. Furthermore, even when the risk is known it is often not considered to be a serious one, and the risk of flooding is often placed below that of other hazards⁴, with few taking preparedness actions.

This level of awareness is similar for communities around the world, and the typical response has been to further inform the population of the risk and assume that, armed with enough knowledge, individuals will act to protect themselves. While awareness is an essential first step, an awareness of risk alone is not enough to generate preparedness actions. Research across multiple areas indicate the need for additional factors to be considered in driving disaster preparedness including self-efficacy, efficacy of action, social trust, coping style, optimism bias, societal norms, among many others⁵.

Melbourne Water and VICSES are well aware of these additional factors influencing behaviour and as a result have sought to implement evidence-based interventions with foundations in thorough community understanding. These organisations continue to track the performance of current interventions, while striving to further understand behavioural interventions and uncover reliable techniques that can shift the community from awareness to preparedness actions.

¹ <https://www.floodvictoria.vic.gov.au/learn-about-flooding>

² Modelling Community Preparation for Natural Hazards: Understanding Hazard Cognitions; David McIvor et al.

³ Dependence of flood risk perceptions on socioeconomic and objective risk factors; W. J. W. Botzen J. C. J. H. Aerts J. C. J. M. van den Bergh. First published: 29 October 2009
<https://doi.org/10.1029/2009WR007743>

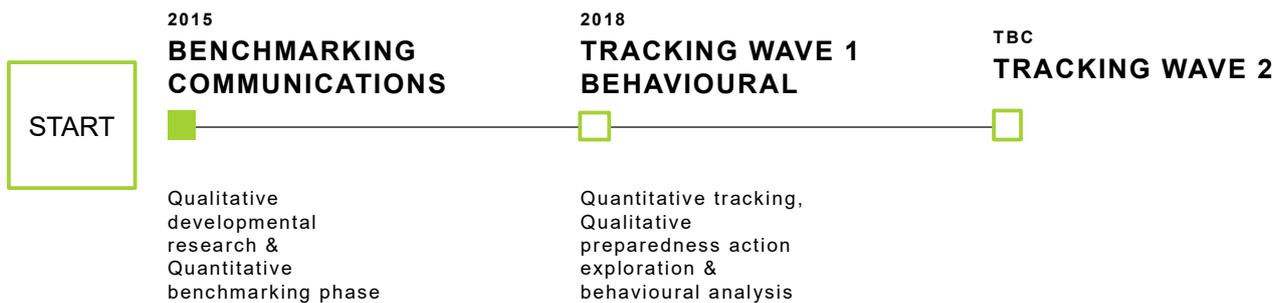
⁴ Dependence of Flood Risk Perceptions on Socioeconomic and Objective Risk Factors. Botzen et al. 2009

⁵ Najafi M, Ardalan A, Akbarisari A, Noorbala AA, Elmi H. The Theory of Planned Behaviour and Disaster Preparedness. PLOS Currents Disasters. 2017 Sep 6 . Edition 1. doi: 10.1371/currents.dis.4da18e0f1479bf6c0a94b29e0dbf4a72.

- *As part of its legislative requirements under The Waterways & Drainage Investment Plan 2016-2021 and the Flood Management Strategy, Port Phillip and Westernport 2015, Melbourne Water is accountable for a 20% increase (of a total 40%) in flood risk awareness by 2021 in the region. Having conducted benchmarking research in 2015 focused on communications, this round of research is required as a progress check towards this awareness target as well as allowing an investigation of behaviour change strategies.*

2.2 RESEARCH OBJECTIVES

A benchmarking wave of research was conducted in 2015 to measure levels of community awareness of flood risk, as well as perceived preparedness and preparedness actions taken. The 2018 research was designed to build on this benchmark, as outlined below:



While the current wave of research shared objectives with the benchmarking phase, the emphasis of the 2018 research can be outlined in three key objectives:

- Measure and evaluate the level of community flood awareness and preparedness against the 2015 baseline.
- Understand the impact of flood engagement initiatives and information sources on awareness and preparedness.
- Develop a broad understanding of critical drivers and barriers to flood preparedness action.

Specifically, there were 6 core questions the research needed to answer:

1. How have levels of awareness and preparedness changed since 2015?
2. What flood preparedness actions have been taken and how are these related to perceived preparedness and awareness?
3. How have different flood education and engagement programs driven levels of awareness and preparedness (different flood initiatives implemented by VICSES, Melbourne Water and potentially Councils)?
4. How do levels of awareness and preparedness vary geographically across Greater Melbourne?
5. Are there barriers to flood preparedness that could be overcome with VICSES and Melbourne Water Flood Education and Awareness programs?
6. What are the critical factors and barriers that lead people to being aware and taking flood preparedness actions?

■ *Note that question 3 was not possible to answer in detail due to extremely low recall of specific initiatives. This low recall is in line with previous research by VICSES showing that even personal contact through an SMS warning may not be remembered⁶. As such, future research should focus on immediate follow up on initiatives (unless they are designed for mass consumption) or behavioural measurement through data that can be tracked without input (e.g. Using insurance company stats to understand X% have insurance before our initiative, Y% have insurance now).*

Question 4 mapping options are being explored as an additional piece as comparative analysis of hotspots and metro/regional were not possible due to low sample sizes (under n=50).

⁶ SES Post Event Research for Public Information & Warnings: Flood and Storm Event, 1-3 December 2017, research report

3. RESEARCH METHODOLOGY

3.1 OVERVIEW OF METHODOLOGY

Our approach to the research was guided by the need to track performance against the 2015 baseline, while also building on the previous research to ensure a greater understanding of behavioural drivers and barriers could be developed. For future waves of research we recommend tracking core measures only, allowing for deeper investigation of other areas.

Following a project inception meeting with Melbourne Water and VICSES, two streams of research activities were conducted:

- Quantitative research: 20-minute online survey with n=1,036 residents of the Port Phillip Westernport catchment and a 10-minute Computer Assisted Telephone Interviewing (CATI) survey with n=519 flood prone residents.
- Qualitative exploration comprising a 1-week online community and additional telephone depth interviews.

This was followed by in depth analysis guided by the behaviour change theory of the Protective Action Decision Model.

3.1.1 Approach to Quantitative Research

The main purpose of the quantitative phase was to evaluate performance of key KPI's against the baseline, as well as quantify drivers and barriers to taking preparedness action.

In the baseline phase of research, we found that the ability to reach a sufficient sample of Flood Prone (FP) individuals through an online approach was limited. To ensure we reached enough of this core audience, the online portion of the quantitative approach was designed as a tracking measure across the general population of the catchment area to provide comparability with benchmark results. The CATI approach targeted only Flood Prone individuals.

Importantly, due to the time restrictions necessitated by a telephone approach, the CATI survey was a cut down version of the online survey, including core measures only. We have drawn insights and conducted analysis between the flood prone (CATI) and general population (online) samples where possible given these methodological differences. The surveys are provided for reference in an appendix to this report.

From the addresses provided by respondents in the online survey, we identified those who are at risk of flooding by matching addresses with those provided by Melbourne Water. Using address matching we identified n=41 in the online sample who were at a 'flood prone' address at the time of the survey. For analysis purposes these were combined with the CATI respondents as part of the total 'Flood Prone' sample.

Fieldwork ran from May 30 through to June 8, 2018. Where possible, results have been compared back to the benchmarking phase of research conducted by Bastion Latitude in mid 2015. Final sample sizes by age and gender are shown in the table following.

Table 1: Final Sample Structure

| n | Total | Female | Male | 18 - 34 years | 35 - 44 years | 45 - 54 years | 55 - 64 years | 65 + |
|-----------------------|-------|--------|------|---------------|---------------|---------------|---------------|------|
| Online Survey | | | | | | | | |
| Not flood prone (NFP) | 995 | 473 | 522 | 222 | 235 | 208 | 197 | 133 |
| Flood prone (FP) | 41 | 20 | 21 | 13 | 6 | 8 | 10 | 4 |
| Total | 1036 | 493 | 543 | 235 | 241 | 216 | 207 | 137 |
| CATI Survey | | | | | | | | |
| Flood Prone (FP) | 519 | 270 | 249 | 0 | 16 | 85 | 132 | 273 |

3.1.2 Approach to Qualitative Research

The qualitative component of the research was originally intended to deep dive into respondents' experiences with education initiatives and campaigns to which they had been exposed. Due to extremely low recall of any initiative this was not possible. Instead this phase was used to explore preparedness actions in more detail, providing valuable insight into the different ways each action should be presented to maximise the chances they are performed.

Respondents were recruited from the quantitative phase. They were required to have completed at least one of the actions listed in the survey to qualify. A total of 34 participants took part in the qualitative phase, which ran from June 25 to July 19, 2018.

3.2 WEIGHTING AND SIGNIFICANCE

The Non-Flood Prone sample was weighted based on gender, education and employment to bring the Wave 2 sample in line with that of the benchmark, ensuring that results are indicative of 'true' shifts, not simply due to sample differences. The Flood Prone sample was also weighted to bring it in line with the benchmark.

Throughout this report, relevant significant shifts (at the 95% level of confidence) between sample groups and research waves are noted in the commentary.

3.3 SUBGROUP ANALYSIS

In addition to the core analysis around Flood Prone (FP) and Non-Flood Prone (NFP) areas, subgroup analysis was conducted across a range of key demographic and profiling measures, including:

- Gender (all)
- Age (all)
- Type of home (NFP)
- Home ownership status (NFP)
- Education (NFP)
- Employment (NFP)
- Language (NFP)

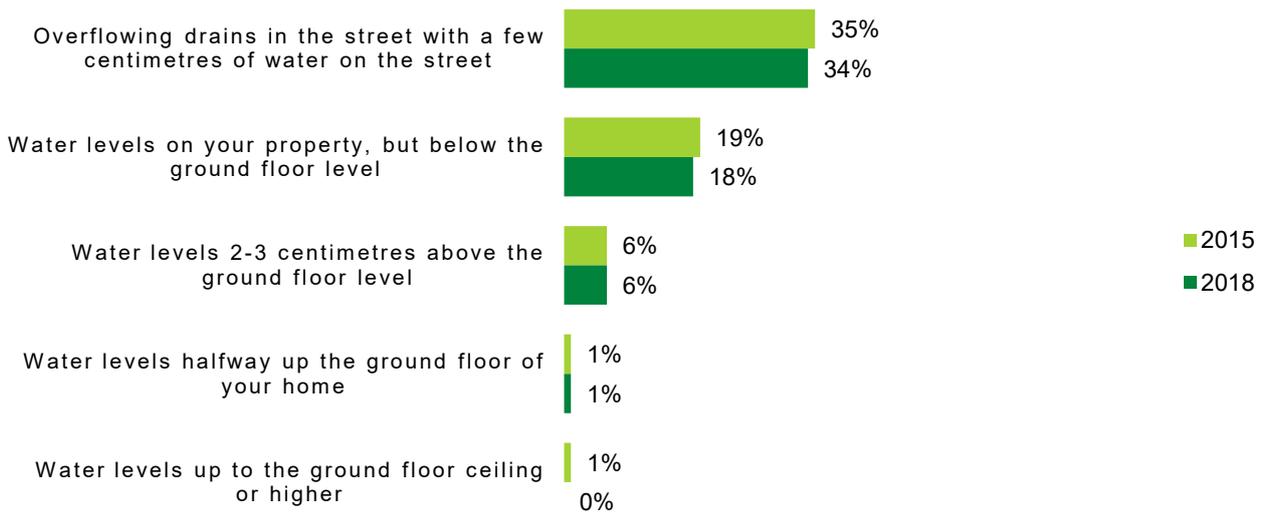
Any relevant differences between these sub-groups have been highlighted throughout this report. Detailed tables have also been provided as an appendix to this report (as a separate Excel document).

4. FLOOD PERCEPTION AND KEY TRENDS

Community understanding of flooding has not shifted in any major way from the 2015 benchmarking phase. In the benchmarking phase, flooding was understood by residents to primarily be riverine and extreme (houses covered in water or washed away). In 2018 this understanding remained unchanged, with ‘low’ severity flooding generally not considered to be a concern for residents. Overall, this stability in perceptions is not surprising given that there is little emotional connection to disaster events unless they are catastrophic (such as the Black Saturday fires) or in an individual’s immediate ‘area’ (physically or emotionally). Additionally, with authorities opting for targeted local campaigns as opposed to mass media campaigns, large shifts in attitudes would not be expected in a methodology covering all of Port Philip Westernport (PPWP) catchment.

As can be seen below, the level of past experience with flooding is consistent this wave with the benchmarking phase. Less than 1 in 10 residents have any experience with flood water entering the home.

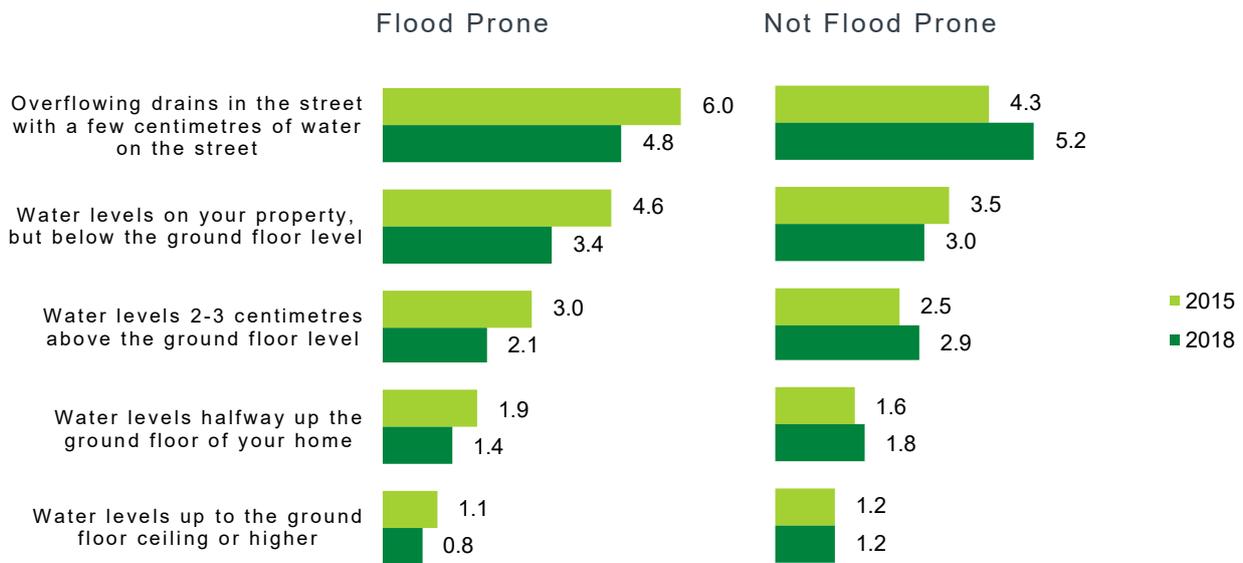
Figure 1: Past experience with flooding



Source: Q11. Which of the following have you ever experienced at your current home or property where you live? Base, 2015 Benchmarking wave: n=2,789. 2018 Tracking wave: n=1045.

Further, as shown below, there is also consistency in the perceived likelihood of various flood levels. Perceived likelihood of water entering the home remains extremely low. Slight declines seen for flood prone (FP) and increases in non-flood prone (NFP) are not statistically significant.

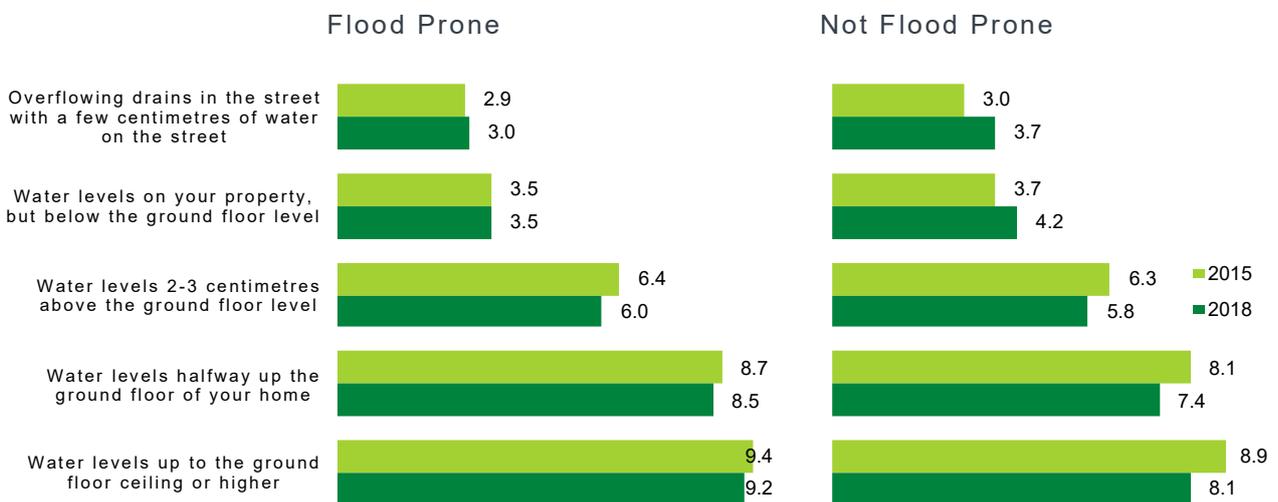
Figure 2: Perceived likelihood of a flood in the next 10 years (average score 0-10, where 0 is extremely unlikely and 10 is extremely likely)



Source: Q9. How likely is it that the home or property where you live will experience one of the following flood levels in the next 10 years? Base, 2015 Benchmarking wave: Flood Prone, n=54, Non-Flood Prone n=2,002. 2018 Tracking wave: Flood Prone, n=560, Non-Flood Prone, n=995. Weighted.

Finally, as shown below, there is also consistency in the perceived impact various levels of flooding would have on residents.

Figure 3: Perceived impact of a flood (average score 0-10, where 0 is no impact and 10 is catastrophic)

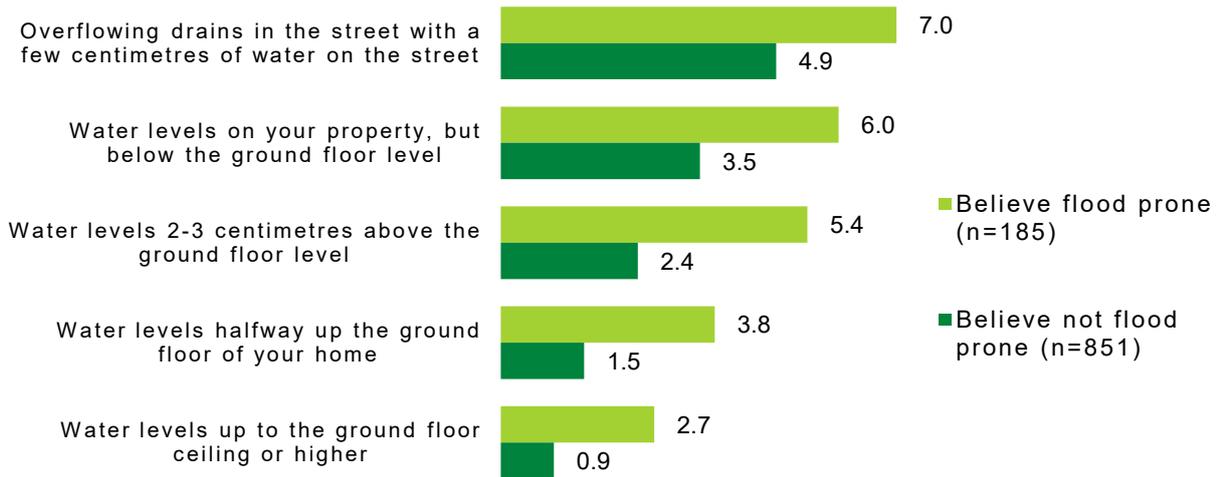


Source: Q22. Think about the impact on you, your family, your day-to-day life and your house and contents. Use the scale below where 0 is 'no impact at all' to 10 being 'catastrophic impact' to rate the amount of impact for each level listed. Base, 2015 Benchmarking wave: Flood Prone, n=54, Non-Flood Prone n=2,002. 2018 Tracking wave: Flood Prone, n=560, Non-Flood Prone, n=995. Weighted.

These results clearly demonstrates a consistent understanding and perception of flooding in the 2018 tracking wave as was seen in 2015.

Interestingly, regardless of whether or not they are actually flood prone, it is the belief that they are flood prone that is key. As shown below, for those that are not flood prone, but believe that they are, perceived risk is significantly higher than for those who do not believe they are flood prone. A similar pattern is seen for those who are flood prone: it is awareness and belief, not reality, that drives perceptions of risk.

Figure 4: Perceived likelihood of a flood in the next 10 years (average score 0-10, where 0 is extremely unlikely and 10 is extremely likely) (NFP residents only)

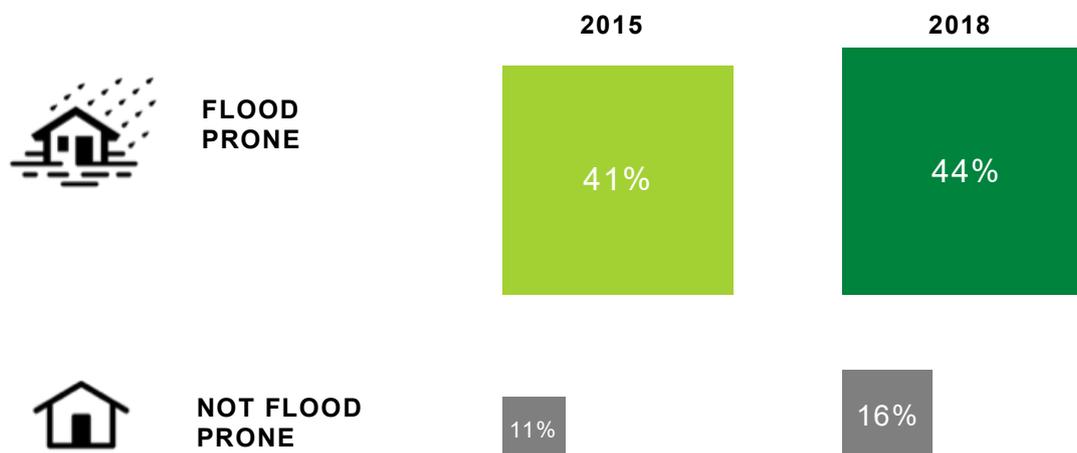


Source: Q9. How likely is it that the home or property where you live will experience one of the following flood levels in the next 10 years? Q5. To the best of your knowledge, is the home or property where you currently live at risk of flooding or may be affected by flooding? That is, are you in a 'flood prone' area? Remember that when we talk about 'flood' we mean water coming into your home or property from outside such as from heavy rain or a storm, and water rising from ground level, not flooding as a result of faulty plumbing or household accidents. Base, 2018 Tracking wave: Non-Flood Prone, n=995. Weighted. Start here

4.1 FLOOD RISK AWARENESS

Awareness of flood risk in the community remains relatively low. As shown below, less than half (44%) of all flood prone residents of the PPWP catchment are aware of their flood risk. This is in line with awareness levels seen in 2015 (41%). While there is an increase of 3 percentage points, this is not statistically significant.

Figure 5: Awareness of flood risk in flood prone households



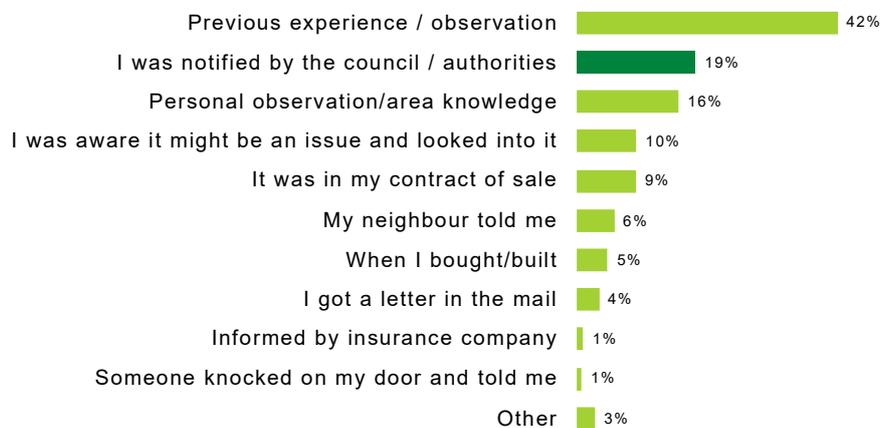
Source: Q5. To the best of your knowledge, is the home or property where you currently live at risk of flooding or may be affected by flooding? That is, are you in a 'flood prone' area? Remember that when we talk about 'flood' we mean water coming into your home or property from outside such as from heavy rain or a storm, and water rising from ground level, not flooding as a result of faulty plumbing or household accidents. Base, 2015 Benchmarking wave: Flood Prone, n=282, Non-Flood Prone n=2,002. 2018 Tracking wave: Flood Prone, n=560, Non-Flood Prone, n=995. Weighted.

We note that Melbourne Water’s definitions of flood prone households have changed from the 2015 to the 2018 research. While there is substantial overlap, there have been households that have changed in flood prone status. This shifting target audience makes the 2015 and 2018 measures comparable, they are not strictly speaking comparing identical audience groups. Further, given that those who are currently not in flood prone areas may feel that they are at risk of flooding, we cannot confidently assume that awareness levels amongst those 'newly identified' properties were previously zero.

Overall, these figures indicate a general stability in perceptions of flood risk across the broader community. This is to be expected given the absence of any large scale, mass media campaigns.

For the 44% of flood prone residents who are aware of their flood risk, the vast majority found out on their own. As shown below, the largest proportion report that they became aware of their flood risk through previous experience with flooding (42%), while others simply know the area (16%) or looked into it themselves (10%).

Figure 6: Source of flood risk awareness



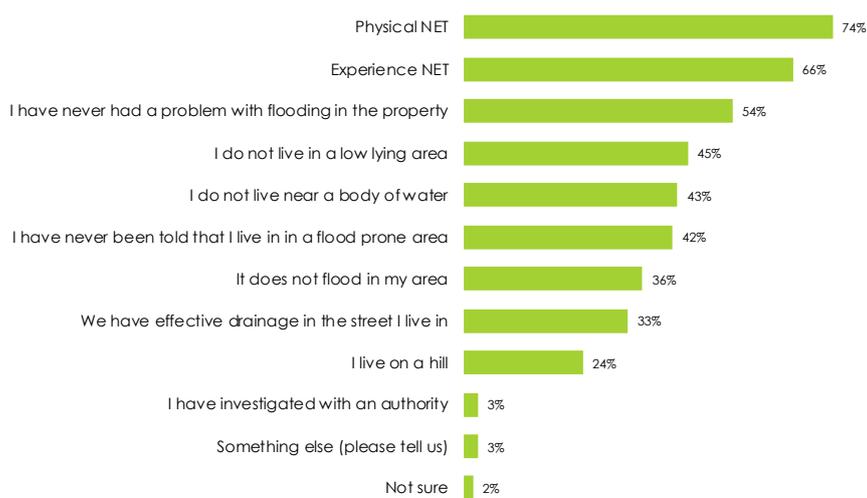
Source: Q6. How did you find out? Base, 2018 Tracking wave: Flood Prone, n=245. Weighted.

Only 1 in 4 reported that they were informed by an authority (general 19%, letter 4%, door knock 1%).

However, regardless of their reported source of awareness there is no difference in perceived preparedness or preparedness actions taken. While it is important to note that this question does not exclude the possibility that contact with authorities was made after the initial discovery of their risk, these results do suggest an opportunity for authorities to increase awareness generating activities as well as ensuring that contact promotes increased action or feelings of preparedness.

Conversely, as shown below, for the majority of respondents who *do not* believe they are in a flood prone region, their reasoning falls into three main buckets: physical characteristics of their area such as living on a hill (73%), no past experience with flooding (65%), or assuming someone would have told them if they were at risk (41%). Overall, these respondents tend to be very passive. Because nothing has happened to them (e.g. have not been told or been actually flooded), and because there is no clear perceived threat nearby (e.g. a river), they conclude that there must be no actual threat.

Figure 7: Factors that make respondents feel they are not at risk of flooding



Source: Q7. What makes you feel you are not at risk of flooding? Base 2018 Tracking wave: Non-Flood Prone, n=817. Weighted.

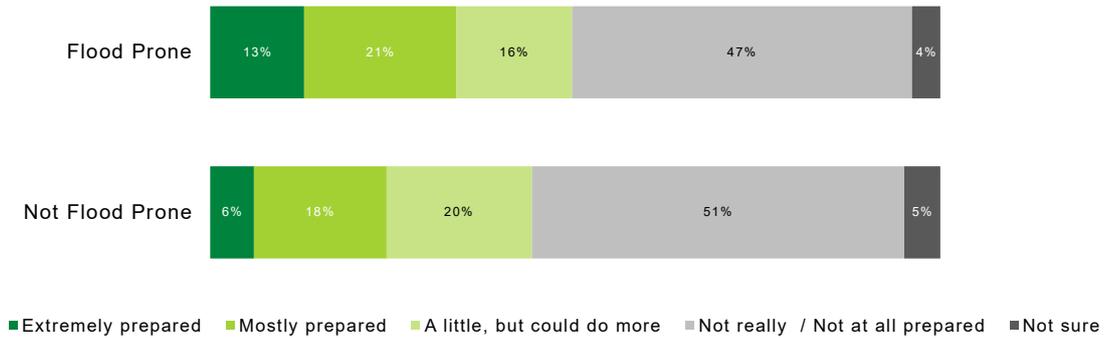
The 2015 benchmarking study provides additional detail about how providing local or personal context in communications can help overcome this passive outlook.

While this question was not asked of CATI respondents due to time restrictions, qualitative insights from the 2015 and 2018 research indicate similar thinking is used by those in flood prone locations.

4.2 PERCEIVED PREPAREDNESS

Overall, perceptions of preparedness for flooding have not shifted from the benchmarking phase. As shown below, only 49% of those in flood prone areas feel they are in any way prepared for a flood at their residence. While this is slightly higher than for those in non-flood prone areas, it is only by a very slim margin.

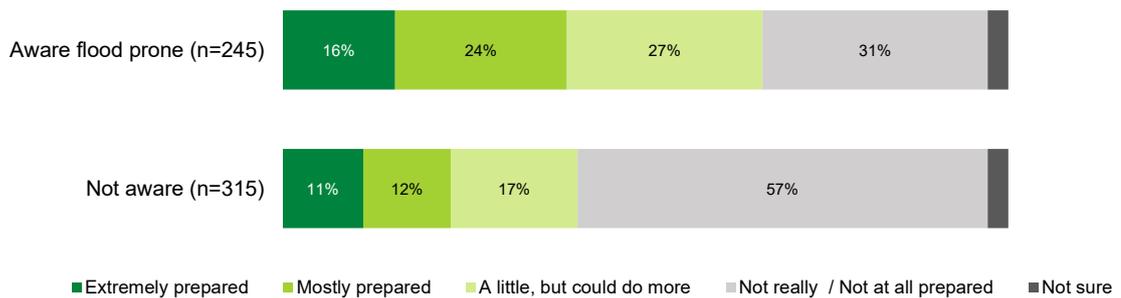
Figure 8: Perceptions of preparedness for a flood at their property



Source: Q12. How prepared do you feel you and your household are for a flood at the home or property where you currently live? Base, 2018 Tracking wave: Flood Prone residents, n=560, Non-Flood Prone residents, n=995. Weighted.

When looking at awareness of being at a flood prone address amongst those who are flood prone, as shown below, we see that there is a correlation between perceptions of preparedness and awareness. Those who are aware that they are flood prone are significantly more likely to say that they are ‘mostly’ or ‘a little’ prepared.

Figure 9: Perceptions of preparedness for a flood at their property by flood prone awareness (FP)



Source: Q12. How prepared do you feel you and your household are for a flood at the home or property where you currently live? Base, 2018 Tracking wave: Flood Prone residents, n=560, Non-Flood Prone residents, n=995. Weighted.

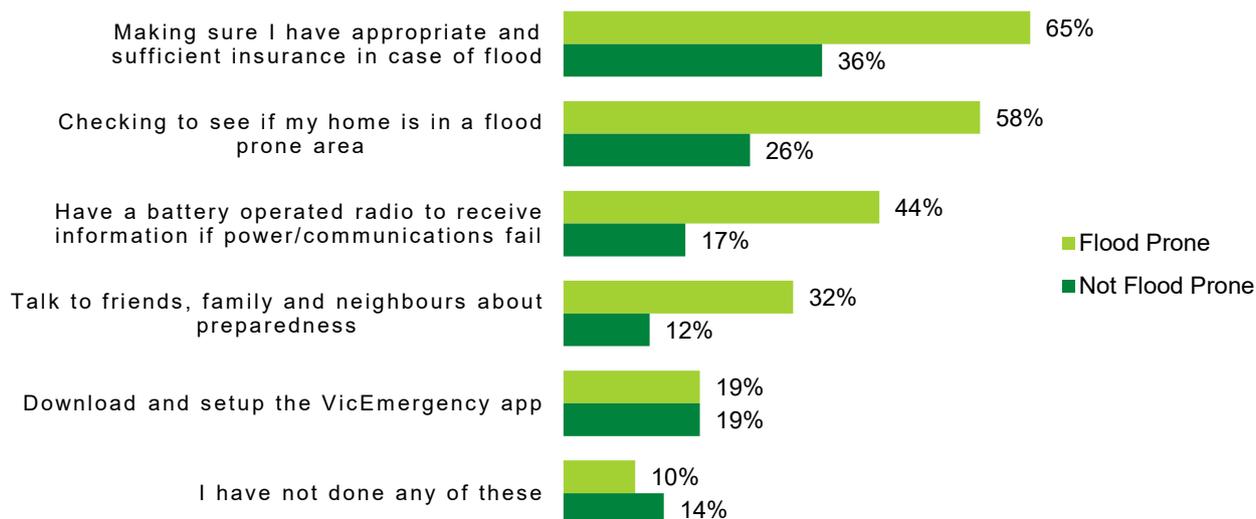
So while self reported preparedness is (encouragingly) much higher amongst those in flood prone areas, there is still nearly one in three who do not feel prepared, and preparedness is still relatively low. It is clear that

awareness alone is not enough to drive preparedness. Other factors complicate this journey from knowledge to action.

4.3 PREPAREDNESS ACTIONS

Overall, as shown below, 9 in 10 residents claim to have undertaken at least one disaster preparedness action in the past.

Figure 10: Actions taken to minimize the risk and potential damage from a natural disaster, including floods



Source: Q16. Which of the following have you done to minimise the risk and potential damage from a natural disaster, including floods? Base 2018 Tracking wave: Flood Prone, n=553, Non-Flood Prone, n=773. Weighted.

It is important to note the 2018 survey introduced new actions for consideration and removed those deemed not likely to impact real world preparedness. As such a pure comparison to the benchmarking survey was not possible. However, results are largely consistent with findings in the 2015 benchmarking phase (NFP 14% have taken no action vs 20% in 2015, FP 10% have taken no action vs 13% in 2015).

Nearly all flood prone respondents have taken some action (90%), with significantly more actions undertaken compared to non flood prone residents. The most common actions are consistent across flood prone and non flood prone residents (e.g. the number 1 activity undertaken was checking insurance for both groups).

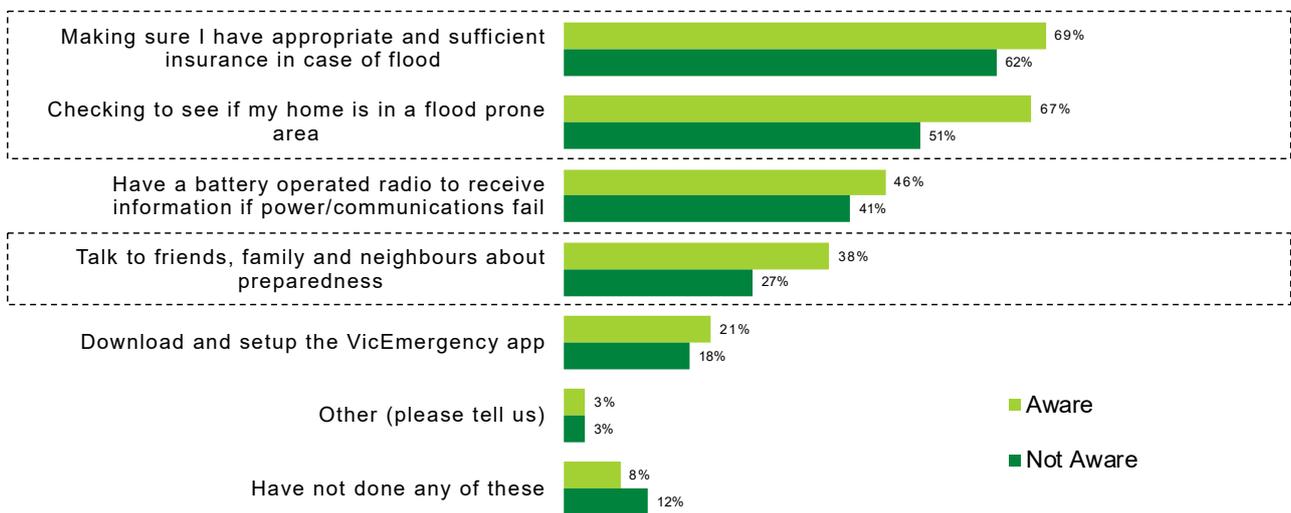
4.4 PATHWAY FROM AWARENESS TO PREPAREDNESS

The previous sections have revealed the current state of core flood prone measures in the PPWP catchment. Overall flood perceptions and awareness have not shifted in any meaningful way since the 2015 benchmarking phase. With that foundation, next steps are to explore how these measures fit together and begin to build the behavioural journey towards flood preparedness actions.

Awareness or perception of flood risk is the beginning of this journey. It is also the focus of most community education and outreach for disaster preparedness. As discussed earlier in this report, it is a natural assumption that if an individual is made aware of a risk they face then they will act in response. However, as behavioural science has shown, this is not necessarily the case. Humans do not always do what is in their best interests. For example, people do not automatically go to the gym when they know the risks of obesity, they do not quit smoking when they know the health risks, etc. Because we know that awareness is not the panacea, it is imperative to understand the drivers of flood preparedness in more detail.

As shown below, as more residents who are aware that they are flood prone have undertaken actions, awareness is an essential first step on the pathway to preparedness.

Figure 11: The impact of awareness on actions taken in flood prone areas



Source: Q5. To the best of your knowledge, is the home or property where you currently live at risk of flooding or may be affected by flooding? That is, are you in a 'flood prone' area? Remember that when we talk about 'flood' we mean water coming into your home or property from outside such as from heavy rain or a storm, and water rising from ground level, not flooding as a result of faulty plumbing or household accidents. Q16. Which of the following have you done to minimise the risk and potential damage from a natural disaster, including floods? Base, 2018 Tracking wave: Aware flood prone, n=245, Not aware, n=315. Weighted.

Awareness of flood risk is correlated with significantly more action amongst residents in Flood Prone areas on 3 core actions (highlighted in the chart above) and leads to significantly more protective actions to be taken overall (23% of those aware report 4 or more actions, compared to only 13% of those unaware of their risk).

It is important to note that these significant differences are all with regard to information seeking behaviours which arguably require far less effort and resource commitment than other actions. As discussed later in this report, this is not surprising as ease of action is a key factor influencing behaviour.

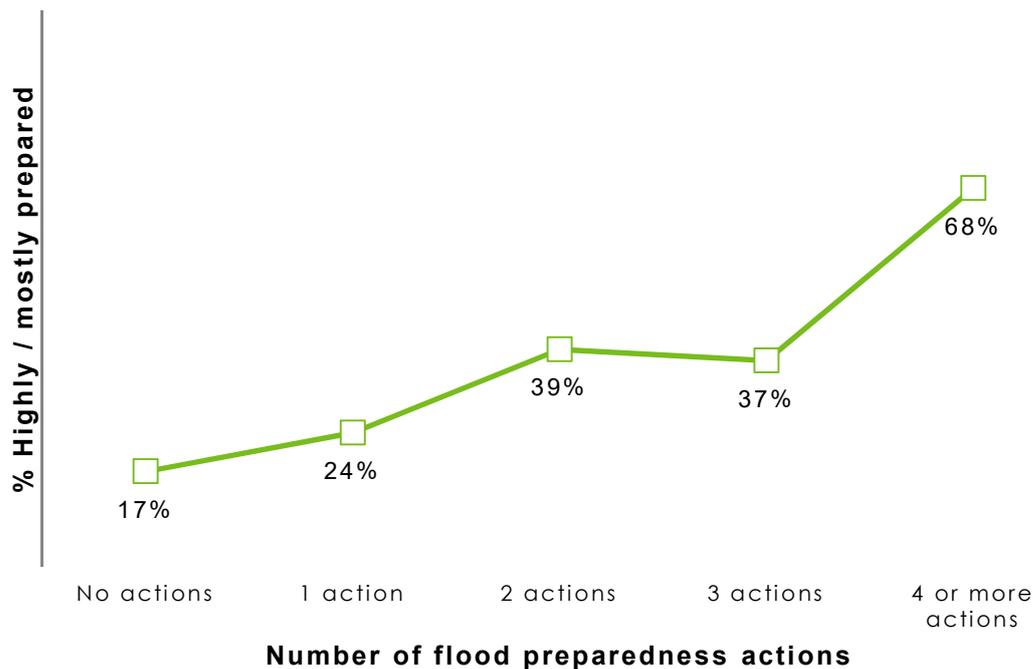
Despite this correlation and the significant differences in measurements, it is clear that the differences in behaviours are not large enough to conclude that awareness of flood risk alone will drive flood preparedness. This confirms results discussed earlier in this report in relation to flood risk awareness and perceptions of preparedness: namely, the large difference in awareness amongst the flood prone population (+28 percentage point difference) is not reflected to the same degree in perceived preparedness (+10 percentage point difference in feeling mostly/extremely prepared).

In fact, of those aware of their risk, 59% in flood prone areas still feel they are not well prepared for the risk. There is clearly far more that needs to occur following awareness to increase the amount of preparedness actions undertaken and increase residents perceptions of preparedness.

If awareness is the necessary first step that will help move residents towards action, then the assumption must be that taking those preparedness actions will lead to stronger perceptions of preparedness.

As shown below, the data does indeed show a strong correlation between the number of actions taken and the feeling of preparedness.

Figure 12: Feelings of preparedness by number of preparedness actions taken in Flood Prone areas



Source: Q16. Which of the following have you done to minimise the risk and potential damage from a natural disaster, including floods? Q12. How prepared do you feel you and your household are for a flood at the home or property where you currently live? Base, 2018 Tracking wave: Flood Prone, n=560. Weighted.

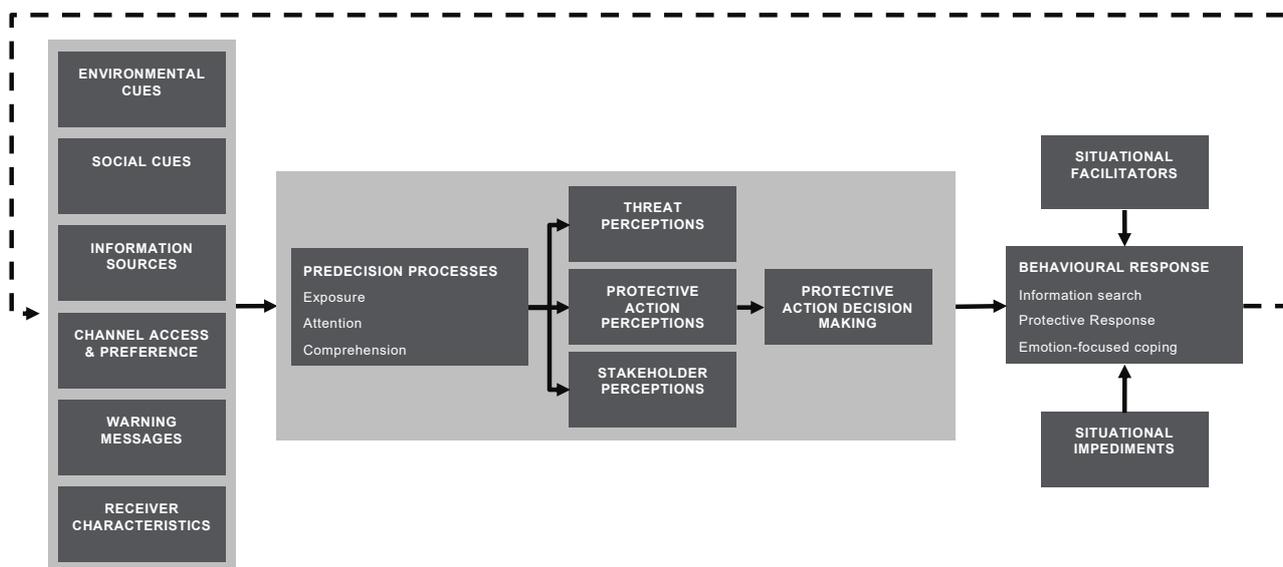
This suggests that taking action does positively contribute to perceptions of preparedness. As discussed in a later section of this report, confidence in one's ability to take effective action (self-efficacy and action efficacy) is a major driver of actually taking that action. If an individual possesses high self-efficacy they are likely to take more action. Thus, a correlation exists between action and preparedness perceptions, but it is a multi-dimensional relationship.

As expected, the results show that a correlation and pathway exists between awareness and action, and action and perceived preparedness, but that the path itself is far from straightforward. Awareness may lead to no action, the wrong action or not enough action. While action both influences and is influenced by the confidence of perceived preparedness. While we can draw a line from awareness to increased action to increased feelings of preparedness, the remainder of this report discusses how to drive people along this pathway to preparedness.

5. PROTECTIVE ACTION DECISION MODEL (PADM)

Melbourne Water and VICSES’s goal is to encourage behaviour change, namely to encourage PPWP residents to take actions which will minimise their risk and resulting damage from a flood and assist with recovery in the aftermath. To inform this goal we drew on the Protective Action Decision Model of behaviour change, shown below.

Figure 13: The Protective Action Decision Model



This model was chosen as a basis for this analysis as it has been developed with disaster preparedness action in mind, making it ideally suited for our purposes. Without restricting our thinking, this model was used to guide our understanding of how individuals move from awareness to action and assisted in identifying key barriers and drivers at each stage of the decision-making process.

The PADM is designed to predict if a protective action will be taken. While the PADM may have been originally designed with short term actions in mind, it is still relevant and applicable to long term decision making potentially far removed from the event itself. The model is relevant for understanding rapid protective action against an immediate threat, for example the environmental cues of rising water outside the home. In the scenario of a threat in the future an environmental cue might include noticing that the drains on the street have not been cleaned in quite some time.

We have also treated the process as a straight line from start to end as it allows us to inform future strategies in a more straightforward manner. While in reality the decision process is far more fluid, with information arriving at different points of the process and perceptions shifting rapidly in response, a linear approach still provides relevant insights.

The model itself can be broadly split into three stages discussed in more detail below.

5.1.1 Pre-decision stage

The first stage is the Pre-decision stage. This is informed by the social and physical environment, which feed the pre-decision processes.

The model refers to 6 core elements of this stage:

- Environmental cues – Elements of the environment which would inform the perceptions of the threat. E.g. a river nearby, blocked drains in the street
- Social cues – Social interactions or stimulus around the threat. E.g. conversations with family / friends / neighbours, never seeing an emergency kit in anyone's home
- Information sources – Where the individual may be exposed to information about the threat. E.g. Social media, television, etc
- Channel access and preference – Where individuals prefer to get information from. E.g. An elderly couple may download the VicEmergency app but prefer to watch television news
- Warning messages – Has the individual been warned, or do they have access to a warning system
- Receiver characteristics – demographics that may inform their exposure or understanding of the threat. E.g. Language barriers may play a role
- Each of these 'inputs' inform how the individual perceives the situation. An individual must first be 'exposed' to the input. For instance, walk past a poster for '15 to Float' on the way to the train. Then they must pay attention to it (actually read the poster). Finally, they must comprehend the message – if the individual thinks it is an ad for a magician floating a car they are not comprehending the intended message. This is a common funnel in advertising and marketing and will be familiar to some readers in that context.

5.1.2 Perception stage

This stage informs how an individual will perceive their situation:

- Threat perceptions – For our purposes this is split into two parts. First, is the threat likely to happen. In other words, will there be a flood, and will it happen to me? Second, what will the severity be? In other words, do I need to protect myself or can I simply weather the storm? It is worth noting that likelihood to happen at all and likelihood to happen in the near future are very different concepts and will be discussed in more detail later.
- Protective action perceptions – Assuming there is a threat, the next step is to ask, 'what actions can I take against this threat'? What are the traits of those actions (easy, expensive, etc)? And if I take them, will they actually help?
- Stakeholder perceptions – We can simplify this into two distinct portions. Firstly, of those involved, who has responsibility? I won't go clean a drain if I think it is the government's responsibility. Secondly,

who has the capability to act? Within this second portion lies self-efficacy, or the belief that I can complete an action or do anything to prevent the threat. If I don't know the first thing about putting together a sandbag it is unlikely I will see this as an action I can realistically undertake.

5.1.3 Decision making and behavioural response

Finally, informed by the social and physical environment, and based on how the threat, the action and the stakeholders are perceived, the individual will decide to act or not. They may choose to search for more information, they may take a protective action (our desired behaviour), or they may react emotionally (for instance, by telling themselves nothing can be done).

Importantly, there is one final step that is of the utmost importance: situational facilitators and detractors. In behavioural science this is referred to as the intention-action gap. An individual may have been convinced that preparing an emergency kit is an important step to take and that they will do it when they get home, but it never happens.

In the context of flood preparedness, we know that often despite an individual's belief that a threat is real and action needs to be taken, they will do nothing. An understanding of situational facilitators which can drive actual action is key to the success of any efforts by Melbourne Water and VICSES and is an important benefit of this model.

With the PADM providing a clear framework for the decision process each stage has been explored to gain a better understanding of where and how we can intervene to promote action with regard to flood preparedness.

5.2 THE SOCIAL AND PHYSICAL ENVIRONMENT

For the current phase of research, we focussed on two main areas of the social and physical environment: the social cues being received around flooding, and the information sources where individuals have seen flood related information.

5.2.1 Information Sources

As a starting point, we needed to understand what information was getting through to residents regarding flooding. There is a range of information sources available to residents from television news broadcasts to council brochures to government education campaigns. However, if individuals are being exposed to this information, it appears that very little is being attended to or cutting through.

When asked, only 10% of respondents recalled any advertising or information about the risk of floods in the few months prior to the survey⁷.

⁷ Source: Q23. Do you recall any advertising or information about the risk of floods in the last few months? Base, 2018 Tracking wave: Flood Prone, n=560. Weighted.

Of that 10%, the majority recall weather warnings, news or advertising. In fact, less than 1% (11 people in total) of our entire sample recalled any 'education' about flood risks (e.g. clean your gutters, prepare an emergency plan, etc).

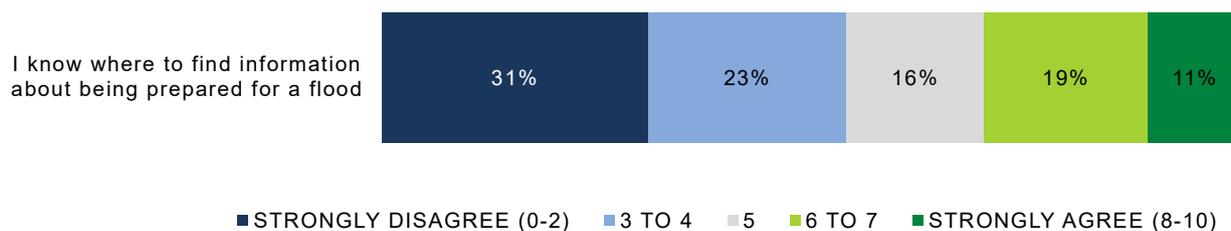
This is clear evidence that information on flood risk is not cutting through to the broader Melbourne population, and the little that is only occurs when the weather or news is speaking about potential flooding: i.e. has urgency and immediacy which drives cut through. In large part this is not a surprise given the targeted communications approach currently utilised.

These results also suggest an opportunity to use weather warnings as a medium for broader educational messaging.

Overall, results suggest an information gap exists across greater Melbourne generally.

Further, as shown below, if an individual actively choses to seek out information about being prepared for a flood very few report that they feel confident they would know where to find that information. Note this question was not asked of the CATI component so reflects NFP results.

Figure 14: Agreement with the statement (NFP)



Source: Q15. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is 'strongly disagree' and 10 is 'strongly agree'. Not asked of CATI component. Base 2018 Tracking wave: Non-Flood Prone, n=995. Weighted.

This suggests that there is a significant amount of work to do in communicating with PPWP residents broadly. A priority must be having a clear source of information for those seeking it. The 2015 benchmarking study noted the variety of sources of information mentioned by respondents when seeking information, which could cause confusion for those looking for a quick and simple answer.

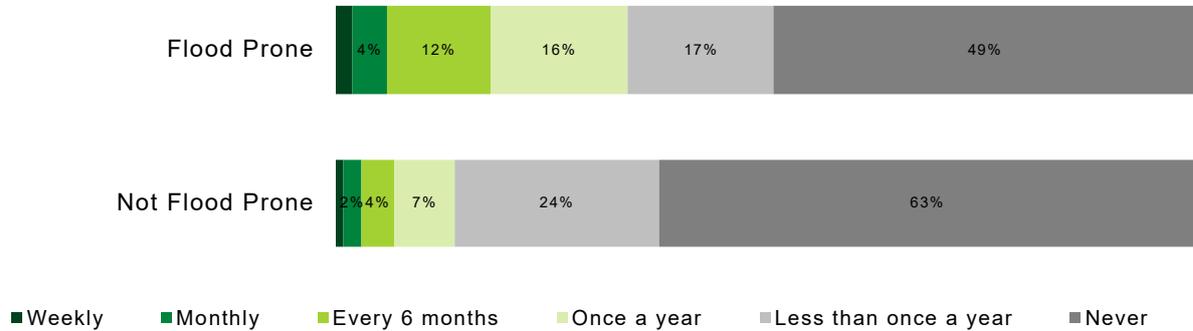
5.2.2 Social Cues

As social creatures we often look to others for clues as to how we should behave, particularly when there is some uncertainty about the situation. However, as this research indicates, when it comes to flood risk, social cues appear almost entirely against preparedness.

As shown below, very few residents are speaking to others about the potential of flooding. Two in three Flood Prone residents (66%) speak to others about the potential of flooding never or less than once a year. Only

6% do so once a month or more frequently. These figures drop even further for Non-Flood Prone residents.

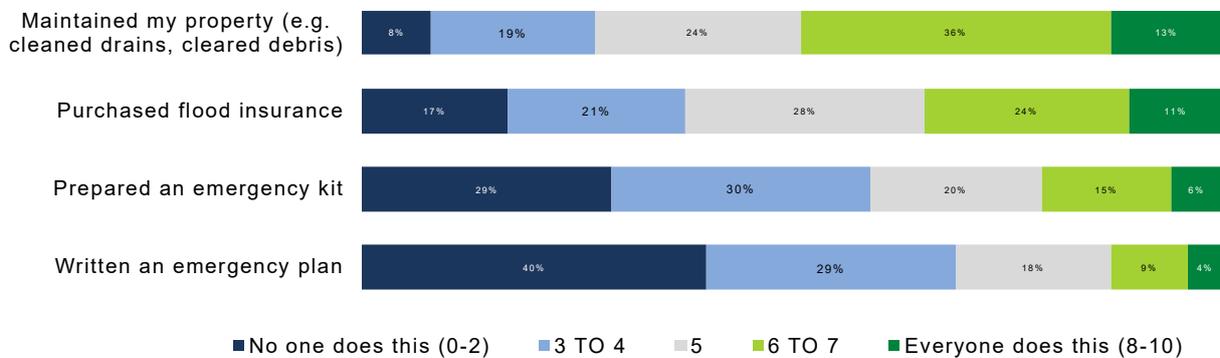
Figure 15: Frequency discussing flood risk with family, friends, neighbours



Source: Q20. How often do you discuss the potential for flooding in your area with family, friends or neighbours? Base 2018 Tracking wave: Flood Prone, n=560, Non-Flood Prone, n=995. Weighted.

Results indicate that flood preparedness is also not perceived in the broader social environment. As shown below, very few residents feel that preparing an emergency kit or emergency plan is something that others do. Even maintaining property, the most noticed preparedness action, is only seen to be done by everyone by 1 in 10 residents.

Figure 16: Perceived action taken by Melbournians (NFP)



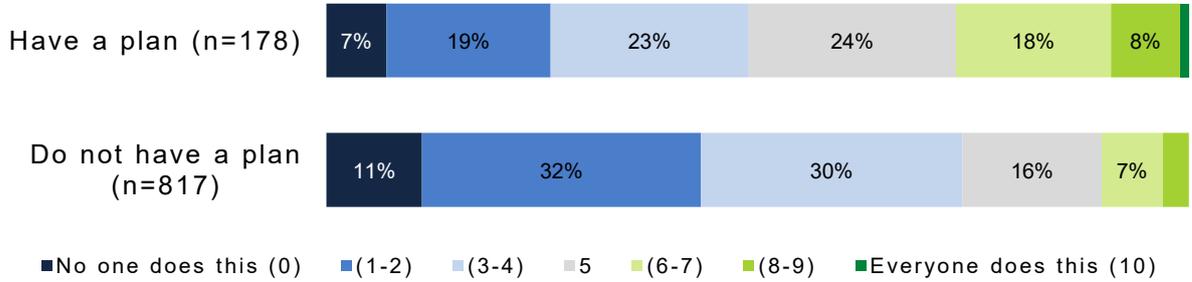
Source: Q21. Do you think Melbournians have taken the following protective actions? Base 2018 Tracking wave: Non-Flood Prone, n=995. Weighted. Not asked of CATI component

For residents if flood preparedness is not heard about and is not seen as something undertaken by others, then it is assumed to not be important. Individuals will ask themselves “Why should I prepare if no one else is?” The social cue to prepare is lacking.

As shown below, residents are far more likely to have taken that action if they think others are taking that action.

Figure 17: Action taken vs perception others take that action (NFP)

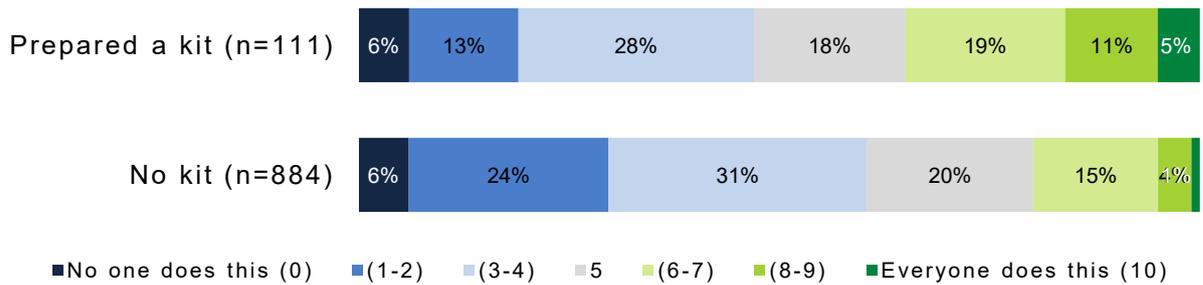
Perception that other Melburnians have a plan in case of flooding amongst those who have a plan / do not have a plan themselves



Perception that other Melburnians have checked their insurance in case of flooding amongst those who have / have not checked their insurance themselves



Perception that other Melburnians have prepared an emergency kit in case of flooding amongst those who have / have not prepared an emergency kit themselves



Source: Q21. Do you think Melbournians have taken the following protective actions? Q16. Which of the following have you done to minimise the risk and potential damage from a natural disaster, including floods? Base 2018 Tracking wave: Non-Flood Prone, n=995. Weighted. Not asked of CATI component

Social norms can be a powerful ally for Melbourne Water and VICSES and it is worth exploring their use in future communications.

5.2.3 Barriers in the Social and Physical Space

It is clear that for residents flood preparedness is not top of mind. In the social and physical space there are 4 key barriers that must be overcome:

| | |
|-------------------------------------|---|
| <p>LACK OF EXPOSURE</p> | <p>Targeted campaigns are important, and VICSES appears to be doing an excellent job implementing them. However, without exposure it is impossible to raise the awareness of risk, the first step in generating action.</p> <p>To that end, there must be a balance between targeting individuals and ensuring entire communities are regularly exposed to information.</p> |
| <p>LACK OF ATTENTION</p> | <p>The research has clearly shown that the information that is out there is not cutting through. As we will see later in this report, there needs to be an emotional connection for individuals or they will not pay attention to communications.</p> <p>The 15 to Float and other disaster preparedness campaigns give us clear examples to follow.</p> |
| <p>LACK OF COMPREHENSION</p> | <p>While explored in more detail in the 2015 benchmarking research, the 2018 qualitative phase indicated there is confusion around what to do to prepare for a flood. There are a laundry list of potential actions to take and individuals then get overwhelmed or are unsure where to focus their limited time and energy.</p> <p>To successfully drive behaviour it is critical to reduce the cognitive load, i.e. deciding on the one thing we want to see individuals do and focusing messaging around that.</p> |
| <p>NOT A SOCIAL NORM</p> | <p>Finally, social norms are working against flood preparedness actions. Phrasing communications to emphasise how others <u>like them</u> are preparing will help generate a desire to prepare.</p> <p>A statement such as “75% of people will prepare their homes in some way before winter for storms, how will you prepare?” will make preparation feel normal and thereby encourage action.</p> |

Fortunately, there are very clear examples of effective strategies for communications campaigns. These typically involve an emotional connection and simplicity of message to drive attention and comprehension. Likewise, examples of the use of social norms and their successes and failures are also prevalent in the literature. Of course, how we build a campaign around these ‘bones’ to make it actually effective for flood preparedness is a more difficult question. The next sections will shed light on potential strategies to consider when developing a campaign.

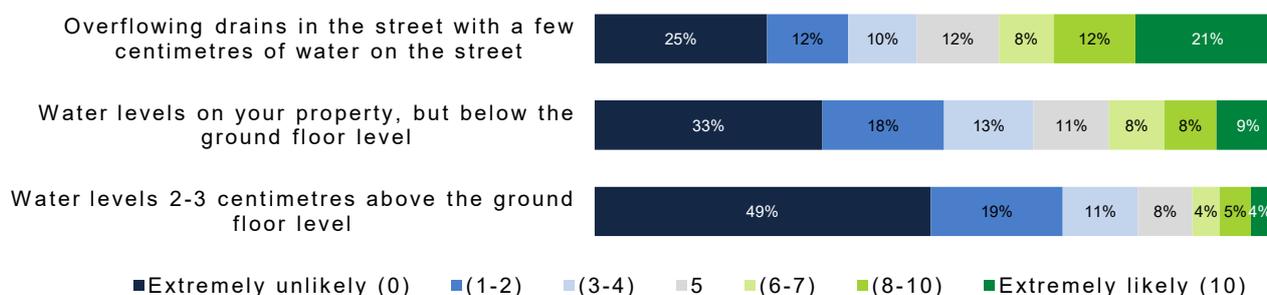
5.3 THREAT PERCEPTIONS

The social and physical environment, and what is taken in and comprehended, informs the next stage of the process: the Perception Stage. The first part of that is the threat perception, namely is there a threat that I need to worry about soon and how will it impact me? If the answers to these questions are negative it is unlikely action will be considered.

5.3.1 Likelihood of the threat

Broadly speaking, as shown below, most PPWP residents feel a flood happening at their property is unlikely. Amongst residents who are actually flood prone, only 1 in 10 (13%) feel it is likely water from a flood will enter their home. Further, 1 in 2 (50%) find it extremely unlikely they will have flood water anywhere on their property, with one in four (25%) giving the lowest likelihood rating possible (0 out of 10).

Figure 18: Perceived likelihood of a flood at these levels at their property in the next 10 years (FP)



Source: Q9. On a scale from 0 to 10, where 0 is 'extremely unlikely and 10 is 'extremely likely', how likely is it that the home or property where you live will experience one of the following flood levels in the next 10 years? Base 2018 Tracking wave: Flood Prone, n=560. Weighted

This indicates that generating awareness of the flood risk broadly is only the starting point. Once aware, Melbourne Water and VICSES will still need to convince individuals that there is an actual threat to them.

Adding a layer of difficulty in communicating the threat, is that the threat must appear not only likely, but also relatively urgent. Only 5% of individuals strongly agree a flood could happen in their area in the next 12 months⁸. This means that even if a resident believes a major flood could happen in their area, few think it will happen soon: there is no sense of urgency to prepare. Further, even if a flood did occur, 45% of respondents strongly agree they would have plenty of warning. Again this contributes to a lack of urgency. The urgency will 'start' when the warning is received. The result is then (natural) procrastination. Flood preparedness actions are not rising to the top of the priority list. All the hard work by Melbourne Water and VICSES convincing residents to act may then be lost, as once

⁸ Q15. How strongly do you agree or disagree with the following statements? "I would expect a flood could happen in my area within the next 12 months" (0=strongly disagree to 10=strongly agree).

convinced they need to act, many simply put preparedness off for another day. The challenge, and the opportunity, is to make the threat feel more immediate.

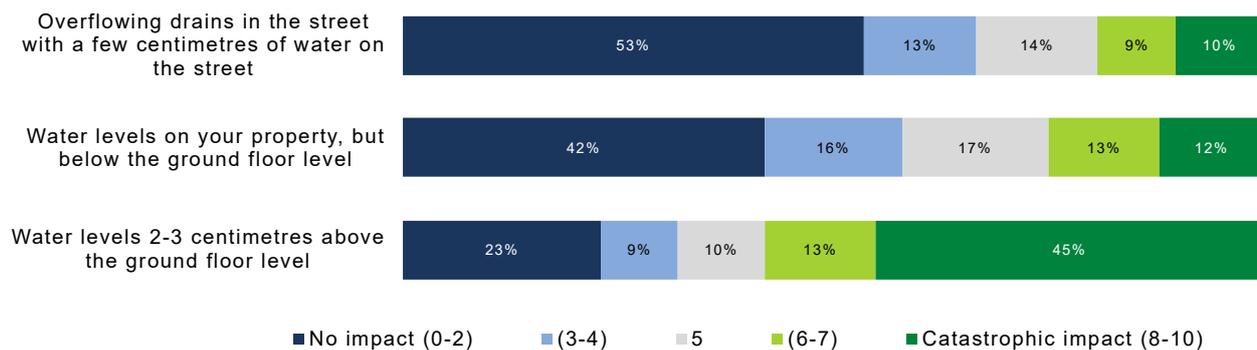
5.3.2 Severity of the threat

Along with convincing residents that a flood could happen to them, the potential impact that will have also needs to be conveyed. The 2015 benchmarking research showed how individuals downplay or, actually misunderstand, the actual impact a flood can have – a sentiment echoed in this wave.

■ *“A flood that covers a few cm in your home is only a hassle.”*
PPWP resident

As can be seen below, 1 in 4 residents still believe water levels at 2-3cm above their ground floor levels will have almost no impact on them.

Figure 19: Perceived impact of flood levels (FP)



Source: Q22. Think about the impact on you, your family, your day-to-day life and your house and contents. Use the scale below where 0 is 'no impact at all' to 10 being 'catastrophic impact' to rate the amount of impact for each level listed. Base, 2018 Tracking wave: Flood Prone, n=560. Weighted

These results strongly suggest there is not enough experience or understanding of the repercussions of “low severity” flooding in the community. This is not overly surprising given the infrequency with which it occurs: as indicated earlier only 1 in 10 residents have ever had flood waters enter their home.

Melbourne Water and VICSES needs to educate residents about what apparent ‘low level’ flood waters can do: make the impact real and tangible and generate an emotional connection.

Discussions indicate that residents often think of flood severity as how it impacts the property rather than themselves personally. This is part of the reason why insurance checking is such a popular action. In comparison, fire preparedness has had relatively greater success because the loss and severity of the impact on the family and irreplaceable objects or life is clearly felt. If residents feel a carpet is easy to replace with insurance, to

positively impact preparedness actions, then Melbourne Water and VICSES need to change the narrative to one of what cannot be replaced, even following a “low severity” flood.

5.3.3 Barriers in the Threat Perception Space

The perceived threat flooding poses is a fundamental part of getting individuals to act, and also one of the most difficult to influence. There are a number of layers of barriers Melbourne Water and VICSES must overcome. A threat must be likely, urgent *and* severe for residents to act. If there is too little threat perception, then we risk no action being taken.

But adding to the challenge, is that too great a threat perception and residents will doubt that any actions will make a difference and we risk them ‘sticking their heads in the sand’. Of concern, currently only 20% of residents feel floods are something you can prepare for driving feelings of helplessness and undermining taking action.

The main barriers faced that need to be addressed to drive behaviour change are:

- There won't be a flood – Residents believe a flood is unlikely in their area, or that they will have time to act before it arrives in the near or distant future. Therefore, why prepare?
- It won't be bad if it does happen – Many residents do not understand the impact a flood will have on them, even at only 2-3cm above ground floor level. It may require changing the narrative about what cannot be easily replaced, or providing context and examples that will hit close to home as the benchmarking research discusses.
- If it is that bad, then insurance will cover it – A very easy way to mentally dismiss a threat. Core communications will touch on the things insurance cannot protect/bring back – just as fire campaigns emphasise survival.
- If it is that bad, then nothing can protect us – If threat perceptions go too far then individuals will cope emotionally. Showing that preparedness leads to coping will be key to allowing us to ramp up the perceived threat without residents simply shutting down emotionally.

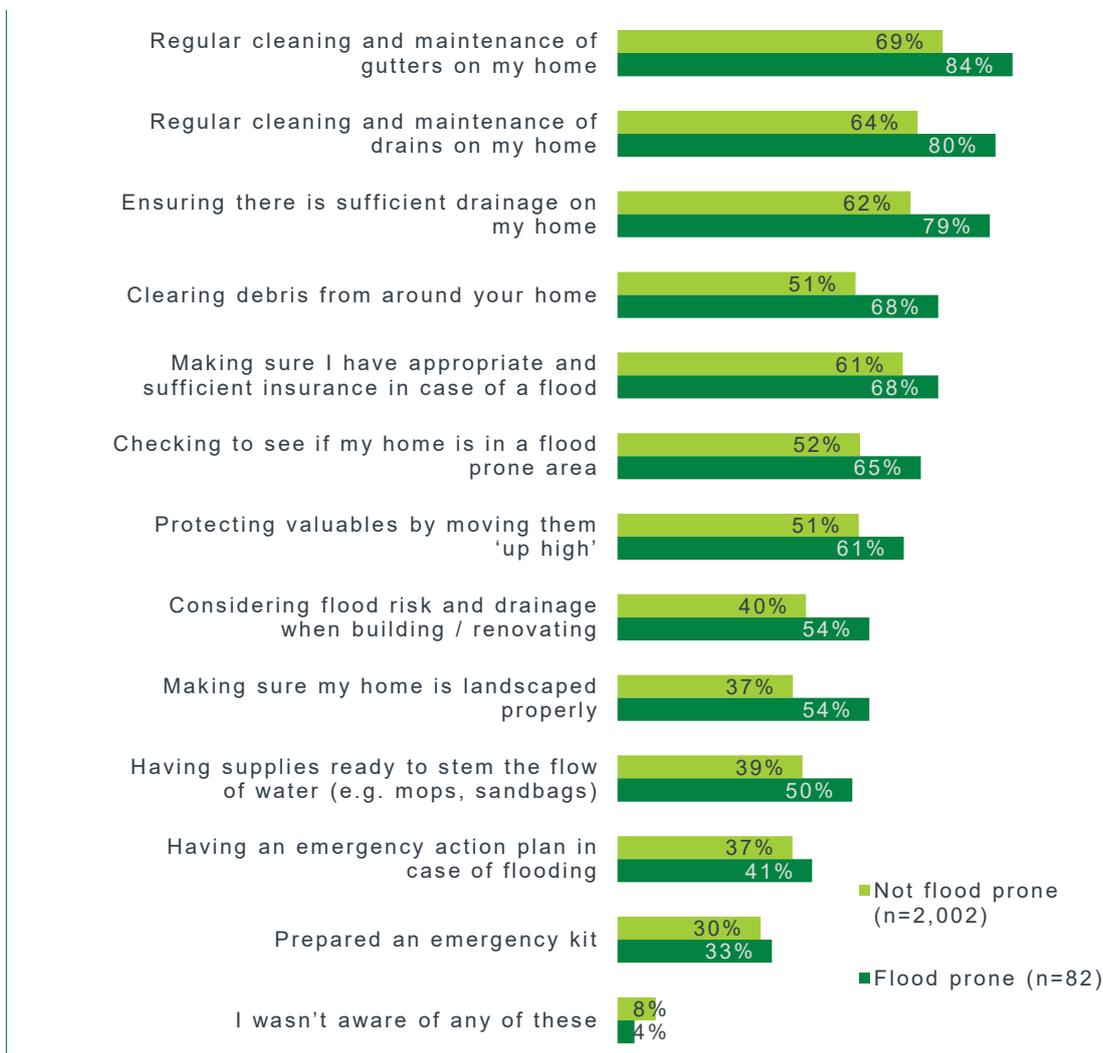
5.4 PROTECTIVE ACTION PERCEPTIONS

The second portion of the Perception stage that impacts actions taken is the perception of potential protective actions individuals can take.

5.4.1 Action Awareness

To begin we must understand what residents actually know regarding protective actions. As shown below, the benchmarking phase of research found mixed levels of awareness of specific actions. ‘Regular cleaning and maintenance of gutters’ was relatively well known at 84% for flood prone areas and 69% in non flood prone areas, while ‘preparing an emergency kit’ was far lower at 33% flood prone and 30% non flood prone.

Figure 20: Awareness of Flood Risk Minimisation Strategies

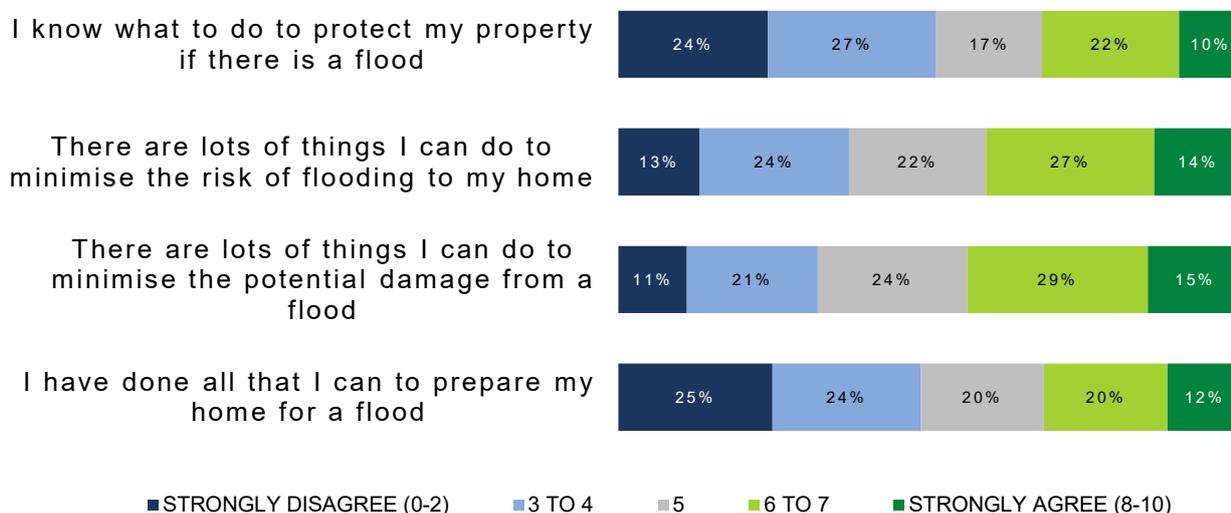


Base: 2015 Benchmarking Those who provided a valid address, n=2,084. “There are a number of ways to minimise the risk of flood damage to your home. Before today, which of the following were you aware of as ways to minimise the risk of flooding and the potential damage from flooding?”

There was clearly room to improve community awareness of protective actions.

As shown below, the current research builds on this story, revealing that few residents agree (32%) that they would know what to do to protect their property if there is a flood.

Figure 21: Attitudes towards flooding (NFP)



Source: Q15. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is 'strongly disagree' and 10 is 'strongly agree'. Base, 2018 Tracking wave: Non-Flood Prone, n=955. Weighted.

This reveals the uncertainty many residents have when it comes to acting before or, more alarmingly, during a flood.

A portion of this uncertainty likely stems from the fact that there are so many potential preparedness actions – for flooding, but also for other natural disasters. Simplifying the messaging around flooding will be important in future communications.

5.4.2 Action Efficacy

As with flooding in general, awareness of actions that can be taken is an essential first step. Residents must also feel that the actions they take will truly assist them in minimising risk, minimising damage or facilitating recovery. The research reveals polarised opinions amongst residents.

As shown above, only slightly more residents who are not flood prone would agree than disagree that there are lots of things they can do to minimise risk or damage to their home. Further, as shown below, almost 2 in 5 flood prone residents state that there is nothing they can do to avoid damage to their homes.

Figure 22: Agreement with statement: “There is nothing I can really do to avoid damage to my home and property from a flood”



Source: Q15. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is 'strongly disagree' and 10 is 'strongly agree'. Base, 2018 Tracking wave: Flood Prone, n=560, Non-Flood Prone, n=995. Weighted.

Thus, for a large portion of residents convincing them to act will require showing them how the action will benefit them during and after a flood.

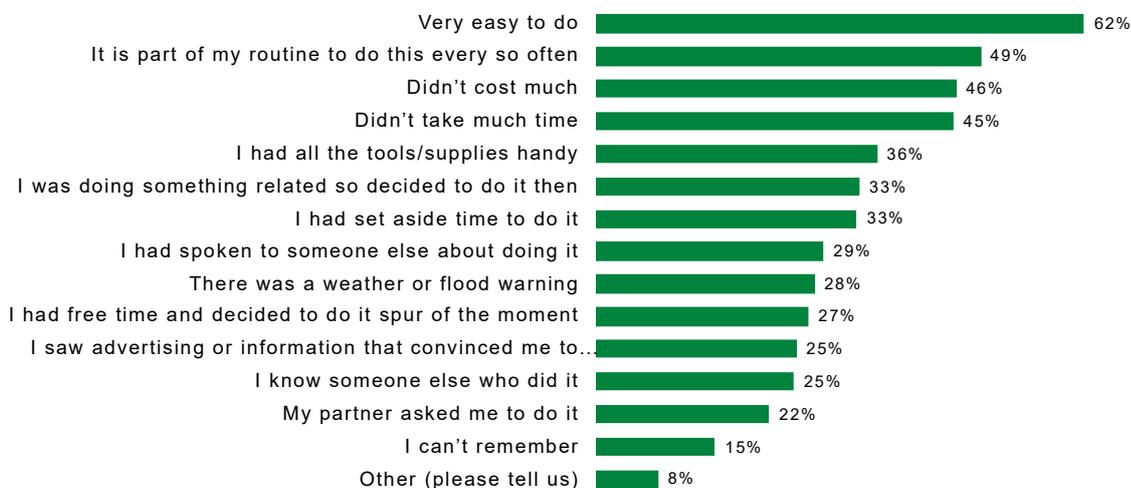
Further research may be needed in this space to provide specific evidence for which actions Melbourne Water and VICSES should champion and provide proof to residents as to how the actions impact their preparedness and recovery.

5.4.3 Action Traits

Protective action perceptions also provide insights into the intention-action gap. Understanding that an action will work and actually taking that action are two very different things. For example, being aware of the need to floss and understanding that it will help dental health does not necessarily lead to flossing. In a similar fashion, the traits of possible flood preparedness actions play a large role in residents determining whether or not they will actually end up taking that action regardless of their in principal ‘support’ for the action.

When exploring why residents took certain protective actions we looked at which traits were most often associated with that action. As shown below, if the action was felt to be easy it was more likely to be undertaken (62%).

Figure 23: Reasons for taking a protective action (NFP)



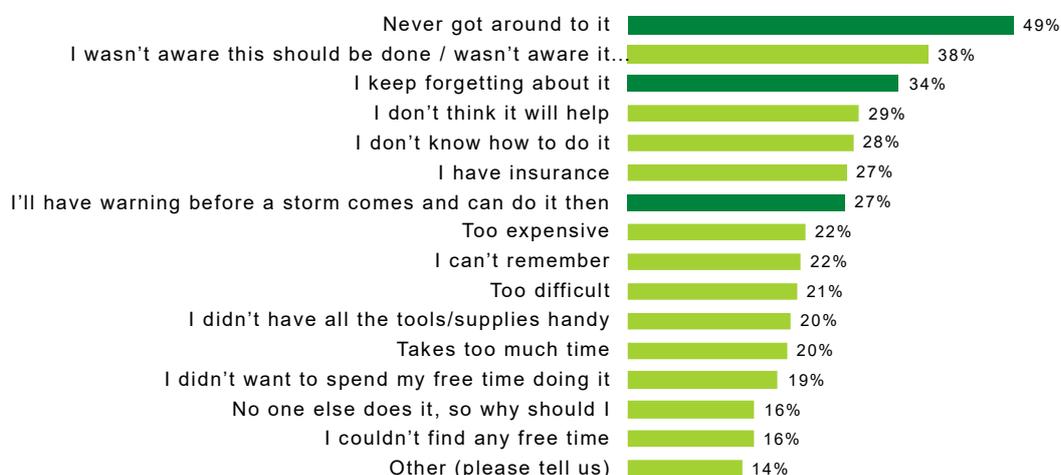
Source: Q17. What are the reasons you did each? Base, 2018 Tracking wave: Non-Flood Prone, n=995. Weighted. Not asked of CATI component.

In addition, reducing the level of effort required, reducing the cost and reducing the time required (or making it part of a routine), are the most common ways to get a task done.

This is regularly seen in behavioural science: to generate action planning actually takes a back seat to removing these most basic barriers. Social interaction, having supplies ready and seeing advertising all fall well below simplicity in effectively driving action. This is not to say these other elements are not important, but simply to emphasise that a difficult or costly task is far less likely to be completed regardless of its merits.

The research also explored the other side of the equation: what traits of an action were most common when residents did not take the action. What this analysis revealed is again the importance of the intent-action gap. As shown below, two of the three most common reasons for not acting were residents simply forgetting to do so despite their best intentions.

Figure 24: Reasons residents have not taken a protective action



Source: Q18. What are the reasons you did not do each of the following? Base, 2018 Tracking wave: Non-Flood Prone, n=995. Weighted. Not asked of CATI component.

There are two major encouraging elements to these results. Firstly, the fact that many residents intend to act. This indicates that Melbourne Water and VICSES may only need to bridge that intent-action gap for many residents, rather than move them along the entire behaviour change process from awareness to action. Secondly, very few residents feel preparedness actions are too difficult to complete (21%) or take too much time (20%) or money (22%). These findings suggest that small changes may be all it takes for residents to act (e.g. make an action a tiny bit easier or provide a small nudge to bridge the intent-action gap).

5.4.4 Barriers in the Protective Action Perception Space

The research provides clear guidance around what is important in the Protective Action perception space and what barriers must be overcome:

- Residents don't know what actions to take – This may be due to so many disaster preparedness actions being available. Research is required into which actions work best and focus on those in communications.
- Residents don't know which action to start with as there are so many - Chunking the actions into larger “groups” will simplify this process for residents, e.g. Property (gutters and building regs), Plan (emergency plan, accommodation), Pay (insurance). Three P's feel simpler than 5 actions.
- Residents don't believe the actions will work – This builds off the research recommended about which actions to take. Once it is known which actions actually work that justification and evidence can be provided in communications to convince residents they can make a difference.
- Too hard basket – Make actions simple and they are most likely to get done. E.g. An already put together emergency kit available at the checkout of a supermarket is easier to get than 'building' one from elements that have to be sourced and purchased individually.
- Intent-Action gap – Melbourne Water and VICSES work may be getting many residents most of the way there. A simple trigger may be all it takes to turn intent into action, this will be discussed in more depth later.

5.5 STAKEHOLDER PERCEPTIONS

The final factor contributing to whether individuals decide to act in relation to flood preparedness is how they perceive the role and responsibilities of the various stakeholders involved. The two core considerations are who is responsible for various actions and who is capable. Individual capability, also referred to as self-efficacy, (the perceived ability to actually complete an action) is frequently identified in disaster preparedness literature as a core component of the decision to act.

5.5.1 Responsibility

There are three key stakeholders in flood preparedness, government / authorities, insurance, and the community/individual resident. Their perceived responsibility at various stages is summarised overleaf.

Table 2: Responsibility as perceived by residents

| Stage | Government | Insurance | Resident |
|---|------------|-----------|----------|
| Prevention | ✓ | | |
| Warning community of future risk | ✓ | ✓ | |
| Warning community during flooding event | ✓ | | |
| Preparing individual homes for floods | | | ✓ |
| Preparing the community for floods | ✓ | | ✓ |
| Post flood | ✓ | ✓ | |

5.5.1.1 Government

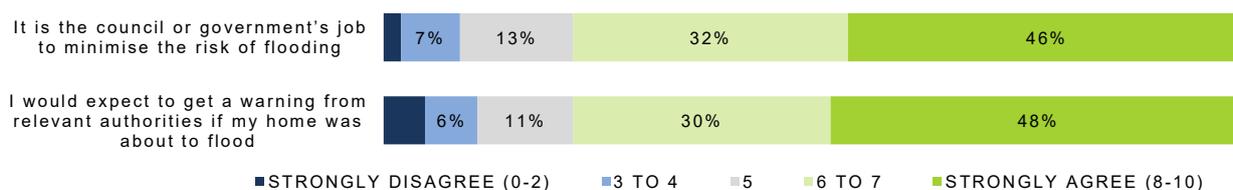
As we can see above, government and authorities are felt to hold a high level of responsibility at multiple stages. They are felt to be responsible for infrastructure maintenance and building regulations that prevent flooding, for warning the community of their risk and for assisting the community during and following a flood.

In fact, 91% agreed that the government has an obligation to inform the community of their risk if they are in a flood prone area.⁹

In discussions with residents, many were unwilling to accept the excuse that government departments do not have enough resources to maintain assets and prevent all floods. Particularly for those individuals who were allowed to build in areas where floods occur frequently, they feel they should have been warned or prevented from building in that location.

As shown below, the clear majority of residents feel that the government and or other authorities have a responsibility to warn and minimise risk.

Figure 25: Responsibility perceived by residents



Source: Q15. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is 'strongly disagree' and 10 is 'strongly agree'. Base, 2018 Tracking wave: Non-Flood Prone, n=995. Weighted.

We note that the way the questions were framed for this section may impact results. For instance, asking if government has an obligation to inform the community of their flood risk is likely to generate different answer than asking if people should be responsible for knowing how to

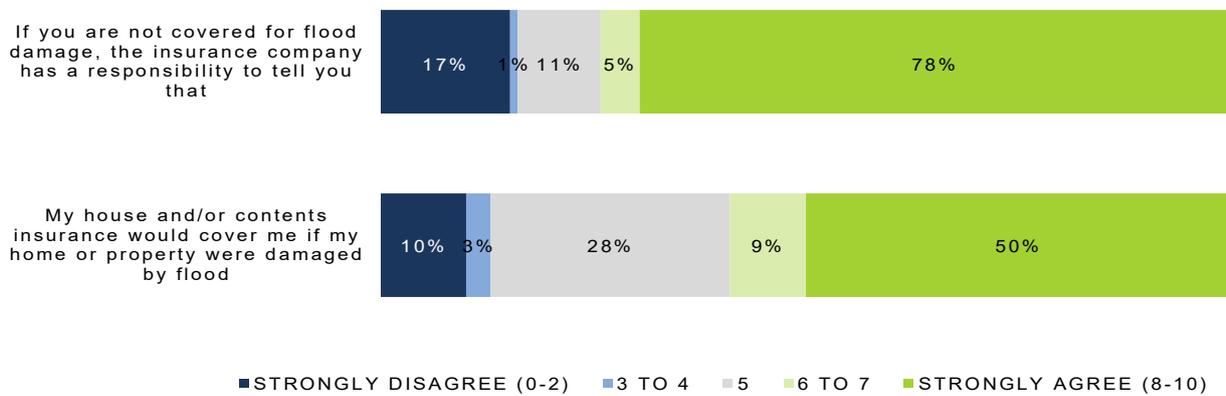
⁹ Source: Q8. Do you feel the government have an obligation to inform communities about their flood risks? Base, 2018 Tracking wave: Non-Flood Prone, n=995. Weighted

protect their home. Having said this, other aspects of the research suggest this finding is legitimate despite the framing of the question.

5.5.1.2 Insurance

Insurance coverage is the most common protective action residents take, and this is reflected in the role it is associated with in the flood preparedness process. It is something that is understood and has clear benefits - it is there to help pick up the pieces. What is worrying is that it appears that this is in large part taken for granted by many residents. In both the benchmarking research and this phase, it is clear that the impact of a flood is seen to be minimal, and residents do not understand the time or effort insurance claims may require. Additionally, as shown below, almost 9 in 10 flood prone residents agree that the insurance company has a responsibility to tell you if you are not covered for flood damage.

Figure 26: Responsibility perceived by residents (FP)



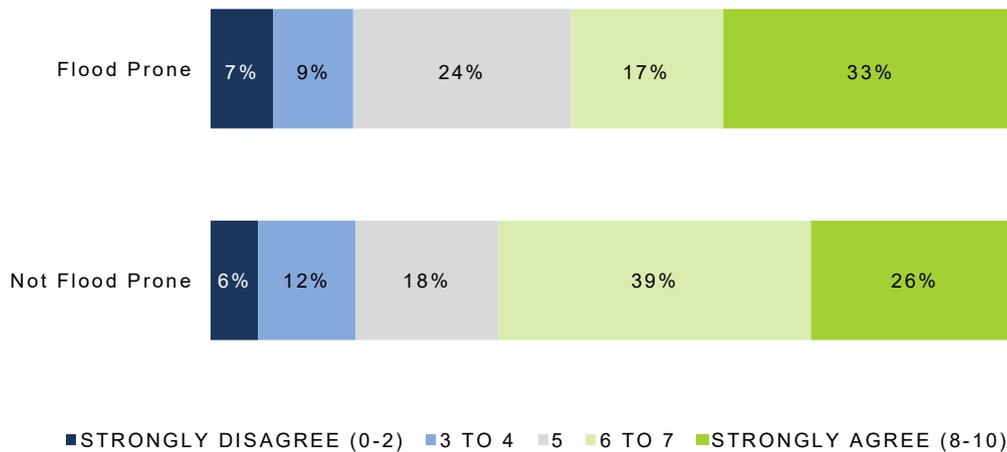
Source: Q15. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is 'strongly disagree' and 10 is 'strongly agree'. Base, 2018 Tracking wave: Flood Prone, n=560. Weighted.

Overall, this reveals a hands-off approach many individuals take to flood damage, assuming it will be taken care of by others.

5.5.1.3 Individual

Despite placing a lot of responsibility on others, as shown below, the majority of residents also accept that the community and the individual play a vital role in reducing flood risk. Half of flood prone residents agree that it is up to them to protect their own property from flooding, and 68% not flood prone residents agree the local community plays a vital role in preparing for floods.

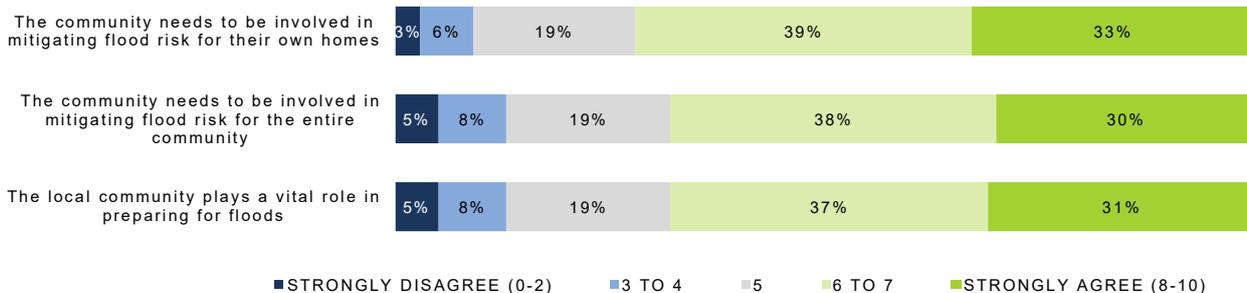
Figure 27: Agreement with statement “It is up to me to protect my property from the risk of flooding”



Source: Q15. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is ‘strongly disagree’ and 10 is ‘strongly agree’. Base, 2018 Tracking wave: Flood Prone, n=560, Non-Flood Prone, n=995. Weighted.

This is an important finding, in that it reveals individuals are willing to accept their own responsibility in the process. However, it is important to not lose sight of the fact that there may be some social desirability impacting these figures. Individuals will want to appear involved in protecting their community, but in reality may not be willing to back that up with any real effort. For example, we know that even where individuals support recycling they may still put plastic in the rubbish bin if it is easier.

Figure 28: Perceptions of responsibility (NFP)

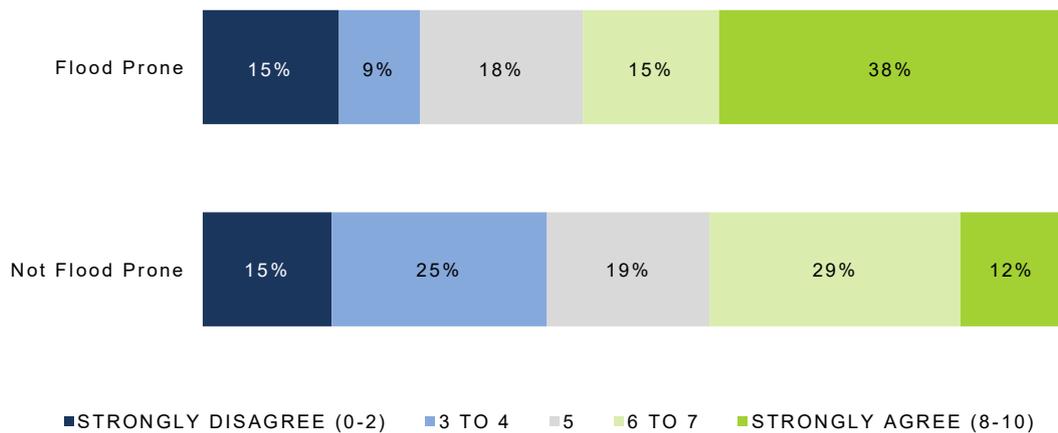


Source: Q15. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is ‘strongly disagree’ and 10 is ‘strongly agree’. Base, 2018 Tracking wave: Non-Flood Prone, n=995. Weighted. Not asked for CATI component

5.5.2 Self-efficacy

Along with feeling they have a responsibility to act, individuals need to feel they are capable of undertaking action. We have spoken in the previous Action Perception section about the need to increase residents’ feelings of self-efficacy. As shown below, very few individuals (particularly in non flood prone areas) feel confident that they are able to take the actions required to prepare themselves for a flood.

Figure 29: Agreement with the statement “I’m confident I am able to take the actions required to prepare my property for a flood”



Source: Q15. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is ‘strongly disagree’ and 10 is ‘strongly agree’. Base, 2018 Tracking wave: Flood Prone, n=560, Non-Flood Prone, n=995. Weighted.

Regardless of how strongly individuals feel they should act, or how clear the action they need to take is, if individuals do not feel they can actually complete the act, then it will not be done. Fortunately, as we saw in the previous sections the actions themselves are generally not perceived to be difficult. The role for Melbourne Water and VICSES then is to communicate how these small preparedness actions can have a major impact on reducing the damage or clean-up for their home or community.

5.5.3 Barriers in the Stakeholder Perceptions Space

There are two major barriers in this space:

- The bystander effect – If government and insurance are responsible for reducing risk at the start, warning me and saving me during a flood, and cleaning up after a flood, then regardless of my feelings about my own responsibility I may very well sit by and watch.
- Self-efficacy – Individuals must believe they have the ability to complete actions that will make a difference to the outcome of a flood.

For Melbourne Water and VICSES the main challenge in this space is to change the narrative from who prevents or cleans up the damage, to what

cannot be saved by government or insurance, e.g. sentimental items, the emotional cost of having to move out of your home while it is repaired, etc.

5.6 SITUATIONAL FACILITATORS AND IMPEDIMENTS

At the final stage of the PADM an individual is ready to decide on how to act. If Melbourne Water and VICSES have been successful they have convinced residents that there is a threat that they need to prepare for and given residents the self-efficacy and knowledge to prepare effectively. The research shows that in large part residents accept that they have a role to play in preparedness, and that many who do not act are simply putting it off or unaware of the measures they could take. In other words, overall residents appear motivated to act and are generally capable of doing so. However, the final step is extremely difficult in our busy lives, moving from intent to action.

Looking at a daily list of must-dos and like-to-dos, flood preparedness is typically very far down the list. Furthermore, barring a flood warning, flood preparedness often appears to be something that there will be plenty of time to do 'later'. It is no surprise then that we see a gap between intent and action in flood preparedness. In order to bridge this gap, the research explored what triggers can prompt flood preparedness action.

5.6.1 Understanding Triggers

In understanding how to bridge this gap from intent to action we have borrowed from behavioural science's understanding of triggers. A trigger is any stimulus in the environment that makes us think about a related concept. In our case, hearing a news report about a pending storm will prompt us to think about how we need to clean our gutters. This suggests that if Melbourne Water and VICSES can trigger residents to think about actions at the right time in the right way, they can greatly increase the chances of a resident acting.

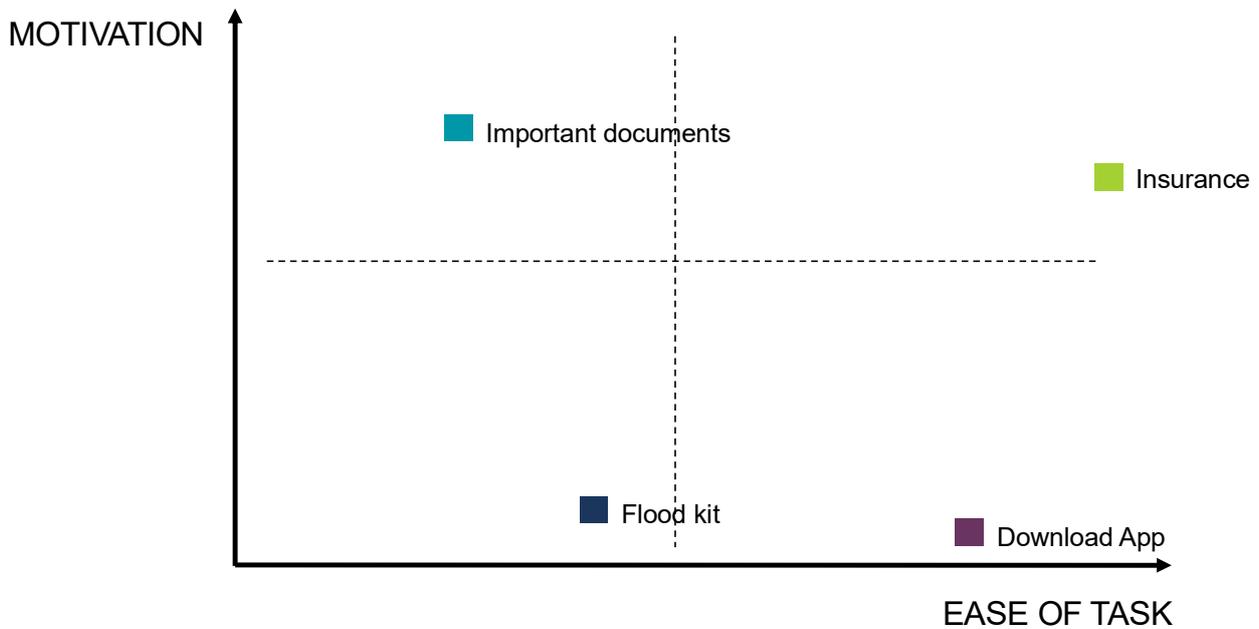
Considering the Fogg Behavioural Model here, we can classify triggers into three types:

- **Facilitator** – this simplifies a task for which there is already high motivation. For instance, a resident wants to keep all their important papers safe but may not have a way to do so. Melbourne Water or VICSES selling document 'safes' with instructions on where to store it would make it easier for residents to take action. Particularly if this is provided in an area they visit regularly such as Bunnings or supermarket.
- **Spark** – this trigger is designed to increase motivation for a simple action. For instance, many residents want a central location for information and warnings but don't download the VicEmergency app. A campaign aligned with a major storm warning that would tell residents everything can be found in one place may increase the motivation to take this simple step.
- **Signal** – Serves as a reminder to complete an action for individuals who are motivated to act and feel it will be easy to do. For instance,

residents who intend to check their insurance. An SMS from Melbourne Water or VICSES with instructions on how to quickly check their coverage before a storm warning may go a long way to generating action.

In addition, the qualitative phase of this research identified where 4 key actions that were taken sat on measures of motivation and ease of task, and then assess what triggered the resident to act. This is outlined below.

Figure 30: Qualitative analysis of actions taken*



*Note this is an analysis and interpretation of qualitative interviews and does not reflect quantified measures.

The simplest action completed was checking insurance. As reflected in the quantitative results, checking insurance is one of the most common actions taken. The qualitative work highlighted the fact that while there can be some barriers such as not wanting to be put on hold over the phone or searching through fine print, for the most part it was easy enough for residents to find out if they were covered for flood damage. There was also a high level of motivation to do so because of the inherent need to get it 'right'. Getting insurance, or checking your coverage, is a safety net for people to feel prepared for a worst-case scenario.

For Melbourne Water and VICSES there is little to be done in this area with the exception of reminding residents that it is their responsibility to check their coverage. If residents perceive any threat at all, even distant and remote, checking insurance is the first step. To that end, participants often mentioned major flooding events in the news or a storm warning as prompts to get them to check their insurance.

The second action discussed in detail was downloading the VicEmergency app. This task was seen as quite easy to do for most residents (although less tech savvy residents may have more difficulty) but there was little

motivation to download it. It is true that the app solves the issue for residents of having all information in one place. However, for the individuals we spoke to, there was generally not a need for the app day to day so it felt superfluous to their needs.

As such Melbourne Water and VICSES should look at a spark solution, such as an SMS in line with a major storm occurrence. Searching for information will be top of mind for residents, and an SMS gets the individual on their phone. This will then drive motivation to download the app as an easy place for them to get updates. As they are already on their phone, ease of the task is also high. Respondents who downloaded the app mentioned doing so following discussions with friends and family “at the right time” and were particularly motivated by the idea of getting updates specific to their area, similar to the danger zones sometimes shown for fires.

Document protection was also explored. For residents, protecting important documents has clear and obvious benefits, particularly for older residents who may have less in digital format. However, the question of how to store them such that they are safe is not as straightforward. For example, one respondent described receiving individual plastic document sleeves from an authority prior to a flood. Putting documents into these sleeves and then storing them was felt to be as an extremely time intensive process compared to other more ‘major’ actions they could be doing such as cleaning gutters, preparing sandbags, etc.

So the opportunity here is one of making the task simpler through a facilitator. One facilitator example was a respondent who mentioned discovering their local surf / life saver club had sandbags available to pick up in an emergency. In a nutshell, anything that makes the task easier will increase potential uptake.

Finally, the most difficult area of action is that which is not easy and for which there is little motivation. One example the research explored was preparing a flood kit. This came up against multiple barriers including the time and cost of putting one together, where to store it, and what actual benefit it provided. Very few residents feel flood waters will enter their home, and almost none see waters getting over 2-3cm above ground floor level as a potential reality. There is no immediate association with needing water, blankets, etc in the case of a “low severity” flood. This quadrant requires more serious consideration by Melbourne Water and VICSES if emergency kits are a key goal.

Finally, but critically, all triggers to action need to be simple and timely to be effective. For example, sending an SMS about cleaning gutters on Monday morning will likely lessen the effectiveness of the trigger: fewer residents are at home at the time of getting the message. By the time they get home, they may be too tired, may have forgotten, etc. Likewise, if the SMS has too much information or jargon it will be ignored, or if too many messages are sent they will also be ignored.

Triggers must be carefully considered and may require additional research to quantify and pinpoint where and how to target uptake of specific actions.

6. PREDICTORS / DRIVER ANALYTICS

The previous sections have comprehensively covered the PADM in detail as it relates to flood preparedness in the PPWP catchment. As has been seen here, and in flood preparedness literature from around the world, there are a myriad of factors which come into the decision to undertake flood preparedness actions for residents. These are summarised below.

Table 3: PADM summary

| Stage | Barriers | Key finding |
|---------------------------------|--------------------------|--|
| Pre-decision stage | | |
| Social and Physical Environment | Lack of exposure | Residents don't know where to find information, don't pay attention to information that is out there and don't view flood preparedness as a social norm. |
| | Lack of attention | |
| | Lack of comprehension | |
| | Not a social norm | |
| Perception stage | | |
| Threat | Low perceived likelihood | Residents do not feel a flood is likely in their area in the near future. If it does flood insurance will protect them, or if the flood is too great they feel helpless and will not act. |
| | Low perceived severity | |
| | Insurance as a fall-back | |
| | Helplessness | |
| Action | Low action awareness | Residents are not confident they know what to do to prepare. They will complete simple low effort tasks but these are often a low priority and may be forgotten. |
| | Low action efficacy | |
| | Simplify | |
| | Intent-action gap | |
| Stakeholder | Bystander effect | Residents recognise the community has a responsibility to help prepare. However, in reality government and insurance hold most of the responsibility in the community's eyes. As such, residents are at risk of being bystanders and letting others prepare and clean up, or feeling they are not capable of completing the actions they do see as their responsibility. |
| | Self-efficacy | |
| Decision making stage | | |
| | Triggers | Facilitators, sparks and signals can all be used to shift residents from intent to action. They must be relevant and timely and used strategically so as not to overwhelm. |

6.1.1 Drivers of preparedness action

With such breadth of information there is a need to identify areas of priority that Melbourne Water and VICSES can focus on to generate action in the community. To this end Relative Importance Analysis (a form of regression or driver analysis using Q software¹⁰) was conducted to identify which aspects of the PADM had the greatest impact on preparedness.

We already know that when looking at preparedness actions themselves the easier they are the more likely they will be completed. However, we also want to know what aspects of the PADM are drivers if we remove the traits of the task from consideration. The results of the Relative Importance Analysis are shown overleaf. Note that The Relative Importance score for each independent variable is a convex combination (a weighted sum where weights add up to 1). The sign of the score (positive or negative) indicates the direction of impact on the dependent variable.

As discussed in the key trends section early in the report there is clear correlation between awareness of flood risk and taking action. However, simply becoming aware of risk is not enough to generate action. In this model we identify that awareness is indeed an important factor in determining action, but there are more influential factors. Namely, feeling it is up to them (not government) and self-efficacy - or the belief that they are able to take the actions required to prepare their property, and severity of the threat – individuals who believe flood water will have a major impact are more likely to act.

These findings confirm what we have discussed throughout the report, that residents must feel there will be an impact that they will feel – but more importantly that they have the knowledge and ability to cope with that threat. Awareness for residents is an important first step, but bringing that threat to life in their context and then giving them the tools to deal with it are essential to ensuring action will be taken.

¹⁰ Q Wiki: [https://wiki.q-researchsoftware.com/wiki/Driver_\(Importance\)_Analysis#Relative_Importance_Analysis](https://wiki.q-researchsoftware.com/wiki/Driver_(Importance)_Analysis#Relative_Importance_Analysis)
 “Relative Importance Analysis yields scores that are similar to Shapley importance and Kruskal importance, but takes much less time to compute. Relative Importance Analysis works by transforming the set of independent variables to a set of orthogonal variables that are not correlated with each other. It turns out that the squared regression coefficients from the linear regression using the orthogonal variables represent each variable's contribution to the R-square. The Relative Importance score for each independent variable is simply a convex combination (a weighted sum where weights add up to 1) of the squared regression coefficients, with the weights calculated based on the orthogonal variable transformation.”

Figure 31: Relative Importance Analysis for Preparedness Action



6.1.2 Drivers of perceived preparedness

As discussed in the key trends section there is also a link between actions taken and perceived preparedness. However, we wanted to explore this in more detail to understand how important that correlation is in relation to other aspects of the PADM. The results of the Relative Importance Analysis exploring the drivers of perceptions of preparedness are shown below. Note again that The Relative Importance score for each independent variable is a convex combination (a weighted sum where weights add up to 1). The sign of the score (positive or negative) indicates the direction of impact on the dependent variable.

Figure 32: Relative Importance Analysis for Preparedness Perceptions

| Independent variables | Relative Importance in driving perceptions of preparedness |
|--|--|
| Agree (8-10) - I'm confident I am able to take the actions required to prepare my property for a flood | 20.1 |
| Agree (8-10) - I'm confident I am able to take the actions required to prepare my property for a flood | 20.1 |
| Agree (8-10) - I have done all that I can to prepare my home for a flood | 13.9 |
| Speak with friend / family / neighbours at least once every 6 months about flood risk | 12.4 |
| Agree (8-10) - My house insurance would cover me if my home or property were damaged | 8.2 |
| Agree (8-10) - I know where to find information about being prepared for a flood | 6.2 |
| Are aware of their flood risk status | 5.7 |
| Have taken at least one action | 5.5 |
| Agree (8-10) - I know what to do to protect my property if there is a flood | 4 |
| Agree (8-10) - It is up to me to protect my property from the risk of flooding | 3.4 |
| Feel government is responsible for notifying community of flood risk | -3.3 |
| Feel it is likely (8-10) that flood water could enter their home in the next 10 years | 2.9 |
| Recall flood advertising or information | 2.7 |

| Independent variables | Relative Importance in driving perceptions of preparedness |
|---|--|
| Agree (8-10) - There are lots of things I can do to minimise the potential damage from a flood | 2 |
| Foresee a high impact (8-10) of flood water entering their home | -1.6 |
| Believe most people have taken at least one preparedness action | 1.3 |
| Agree (8-10) - I would expect to get a warning from relevant authorities if my home was about to flood | -1.2 |
| Agree (8-10) - I would expect a flood could happen in my area within the next 12 months | 1 |
| Agree (8-10) - There are lots of things I can do to minimise the risk of flooding to my home | -0.9 |
| Agree (8-10) - The community needs to be involved in mitigating flood risk for their own homes | 0.6 |
| Agree (8-10) - It is the council or government's job to minimise the risk of flooding | -0.6 |
| Have experienced water entering their home | -0.5 |
| Agree (8-10) - There is nothing I can really do to avoid damage to my home and property from a flood | -0.5 |
| Agree (8-10) - If there was going to be a flood, you would have plenty of warning that it was coming | -0.4 |
| Agree (8-10) - Floods are not something you can prepare for | -0.4 |
| Agree (8-10) - The community needs to be involved in mitigating flood risk for the entire community | -0.3 |
| Agree (8-10) - If you are not covered for flood damage, the insurance company has a responsibility to tell you that | 0.2 |
| Agree (8-10) - It is the council or government's job to minimise the risk of flooding | -0.2 |

What is clear from this analysis is that having actually taken action is only of moderate importance to determining feelings of preparedness. Instead it is self-efficacy that is a far important factor. If an individual is confident that they are able to take the actions required to protect themselves then

they will feel prepared. Likewise, if an individual knows where to find information or speaks to family and friends about flood risk they are more likely to feel prepared. This highlights an important psychological point, that feeling prepared is not necessarily tied exclusively to how prepared they actually may be.

The feeling of being prepared is instead tied to a feeling of comfort and confidence. As such, being confident in your ability to seek information and act, having the safety net of insurance or the social safety net of discussion with family and friends are all highly important factors in our model. The 'Prepare.Act.Survive' tagline for fire is a good example of tapping into this attitude. In order to survive you must act, and in order to act appropriately you must prepare. To feel comfortable about your chances of surviving you prepare your plan. Driving flood preparedness action needs to generate a similar thought process.

Conversely, it is important to remember that overconfidence can be detrimental to actual preparedness. If an individual feels confident but sees the threat as too far in the distant future, they will not act. Thus, Melbourne Water and VICSES must balance the need to enable residents and give them the confidence that they can act and protect themselves, with the need to ensure they carry through on those actions now.

7. ACTIVATION CASE STUDIES

In addition to the theoretical evidence base for understanding the behavioural pathway to disaster preparedness as well as what aspects of that process are the key targets for driving change, this section provides some illustrative examples to inform future communications and interventions. Note these examples were not tested directly with residents. However, they are valuable examples of behavioural principles which have been applied with success elsewhere.

7.1.1 15 to Float

This campaign by VICSES was specifically recalled by 14 respondents, more than the number of respondents who could recall any flood preparedness messaging in general (n=11). While an apparently low level of recall, in the context of the time that had passed since the campaign and the size of the campaign itself, this recall is actually indicative of a successful campaign execution. The 15 to Float campaign serves as a powerful example of the recall that can be gained through simple, emotional messaging. One element of the campaign is analysed below.

Figure 33: 15 to Float image

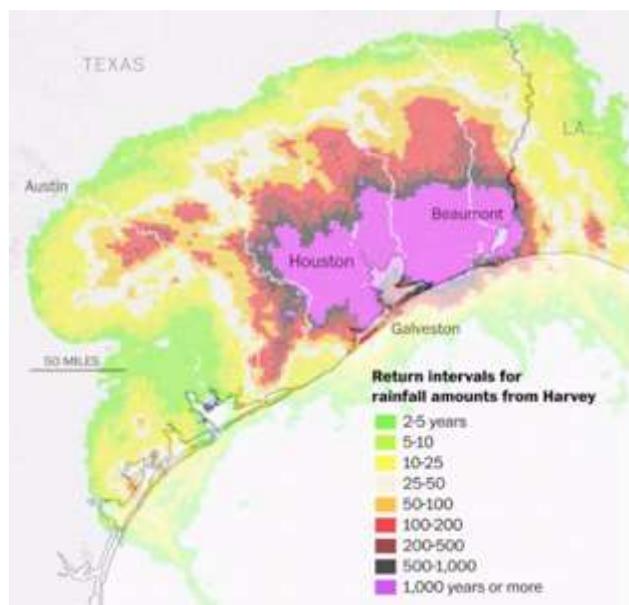


There are a few key strengths of this image which are worth noting:

- Saliency – the dark clouds and rising water provide an immediate emotional connection. For residents who see this image they can feel the danger and threat in that situation.
- Simplicity – The message itself is very simple, ‘Never drive on flooded roads’. There is no ambiguity or complexity.
- Language – The language here is relevant and easy to conceptualise: most can imagine 15cm. In other aspects of the campaign a pen was used to make the level even more salient. In contrast, residents have issues understanding what a 1 in 100 year flood means and find it hard to relate to. A pen provides a vivid mental image of how little water it takes to make a car float.

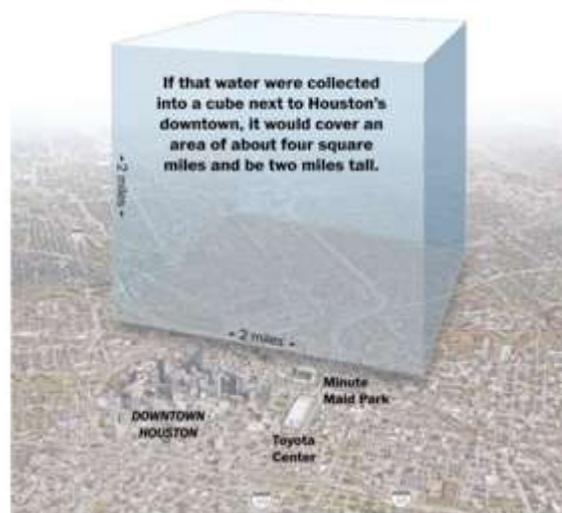
A second example of how important language is discussed based on the image below.

Figure 34: News articles use different language to convey meaning



What would 9 trillion gallons of water look like?

As of noon on Aug. 27, about 9 trillion gallons of rain had already fallen across the greater Houston area and Southeast Texas.





There is little emotional connection to the image on the top left. It does not generate an emotional response; it is simply a map. In addition, residents are unlikely to understand what a return interval is. Further if they do they may feel like it has happened once, so we don't need to worry for another 50 years. Overall, this image is unlikely to be generate preparedness action.

Conversely, the image on the top right and those below puts the amount of water in terminology anyone can understand. While in gallons, 9 trillion is clearly a lot. Further, that amount of water shown visually scaled against an entire city, immediately and clearly conveys the scope of just how much water fell. Those below similarly convey in clear and easy to understand visual terms what 3 feet and 6 feet of water would actually look and feel like. The impact and understanding is simple and immediate.

7.1.2 NSW Rural Fire Service

The NSW RFS has also implemented communications which provide useful examples from which to learn. An illustrative image is shown below.

Figure 35: NSW RFS campaign



There is a clear focus in this execution on generating an emotional connection with the audience. The viewer sees a family in a burnt-out home, a startling and evocative image which will attract attention and generate an emotional response (aiding recall). Additionally, as in the 15 to Float campaign the messages are simple and clear: you must prepare in order to save your family and 'Prepare. Act. Survive'.

In both of these campaigns we see how saliency and emotional connection can generate increased awareness of the campaign, and how simplicity of presentation and simplicity of the call to action generates comprehension.

Contrasting these communications with a 2015 brochure about flood preparedness shown overleaf, we can immediately see the difference.

Figure 36: SES FloodSafe brochure (2015)





FloodSafe
Better FloodSafe than sorry

How to plan and prepare for floods

Flooding in Victoria

Victoria has many flood-prone communities with thousands of homes, properties and businesses at risk of flooding. Floods cause more damage per year in terms of dollars and lives lost than any other natural hazard in Australia. Flooding can happen at any time of the year.

If you live in, work in or visit areas on low-lying land, close to creeks or rivers, or near major stormwater drains you may be at risk of flooding.

A well prepared community can reduce the impact of flooding by up to 80%. People who are prepared are more likely to respond to floods appropriately and safely.

Types of flooding

Riverine flooding

In riverine flooding, relatively high water levels overflow above the banks of a stream or river. Depending on the local landscape, some floods may pass quickly, while others will move slowly down the river, sometimes lasting for several months. As the water moves downstream during floods, this may cause flooding in areas where it is not raining.

Flash flooding

Flash flooding is caused by heavy rain over a short period of time and is generally defined as developing in six hours or less from rainfall to the onset of flooding.

Overland flooding

Overland flooding is a type of flash flooding caused by a large amount of rain falling in a small area, causing storm water drains to overflow.

Weather Warnings

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

Flood Watches mean there is a developing weather pattern that might cause floods in one or two days.

Flood Warnings mean flooding is about to happen or is already happening. Flood Warnings are classified into Minor, Moderate and Major depending on the expected size and impact of the flood.

SES will provide information about how the floodwater might affect people and properties.

Severe Weather Warnings or Severe Thunderstorm Warnings are issued when heavy rain fall that could lead to flash flooding is expected. Flash flooding happens quickly. There may be little or no warning. The arrival time and depth of a flash flood can not usually be predicted. Remember that you may not receive any official warning. If you think you are at risk, do not wait for an official warning to act.

Emergency Alert

During floods, SES may provide an alert through the National Emergency Alert Telephone Warning System. All Emergency Services can use Emergency Alert to warn communities about dangerous situations by voice message to landline telephones or text message to mobile phones.

If you receive an Emergency Alert you should pay attention and act accordingly.

Emergency broadcasters

During a flood, tune in to your local emergency broadcaster: ABC Local Radio, Commercial Radio, designated Community Radio Stations and SKY News Television. Your Emergency Broadcaster will keep you informed of local events.

Your emergency broadcaster:

Prepare an Emergency Plan

Flooding can happen at any time, with little warning. People who have planned and prepared for emergencies can help to reduce the impact of emergencies on their homes and families and recover faster.

Your emergency plan should include:

- Emergencies that might affect you
- How they might affect you
- What you will do before, during and after an emergency
- Where you will go if you evacuate and the safest route to get there
- A list of contact numbers you may need

Prepare an Emergency Kit

Every home and business should have a basic Emergency Kit. An Emergency Kit puts everything you need into one place. A basic Emergency Kit should contain: When a warning is issued, place extra items into your Emergency Kit, including:

| | | | |
|---|---|--|--|
|  Radio |  Torch |  Spare batteries |  First Aid Kit |
|  Gloves |  EMERGENCY KIT | |  Important documents |
|  Food <small>2 days supply</small> |  Water <small>2 days supply</small> |  Prescriptions & medications <small>2 days supply</small> |  Copy of your Emergency Plan |

- Mobile phone and charger
- Mementos and valuables
- Prescriptions and medications
- Requirements for pets
- Strong shoes
- Clothing for at least three days

For more information visit
ses.vic.gov.au

**FLOOD STORM
EMERGENCY 132 500**



In the flood preparedness brochure there is little emotional connection. There is no evocative imagery and the “flooded” house actually looks secure and undamaged. Further, the highly detailed presentation of the information and tasks suggests this will be difficult to comprehend and action. Residents may not engage with this brochure, regardless of the level of detail provided, as just at a glance it feels like it will be difficult to digest.

It is important to note that when people request more information this is not necessarily what they need. What they typically mean is that they have not been provided with the right information. So then providing more detail often compounds the issue, increasing the size of the haystack when really they just needed a simpler way to get to the needle. Overall, for individuals with other priorities who may not believe there is a threat, it is unlikely this detailed format will be effective.

As a final note on emotional connection, there are two key considerations. Firstly, saliency we have discussed as a method for connecting individuals with what it would feel like to be in that situation making any messaging far more impactful. Secondly, the benchmarking study highlighted the importance of context. Effective communications need to show flooding can happen to people like them in areas such as theirs. Otherwise it is easy for those (particularly in metro areas) to dismiss flooding as something that happens to others, not them.

7.1.3 VICSES SMS

Finally, another example from VICSES worth discussing is the flood warning SMS (shown below).

Figure 37: VICSES SMS Warning



This example highlights the value of a timely intervention. As discussed earlier in relation to ‘triggers’, a communication is far more impactful when it is delivered at the right time. Reminders for a weekend-style action such as cleaning gutters or maintaining the home will lose effectiveness if delivered on a Monday morning. Similarly, an SMS to stock up on sandbags in the middle of summer is unlikely to generate action. VICSES already uses warning SMS’ to great effect, and it is worth exploring how to expand this ability to drive desired behaviour with residents at a specific time.

7.1.4 In Summary

These examples provide a brief insight into how behavioural principles can be brought to bear alongside the PADM and positively impact flood preparation behaviours. Namely, how Melbourne Water and VICSES can generate action through emotional connection, simplicity of messaging and task, timely delivery of information and triggers, and careful selection of relevant language. While this is by no means a comprehensive exploration of communication execution effectiveness, it provides a useful starting point.

8. IMPLICATIONS

Based on this research there are some indications that communications campaigns focusing on the following messages could be valuable:

- Flood risk to their specific address as well as the broader community
- Impacts of flooding, especially of low level flooding
- What can be done to minimise risk
- What can be done to minimise impact
- Where to go for more information
- How quickly flooding can occur: act now or there won't be time later
- Warnings may not come quickly enough to protect property, valuables, minimise impact
- Insurance is good, but may not be enough
- Normalise preparation e.g. others are prepared, are you?

8.1 IMPLICATIONS FOR COMMUNICATIONS

| | |
|--|---|
| Generate an emotional connection to flooding | <p>Saliency - get individuals to feel what it would be like in that situation.</p> <p>Context – show the negative impact on people like them or in areas like theirs.</p> <p>Personal, real, stories typically work best</p> |
| Keep it simple | <p>Look and feel - the layout of communications or complexity of a task can easily overwhelm individuals. Reduce cognitive load through clean presentation of information, focusing on the one thing we want residents to take away.</p> <p>Actions – residents are much more likely act if they feel it is easy, cheap and quick to do so. Anything that can be done to facilitate that feeling will help drive action. For example, taking the VICSES brochure shown earlier, those pictured items and inclusions in the emergency kit could be 'chunked' into one concept in order to get individuals interested. For instance, "pack your emergency kit". The task is the same but it is less daunting to gain buy in first, and then explain the detail.</p> |
| Make it timely | Triggers and activities must be utilised strategically. For instance, |

residents often act when they hear a storm warning, so explore how to piggyback off that tendency to generate action. With so many potentially prepared residents simply forgetting to complete tasks using timely intervention is an opportunity to get them to complete the task now.

Choose language carefully

15 to Float provides an excellent example of this principle in its precision with the language chosen. Residents immediately grasp the message and can relate to the measures used. It is important to stay away from terms such as “1 in 100 year flood” which does not feel tangible – in terms of risk it means nothing to them, it is too distant, too hard to imagine.

8.2 IMPLICATIONS FOR GENERATING ACTION

There are 3 key elements to generating action:

1. Understanding your threat is the most basic building block of changing behaviour. We have seen that individuals who are aware of the threat that flooding poses to them are far more likely to act. To be clear, this means they recognise the impact flooding can have. In this context, the impact of low level flooding is particularly important to communicate given the degree of misperception.
2. Residents must also be given the tools to act (self-efficacy). Those who know where to find information and are confident that they are able to take the steps needed to protect themselves will do so.
3. Finally, if nothing else, the action itself must be easy to complete. This is the greatest single determinant of completion.

8.3 SHIFTING THE NARRATIVE

We have used examples throughout the report of how communications in relation to fire danger often capitalises on the irreplaceable: the ultimate goal is survival for you and your family. That is something that cannot be insured or replaced.

Conversely, flooding is often seen by individuals as a more low-level threat, and often a threat to the property but not the people in it. John Richardson, Emergency Services National Preparedness coordinator, Australian Red Cross Emergency Services National Preparedness coordinator, sums it up well:

- *“Preparation is about more than having an escape route, a torch and a shelf of tinned food. Protecting life is always your first priority, but making sure you protect the things that make up who you are will help you to recover. It is about anchoring you to the past, and helping start a new life. For me it’s an old footy jumper and my granddad’s war medals. For someone else it might be their kid’s teddy bear and their vinyl collection.”*

The perceived impact that flooding will have on the individual is the second most important factor in determining action. Melbourne Water and VICSES need to highlight that potential impact, and a major portion of that is getting residents to feel the potential loss of something important and irreplaceable by insurance.

9. CONCLUSIONS AND RECOMMENDATIONS

One objective of this research was to track key measures and KPIs against the 2015 benchmark and to explore the drivers and barriers of flood preparedness action. The application of the PADM has provided a clear framework for Melbourne Water and VICSES to explore both the preparedness decision making process, and the barriers and drivers along the way.

Overall, this research suggests a number of potential opportunities, conclusions and recommendations moving forward:

| | |
|--|--|
| <p>Consider whether there is value in continuing to measure flood risk awareness</p> | <p>Tracking resources may be spent gaining depth of knowledge into each action, communication or engagement initiative. There are a number of issues to consider.</p> <p>While tracking across the broader community such as this will continue to be useful to measure the impact of any campaigns / initiatives, we recommend tracking be reduced to key KPI measures (e.g. awareness of flood risk). The supporting analysis has been explored in detail both in 2015 and this wave and there is a strong breadth of understanding.</p> <p>Measurement of flood risk awareness across the community as a whole is not going to shift significantly unless there are substantial resources put behind a mass media communications campaign.</p> <p>Definitions of flood prone households have changed from the 2015 to the 2018 research and may change again in the future. This impacts the ability to reliably track shifts as the target audience definition is not the same from one wave to the other.</p> |
| <p>Future communications / messaging</p> | <p>There are a number of future communication possibilities and priorities raised by this research to drive flood preparedness action and behaviour change. All of these will have a positive impact on flood preparedness. Melbourne Water needs to prioritise messaging. We recommend prioritising message(s):</p> <ul style="list-style-type: none"> • That can be simply and clearly communicated • That can be communicated in an engaging and emotive way • Where there is a clear and simple call to action • Where current perceptions / awareness are furthest from the ideal / there is the biggest need <p>Based on this rubric, we recommend prioritising messaging around the impact of low level flooding.</p> |
| <p>Carefully considered communications design</p> | <p>Generate an emotional connection to flooding. Keep it simple. Make it timely. Choose language carefully. Clear call to action / behaviour.</p> |

| | |
|---|---|
| Determine most effective preparedness actions | Driving behaviour change effectively requires clear goals. Melbourne Water and VICSES need to determine what actions / behaviours are actually most beneficial in minimising the impact of flooding. Communications / campaigns then need to be focused on driving that behaviour. |
| Drive behaviour change / generate action by addressing 3 key elements | <p>Understanding your threat: raise awareness and understanding of the impact flooding can have. In particular, the impact of low level flooding.</p> <p>Self-efficacy: Give residents the tools to act. Make sure they know exactly what to do and where to find information.</p> <p>Ease: Focus on actions that are already easy to complete (e.g. downloading an app), make other actions easier to complete (e.g. sell emergency kits that are already put together), and make actions feel easy to complete (e.g. chunk down into simple steps when communicating to reduce cognitive load).</p> |
| Thorough testing of future communications / campaigns | We recommend any future campaigns or concepts from Melbourne Water and or VICSES to drive flood preparedness actions should be carefully tested to provide greater clarity on how and when aspects of behavioural intervention should be used. For instance, which triggers work and when they are most effective for which type of person. The benchmarking phase provides more detail around communications for 4 potential segments in the population. |
| Timely research to measure impact of future initiatives | For any initiatives in field we also recommend research as close as possible to the moment of the intervention. For example, behavioural research such as tracking increases in flood insurance searches or torch purchases can provide valuable data that may not be possible through traditional research methods. |
| Task-centred innovation map | We see great value in generating a task-centred innovation map. This is the process of mapping where residents experience friction points along the PADM journey. In other words, do residents take one action then stop? Do they seek information but then not act on that information? Identifying key bottlenecks will allow Melbourne Water and VICSES to intervene at key junctures with innovative campaigns, shifting residents along the path to preparedness. |

Overall, the opportunity now lies in exploring behaviour in greater detail. There is a clear framework to work from in the PADM and Behaviour Change Wheel (2015). Now a combination of behavioural insights, creatives and field teams can provide evidence-based, tested interventions that can lead real change.

10. APPENDICES

10.1 QUANTITATIVE QUESTIONNAIRE (ONLINE)



SECTION A: INTRODUCTION

Thank you for agreeing to participate in this survey, which will take no more than 15 minutes of your time. Please rest assured that we are not trying to sell you anything, and that your responses to these questions will be used along with hundreds of others. All responses are kept confidential and are collected in accordance with the principles and guidelines as set out by the Australian Social and Market Research Society (AMSRS).

SECTION B: SCREENER

Q1 Who is responsible for managing your household? By that I mean paying bills, making decisions on services for your property, purchasing insurance, etc. Are you.....? [SR]

| | |
|---|---|
| Solely responsible for managing the household | 1 |
| Jointly responsible for managing the household | 2 |
| Not at all responsible for managing the household | 3 |

CLOSE IF CODE 3 IN Q1.

Q2 Which of the following best describes your residency in the greater Melbourne area. [SR]

| | |
|--|---|
| I am a citizen or resident who lives permanently in the Melbourne area | 1 |
| I am a temporary visitor to the Melbourne area | 2 |
| Neither of these | 3 |

CLOSE IF CODES 2 OR 3 IN Q2.

Q3 What is your postcode? [TYPE IN]

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

ENSURE POSTCODE MATCH WITH DATABASE LIST AGAINST ELIGIBLE POSTCODES. CLOSE IF NO MATCH.



SECTION C: DEFINITION

Thanks for answering those few questions. We'd like to talk more about flooding. When we refer to flooding, we mean water coming into your home or property from outside such as from heavy rain or a storm. We don't mean flooding as a result of faulty plumbing or household accidents within the home. In addition, by 'flooding' we mean water rising up from ground level. For example, if your roof collapsed due to heavy rain, this is not 'flooding' for the purposes of this survey.

Q4 Thinking about the home or property at which you live, at what point do you believe the amount of water would be classified as a 'flood'?

Click on and drag the slider below to raise and lower the water level. [SR]



SECTION D: AWARENESS AND RISK

Q5 To the best of your knowledge, is the home or property where you currently live at risk of flooding or may be affected by flooding? That is, are you in a 'flood prone' area?

Remember that when we talk about 'flood' we mean water coming into your home or property from outside such as from heavy rain or a storm, and water rising from ground level, not flooding as a result of faulty plumbing or household accidents. [SR]

| | |
|----------|---|
| Yes | 1 |
| No | 2 |
| Not sure | 3 |

ASK Q6 OF THOSE WHO SELECTED CODE 1 IN Q5.

Q6 How did you find out?

Select all that apply. [MR.RANDOMISE]

| | |
|---|----|
| Someone knocked on my door and told me | 1 |
| I got a letter in the mail | 2 |
| My neighbour told me | 3 |
| It was in my contract of sale | 4 |
| I was notified by the council | 5 |
| I was aware it might be an issue and looked into it | 6 |
| Other (please tell us) | 97 |



ASK Q7 OF THOSE WHO SELECTED CODE 2 OR 3 IN Q5.

Q7 What makes you feel you are not at risk of flooding?

Select all that apply. [RANDOMISE RESPONSES. MR]

| | |
|---|----|
| I live on a hill | 1 |
| I do not live near a body of water (creek, river, lake, beach) | 2 |
| We have effective drainage in the street I live in | 3 |
| I do not live in a low lying area | 4 |
| I have investigated with an authority about my property's flood risk | 5 |
| I have never been told that I live in a flood prone area | 6 |
| I have never had a problem with flooding in the property I live in before | 7 |
| It does not flood in my area | 8 |
| [ANCHOR] Something else (please tell us _____) | 98 |
| [ANCHOR] Not sure | 99 |

Q8 Do you feel the government have an obligation to inform communities about their flood risks?

| | |
|----------|---|
| Yes | 1 |
| No | 2 |
| Not sure | 3 |

ASK ALL

Q9 On a scale from 0 to 10, where 0 is 'extremely unlikely' and 10 is 'extremely likely', how likely is it that the home or property where you live will experience one of the following flood levels in the next 10 years? [SR PER LEVEL]

| Extremely Unlikely | | | | | | | | | Extremely likely | | |
|--|---|---|---|---|---|---|---|---|------------------|-------------------|----|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | | | | | | | 0-10 SCORE | |
| Overflowing drains in the street with a few centimetres of water on the street | | | | | | | | | | | |
| Water levels on your property, but below the ground floor level | | | | | | | | | | | |
| Water levels 2-3 centimetres above the ground floor level | | | | | | | | | | | |
| Water levels halfway up the ground floor of your home | | | | | | | | | | | |
| Water levels up to the ground floor ceiling or higher | | | | | | | | | | | |





Q10 Now thinking more broadly on the same scale, how likely is it that the home or property where you live will experience one of the following emergencies in the next 10 years? [SR PER LEVEL]

| Extremely Unlikely | | | | | | | | | | Extremely likely | | |
|------------------------|---|---|---|---|---|---|---|---|---|------------------|------------|--|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0-10 SCORE | |
| Severe weather / storm | | | | | | | | | | | | |
| House fire | | | | | | | | | | | | |
| Earthquake | | | | | | | | | | | | |
| Extreme heat | | | | | | | | | | | | |
| Flood | | | | | | | | | | | | |
| Bushfire | | | | | | | | | | | | |
| Landslide | | | | | | | | | | | | |

Q11 Which of the following have you ever experienced at your current home or property where you live?

Select all that apply. [MR]

| | |
|--|---|
| Overflowing drains in the street with a few centimetres of water on the street | 1 |
| Water levels on your property, but below the ground floor level | 2 |
| Water levels 2-3 centimetres above the ground floor level | 3 |
| Water levels halfway up the ground floor of your home | 4 |
| Water levels up to the ground floor ceiling or higher | 5 |
| [EXCLUSIVE] I haven't experienced any of these | 6 |





SECTION E: PREPAREDNESS

Q12 How prepared do you feel you and your household are for a flood at the home or property where you currently live?

Remember that when we talk about ‘flood’ we mean water coming into your home or property from outside such as from heavy rain or a storm, and water rising from ground level, not flooding as a result of faulty plumbing or household accidents. [SR]

| | |
|--------------------------------------|----|
| Extremely prepared | 1 |
| Mostly prepared | 2 |
| A little prepared, but could do more | 3 |
| Not really prepared | 4 |
| Not at all prepared | 5 |
| Not sure | 99 |

Q13 How prepared do you feel you and your household are for a different type of emergency where you currently live?

[SR PER ROW]

| | Not at all prepared | Not really prepared | A little, but could do more | Mostly prepared | Extremely prepared | Not sure |
|------------------------|---------------------|---------------------|-----------------------------|-----------------|--------------------|----------|
| Severe weather / storm | 1 | 2 | 3 | 4 | 5 | 97 |
| House fire | 1 | 2 | 3 | 4 | 5 | 97 |
| Earthquake | 1 | 2 | 3 | 4 | 5 | 97 |
| Extreme heat | 1 | 2 | 3 | 4 | 5 | 97 |
| Flood | 1 | 2 | 3 | 4 | 5 | 97 |
| Bushfire | 1 | 2 | 3 | 4 | 5 | 97 |
| Landslide | 1 | 2 | 3 | 4 | 5 | 97 |

Q14 What are the ways you feel you can minimize the risk of flooding and potential hardship or damage from flooding?

OPEN





ASK ALL.

Q15 The following are some statements that people have said about flooding in Melbourne. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is 'strongly disagree' and 10 is 'strongly agree'.

[RANDOMISE STATEMENTS. SR PER STATEMENT. DISPLAY 4 – 5 STATEMENTS PER PAGE]

| | | Strongly disagree | | | | | | | | Strongly agree | | |
|---|--|-------------------|---|---|---|---|---|---|---|----------------|---|----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | 0-10 SCORE | | | | | | | | | | |
| a | There is nothing I can really do to avoid damage to my home and property from a flood | | | | | | | | | | | |
| b | It is the council or government's job to minimise the risk of flooding | | | | | | | | | | | |
| c | If there was going to be a flood, you would have plenty of warning that it was coming | | | | | | | | | | | |
| d | If you are not covered for flood damage, the insurance company has a responsibility to tell you that | | | | | | | | | | | |
| e | It is up to me to protect my property from the risk of flooding | | | | | | | | | | | |
| f | There are lots of things I can do to minimise the risk of flooding to my home | | | | | | | | | | | |
| g | There are lots of things I can do to minimise the potential damage from a flood | | | | | | | | | | | |
| h | I have done all that I can to prepare my home for a flood | | | | | | | | | | | |
| i | I know what to do to protect my property if there is a flood | | | | | | | | | | | |
| j | Floods are not something that you can prepare for | | | | | | | | | | | |
| k | My house and/or contents insurance would cover me if my home or property were damaged by flood | | | | | | | | | | | |
| l | I know where to find information about being prepared for a flood | | | | | | | | | | | |
| m | I would expect to get a warning from relevant authorities if my home was about to flood | | | | | | | | | | | |
| n | I'm confident I am able to take the actions required to prepare my property for a flood | | | | | | | | | | | |
| o | I would expect a flood could happen in my area within the next 12 months | | | | | | | | | | | |
| p | The community needs to be involved in mitigating flood risk for their own homes | | | | | | | | | | | |
| q | The community needs to be involved in mitigating flood risk for the entire community | | | | | | | | | | | |
| r | The local community plays a vital role in preparing for floods | | | | | | | | | | | |





Q16 Which of the following have you done to minimise the risk and potential damage from a natural disaster, including floods?

Select all that apply. [PIPE RESPONSES FROM Q16. RANDOMISE RESPONSES. MR]

| | |
|--|-----------|
| Regular cleaning and maintenance of drains on my home | 1 |
| Ensuring there is sufficient drainage on my home | 2 |
| Having an emergency plan | 3 |
| Having supplies ready to stem the flow of water (mops, sandbags) | 4 |
| Considering flood risk and drainage when building / renovating | 5 |
| Checking to see if my home is in a flood prone area | 6 |
| Protecting valuables by moving them 'up high' | 7 |
| Making sure I have appropriate and sufficient insurance in case of flood | 8 |
| Prepared an emergency kit | 9 |
| Download and setup the VicEmergency app | 10 |
| Download the Bureau of Meteorology app | 11 |
| Have backups of important documents and data | 12 |
| Have a list of emergency contact numbers | 13 |
| Have a battery operated radio to receive information if power/communications fail | 14 |
| Talk to friends, family and neighbours about preparedness | 15 |
| Have a first aid kit | 16 |
| Identify an alternative place to stay if you have to evacuate | 17 |
| [ANCHOR] I have not done any of any of these | 99 |

ASK Q17-18 IF Q16 CODE 99 NOT SELECTED

Q17 What are the reasons you did each?

Please select all that apply. [RANDOMISE. MR.]

| | PIPE CORE SELECTED RESPONSES FROM Q16 (MAX 5) |
|---|--|
| Very easy to do | 1 |
| Didn't take much time | 2 |
| Didn't cost much | 3 |
| I had set aside time to do it | 4 |
| I had free time and decided to do it spur of the moment | 5 |





| | |
|---|----|
| I was doing something related so decided to do it then | 6 |
| It is part of my routine to do this every so often | 7 |
| I had spoken to someone else about doing it | 8 |
| I know someone else who did it | 9 |
| I saw advertising or information that convinced me to do it | 10 |
| My partner asked me to do it | 11 |
| I had all the tools/supplies handy | 12 |
| There was a weather or flood warning | 13 |
| Other (please tell us) | 97 |
| I can't remember | 99 |

Q18 What are the reasons you did not do each of the following?

Please select all that apply. [RANDOMISE. MR.]

| | PIPE CORE UNSELECTED RESPONSES FROM Q16 (MAX 5) |
|--|--|
| Too difficult | 1 |
| Takes too much time | 2 |
| Too expensive | 3 |
| I couldn't find any free time | 4 |
| I didn't want to spend my free time doing it | 5 |
| Never got around to it | 6 |
| I keep forgetting about it | 7 |
| No one else does it, so why should I | 8 |
| I don't think it will help | 9 |
| I have insurance | 10 |
| I don't know how to do it | 11 |
| I didn't have all the tools/supplies handy | 12 |
| I'll have warning before a storm comes and can do it then | 13 |
| I wasn't aware this should be done / wasn't aware it might minimise risk | 98 |
| Other (please tell us) | 97 |
| I can't remember | 99 |





Q19 Which of the following actions were you aware of for staying safe during a flood?

Please select all that apply. [MR. RANDOMISE]

| | |
|--|----|
| Stay away from drains, culverts and waterways | 1 |
| Not drive, ride or walk through floodwater | 2 |
| Check on friends, family and neighbours | 3 |
| Parking your car away from rivers, drains and creeks | 4 |
| Secure objects that might float and cause damage | 5 |
| Raising chemicals and oil above the likely flood height | 6 |
| Protect valuables by moving them 'up high' | 7 |
| Evacuate if warned to do so | 8 |
| Following radio, TV, or social media for information and updates | 9 |
| Following the advice in warnings | 10 |
| Use sandbags to stem water flow | 11 |

Q20 How often do you discuss the potential for flooding in your area with family, friends or neighbours? [SR]

| | |
|-----------------------|---|
| Weekly | 1 |
| Monthly | 2 |
| Every 6 months | 3 |
| Once a year | 4 |
| Less than once a year | 5 |
| Never | 6 |

Q21 Do you think Melbournians have taken the following protective actions?

[RANDOMISE.]

| No one does this | | | | | | Everyone does this | | | | | |
|-------------------|--|---|---|---|---|--------------------|---|---|---|----|--|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 0-10 SCORE | | | | | | | | | | | |
| a | Purchased flood insurance | | | | | | | | | | |
| b | Maintained my property (e.g. cleaned drains, cleared debris) | | | | | | | | | | |
| c | Written an emergency plan | | | | | | | | | | |
| d | Prepared an emergency kit | | | | | | | | | | |





SECTION F: PERCEIVED IMPACT OF FLOODING

Q22 We are interested if the impact on you would be different with different levels of flooding.

Think about the impact on you, your family, your day-to-day life and your house and contents.

Use the scale below where 0 is 'no impact at all' to 10 being 'catastrophic impact' to rate the amount of impact for each level listed. [SR PER LEVEL]

| No impact at all | | | | | | | | | | Catastrophic impact | |
|--|---|---|---|---|---|---|---|---|---|---------------------|--|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | | | | | | | | | | 0-10 SCORE | |
| Overflowing drains in the street with a few centimetres of water on the street | | | | | | | | | | | |
| Water levels on your property, but below the ground floor level | | | | | | | | | | | |
| Water levels 2-3 centimetres above the ground floor level | | | | | | | | | | | |
| Water levels halfway up the ground floor of your home | | | | | | | | | | | |
| Water levels up to the ground floor ceiling or higher | | | | | | | | | | | |

SECTION G: COMMUNICATIONS

Q23 Do you recall any advertising or information about the risk of floods in the last few months? [SR]

| | |
|----------|----|
| Yes | 1 |
| No | 2 |
| Not sure | 99 |

IF SELECTED CODE 1 IN Q23, ASK Q24-27.

Q24 Where did you see this advertising or information?

Select all that apply. [RANDOMISE CHANNELS. MR]

| | |
|------------|---|
| Television | 1 |
| Radio | 2 |
| Newspaper | 3 |



| | |
|--|----|
| Website | 4 |
| Social media (Facebook, Twitter) | 5 |
| Word-of-mouth (family, friend, neighbour, colleague) | 6 |
| Letter box drop | 7 |
| [ANCHOR] Something else (please tell us _____) | 98 |
| [ANCHOR] Not sure | 99 |

Q25 What specific information have you seen about flooding in the last 12 months?

Select all that apply. [RANDOMISE. MR]

| | |
|--|----|
| Brochures and leaflets | 1 |
| Section 52 certificates | 2 |
| Videos or posts on social media | 3 |
| Information on websites | 4 |
| Weather warnings and forecasts | 5 |
| Information stalls or stands | 6 |
| Community meetings | 7 |
| Presentations at your workplace or community group | 8 |
| Letters addressed to your home | 9 |
| Television news program | 10 |
| Television advertising | 11 |
| Radio advertising | 12 |
| Radio programs | 13 |
| Doorknocking | 14 |
| Conversations with friends and family | 15 |
| Newspaper article | 16 |
| Newspaper advertising | 17 |
| Other (please tell us) | 97 |

Q26 Do you recall who provided this information?

Select all that apply. [RANDOMISE RESPONSES. MR]

| | |
|---|---|
| Bureau of Meteorology | 1 |
| Emergency services (police, fire brigade) | 2 |
| State Emergency Services (SES) | 3 |
| Local council | 4 |
| State Government | 5 |





| | |
|--|----|
| Water Retailer (South-East Water, City West Water, Yarra Valley Water) | 6 |
| Melbourne Water | 7 |
| Insurer | 8 |
| Department of Human Services | 9 |
| A friend / family / neighbour | 10 |
| Landlord / real estate agent | 11 |
| [ANCHOR] Other (please tell us _____) | 98 |
| [ANCHOR] Not sure | 99 |

Q27 **What were the key things you remember from this advertising or information?**

OPEN

Q28 **Are you aware of any of the following?**

Select all that apply. [RANDOMISE RESPONSES. MR]

| | |
|--|---|
| Local flood guides (Local Flood Guides explain local flood risks for communities. They provide advice on how to prepare and respond to flood events and who to contact in the event of a flood. They are made available on the Victoria State Emergency Service website.) | 1 |
| Flood emergency plans (Municipal Flood Emergency Plans detail arrangements to prepare, respond and recover from flood events. Some of the plans are made available on the Victoria State Emergency Service website.) | 2 |
| Flood related planning scheme overlays (Flood related planning scheme overlays identify land subject to flooding and allow conditions and controls to be applied to development to manage flood risks. These overlays are the Special Building Overlay, Land Subject to Inundation Overlay, Flooding Overlay and Urban Floodway Overlay. Information on planning schemes is available online on the Department of Environment, Land, Water and Planning (DELWP) website.) | 3 |





SECTION H: DEMOGRAPHICS

Thanks for all your answers so far! We have just a few final questions to better understand who you are and the area you live in.

Q29 **Are you...**

| | |
|--------|---|
| Male | 1 |
| Female | 2 |

Q30 **Are you Aboriginal and/or Torres Strait Islander?**

| | |
|-------------------|---|
| Yes | 1 |
| No | 2 |
| Prefer not to say | 3 |

Q31 **Where were you born?**

| | |
|------------------------------------|---|
| [show drop down list of countries] | 1 |
| Prefer not to say | 2 |

Q32 **What is the main language spoken in your home?**

| | |
|------------------------------------|---|
| [show drop down list of languages] | 1 |
| Prefer not to say | 2 |

Q33 **Do you speak any other languages at home? (MR)**

| | |
|--|---|
| [show drop down box of languages] | 1 |
| I do not speak any other languages at home | 2 |
| Prefer not to say | 3 |

Q34 **Which of the following best describes your age group? [SR]**

| | |
|-------------------|---|
| Under 18 years | 1 |
| 18 – 24 years | 2 |
| 25 – 34 years | 3 |
| 35 – 44 years | 4 |
| 45 – 54 years | 5 |
| 55 – 64 years | 6 |
| 65 – 74 years | 7 |
| 75 years or older | 8 |



Q35 Which of the following best describes your home?

| | |
|--|----|
| Single story house / townhouse | 1 |
| Multi story house / townhouse | 2 |
| Ground floor apartment | 3 |
| 1 st or 2 nd floor apartment | 5 |
| Apartment on 3 rd floor or higher | 6 |
| Other (please tell us _____) | 98 |

Q36 And thinking about the home you live in ...

| | |
|--|----|
| I own my home outright | 1 |
| I am paying a mortgage | 2 |
| I am renting | 3 |
| I live with others and do not pay rent | 4 |
| Other (please tell us _____) | 98 |

Q37 And is your home subject to any of the following? [SINGLE RESPONSE PER ROW]

| | Yes | No | Don't know |
|--------------------------------|-----|----|------------|
| SBO (Special Building Overlay) | 1 | 1 | 1 |
| Inundation Overlay | 2 | 2 | 2 |
| Floodway Overlay | 3 | 3 | 3 |

Q38 Which of the following best represents your household structure? [SR]

| | |
|---|---|
| Younger family (most children under the age of 8 yrs) | 1 |
| Older family (most children between 8 – 21 yrs) | 2 |
| Mature family (most children over the age of 21 yrs) | 3 |
| Adult shared house | 4 |
| Single/Couples – No kids | 5 |

Q39 What is the highest level of education you have completed? [SR]

| | |
|--|---|
| Less than high school / still in high school | 1 |
| High school / Year 12 | 2 |
| Certificate I / II | 3 |
| Certificate III / IV | 4 |





| | |
|---------------------------------------|---|
| Advanced diploma/Diploma | 5 |
| Graduate diploma/Graduate certificate | 6 |
| Bachelor degree | 7 |
| Postgraduate degree | 8 |
| Prefer not to answer | 9 |

Q40 What is your current employment status? [SR]

| | |
|-----------------------------|---|
| Working full time | 1 |
| Working part time / casual | 2 |
| Looking for full time work | 3 |
| Looking for part time work | 4 |
| Don't work | 5 |
| Home duties | 6 |
| Retired | 7 |
| Student (not in employment) | 8 |
| Prefer not to answer | 9 |

Q41 What is your preferred method of communication if you were to receive information from Melbourne Water or State Emergency Service?

Please select all that apply. [MR. RANDOMISE]

| | |
|------------------------|----|
| SMS | 1 |
| Email | 2 |
| Letter | 3 |
| Phone call | 4 |
| Door knock | 5 |
| Other (please specify) | 97 |

Q42 How long have you lived at the current address in years?

OPEN





Q43 This survey is being conducted on behalf of Melbourne Water. To better help Melbourne Water with their flood preparation strategy, can you please tell us your home address?

It is a critical part of this study and your help here is really appreciated!

Remember your privacy is protected and your individual answers will not be provided to Melbourne Water in association with your address under any circumstances.

Your address will NOT be used for any other purpose except to determine whether or not you are in a flood prone area – which can vary from house to house!

We have your postcode as..... [PIPE IN RESPONSE FROM Q3]

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

Please type in your suburb, street and house number.

| |
|---------------|
| Suburb |
|---------------|

| |
|---------------|
| Street |
|---------------|

| |
|-----------------|
| House no |
|-----------------|

ASK Q44 IF Q23 CODE 1 SELECTED

Q44 One final question!

We're running an online discussion forum with people like you, talking about the information they have recently seen about floods, and we want you to be part of it!

The discussion forum is similar to an online message board and will run over 4-5 days for you to respond to each discussion throughout the week in your own time (takes just a few minutes per day).

If you participate in all discussions you will receive a \$10 e-gift card as a thank-you for your time AND your responses will help keep Melbournians safe during floods!

Would you be interested in taking part?

| | |
|--|---|
| Get paid for chatting online? Sure thing – I'm interested! | 1 |
| No thanks | 2 |

IF YES, TRIGGER INTO MAILING LIST

SHOW Q45 IF Q44=1

Q45 Great! Please enter your details below and we will be in contact with you via email soon with more information.





SECTION I: CLOSING

Thank you so much for completing this survey today.

This study has been conducted by Bastion Latitude on behalf of Melbourne Water. If you have any other comments you would like to make about this survey or about the topic, please type them in the box below.

Please press >> to submit your responses.

10.2 QUANTITATIVE QUESTIONNAIRE (CATI)



Bastion Latitude

QUESTIONNAIRE

MELBOURNE WATER
Flood Preparedness
Progress
Questionnaire CATI

#18-097
MAY 2018

SECTION A: INTRODUCTION

Thank you for agreeing to participate in this survey, which will take no more than 15 minutes of your time. Please rest assured that we are not trying to sell you anything, and that your responses to these questions will be used along with hundreds of others. All responses are kept confidential and are collected in accordance with the principles and guidelines as set out by the Australian Social and Market Research Society (AMRS).

SECTION B: SCREENER

Q1 Who is responsible for managing your household? By that I mean paying bills, making decisions on services for your property, purchasing insurance, etc. Are you.....? [SR]

| | |
|---|---|
| Solely responsible for managing the household | 1 |
| Jointly responsible for managing the household | 2 |
| Not at all responsible for managing the household | 3 |

CLOSE IF CODE 3 IN Q1.

Q2 Which of the following best describes your residency in the greater Melbourne area. [SR]

| | |
|--|---|
| I am a citizen or resident who lives permanently in the Melbourne area | 1 |
| I am a temporary visitor to the Melbourne area | 2 |
| Neither of these | 3 |

CLOSE IF CODES 2 OR 3 IN Q2.

SECTION C: DEFINITION

Thanks for answering those few questions. We'd like to talk more about flooding. When we refer to flooding, we mean water coming into your home or property from outside such as from heavy rain or a storm. We don't mean flooding as a result of faulty plumbing or household accidents within the home. In addition, by 'flooding' we mean water rising up from ground level. For example, if your roof collapsed due to heavy rain, this is not 'flooding' for the purposes of this survey.



SECTION D: AWARENESS AND RISK

Q3 To the best of your knowledge, is the home or property where you currently live at risk of flooding or may be affected by flooding? That is, are you in a 'flood prone' area?

Remember that when we talk about 'flood' we mean water coming into your home or property from outside such as from heavy rain or a storm, and water rising from ground level, not flooding as a result of faulty plumbing or household accidents. [SR]

| | |
|----------|---|
| Yes | 1 |
| No | 2 |
| Not sure | 3 |

ASK Q4 OF THOSE WHO SELECTED CODE 1 IN Q3.

Q4 How did you find out?

Select all that apply. [MR.RANDOMISE]

| | |
|---|----|
| Someone knocked on my door and told me | 1 |
| I got a letter in the mail | 2 |
| My neighbour told me | 3 |
| It was in my contract of sale | 4 |
| I was notified by the council | 5 |
| I was aware it might be an issue and looked into it | 6 |
| Other (please tell us) | 97 |

ASK ALL

Q5 Which of the following have you ever experienced at your current home or property where you live?

Select all that apply. [MR]

| | |
|--|----|
| Overflowing drains in the street with a few centimetres of water on the street | 1 |
| Water levels on your property, but below the ground floor level | 2 |
| Water levels 2-3 centimetres above the ground floor level | 3 |
| [EXCLUSIVE] I haven't experienced any of these | 99 |





Q6 On a scale from 0 to 10, where 0 is 'extremely unlikely' and 10 is 'extremely likely', how likely is it that the home or property where you live will experience one of the following flood levels in the next 10 years? [SR PER LEVEL]

| Extremely Unlikely | | | | | | | | | Extremely likely | |
|--|---|---|---|---|---|---|---|---|------------------|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | | | | | | 0-10 SCORE | |
| Overflowing drains in the street with a few centimetres of water on the street | | | | | | | | | | |
| Water levels on your property, but below the ground floor level | | | | | | | | | | |
| Water levels 2-3 centimetres above the ground floor level | | | | | | | | | | |

Q7 We are interested if the impact on you would be different with different levels of flooding.

Think about the impact on you, your family, your day-to-day life and your house and contents.

Use the scale below where 0 is 'no impact at all' to 10 being 'catastrophic impact' to rate the amount of impact for each level listed. [SR PER LEVEL]

| No impact at all | | | | | | | | | Catastrophic impact | |
|--|---|---|---|---|---|---|---|---|---------------------|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | | | | | | | | | 0-10 SCORE | |
| Overflowing drains in the street with a few centimetres of water on the street | | | | | | | | | | |
| Water levels on your property, but below the ground floor level | | | | | | | | | | |
| Water levels 2-3 centimetres above the ground floor level | | | | | | | | | | |





SECTION E: PREPAREDNESS

Q8 How prepared do you feel you and your household are for a flood at the home or property where you currently live?

Remember that when we talk about ‘flood’ we mean water coming into your home or property from outside such as from heavy rain or a storm, and water rising from ground level, not flooding as a result of faulty plumbing or household accidents. [SR]

| | |
|--------------------------------------|----|
| Extremely prepared | 1 |
| Mostly prepared | 2 |
| A little prepared, but could do more | 3 |
| Not really prepared | 4 |
| Not at all prepared | 5 |
| Not sure | 99 |

Q9 The following are some statements that people have said about flooding in Melbourne. For each one, please indicate how strongly you agree or disagree with the statement, on a scale from 0 to 10 where 0 is ‘strongly disagree’ and 10 is ‘strongly agree’.

[RANDOMISE STATEMENTS. SR PER STATEMENT.]

| | Strongly disagree | | | | | | | | | | Strongly agree | |
|---|--|---|---|---|---|---|---|---|---|---|----------------|------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0-10 SCORE |
| a | There is nothing I can really do to avoid damage to my home and property from a flood | | | | | | | | | | | |
| b | It is the council or government’s job to minimise the risk of flooding | | | | | | | | | | | |
| c | The government has an obligation to inform communities about their flood risk | | | | | | | | | | | |
| d | If you are not covered for flood damage, the insurance company has a responsibility to tell you that | | | | | | | | | | | |
| e | It is up to me to protect my property from the risk of flooding | | | | | | | | | | | |
| f | My house and/or contents insurance would cover me if my home or property were damaged by flood | | | | | | | | | | | |
| g | I’m confident I am able to take the actions required to prepare my property for a flood | | | | | | | | | | | |





Q10 Which of the following have you done to minimise the risk and potential damage from a natural disaster, including floods?

Select all that apply. [RANDOMISE RESPONSES. MR]

| | |
|---|----|
| Checking to see if my home is in a flood prone area | 1 |
| Making sure I have appropriate and sufficient insurance in case of flood | 2 |
| Download and setup the VicEmergency app | 3 |
| Have a battery operated radio to receive information if power/communications fail | 4 |
| Talk to friends, family and neighbours about preparedness | 5 |
| [ANCHOR] I have not done any of any of these | 6 |
| Other (please tell us) | 7 |
| None of these | 99 |

ASK Q11 IF Q10 CODE 99 NOT SELECTED

Q11 What are the reasons you did each?

Please select all that apply. [RANDOMISE. MR.]

| | PIPE SELECTED RESPONSES FROM Q10 |
|---|----------------------------------|
| Very easy to do | 1 |
| Didn't take much time | 2 |
| Didn't cost much | 3 |
| I had spoken to someone else about doing it | 8 |
| I know someone else who did it | 9 |
| I saw advertising or information that convinced me to do it | 10 |
| My partner asked me to do it | 11 |
| I had all the tools/supplies handy | 12 |
| There was a weather or flood warning | 13 |
| Other (please tell us) | 97 |
| I can't remember | 99 |





ASK Q12 IF Q10 ANY OF 1-5 NOT SELECTED

Q12 What are the reasons you did not do each of the following?

Please select all that apply. [RANDOMISE. MR.]

| | PIPE UNSELECTED RESPONSES FROM Q10 |
|--|------------------------------------|
| Too difficult | 1 |
| Takes too much time | 2 |
| Too expensive | 3 |
| I couldn't find any free time | 4 |
| No one else does it, so why should I | 8 |
| I don't think it will help | 9 |
| I have insurance | 10 |
| I don't know how to do it | 11 |
| I didn't have all the tools/supplies handy | 12 |
| I'll have warning before a storm comes and can do it then | 13 |
| I wasn't aware this should be done / wasn't aware it might minimise risk | 98 |
| Other (please tell us) | 97 |
| I can't remember | 99 |

Q13 How often do you discuss the potential for flooding in your area with family, friends or neighbours? [SR]

| | |
|-----------------------|---|
| Weekly | 1 |
| Monthly | 2 |
| Every 6 months | 3 |
| Once a year | 4 |
| Less than once a year | 5 |
| Never | 6 |





SECTION F: COMMUNICATIONS

Q14 Do you recall any advertising or information about the risk of floods in the last few months? [SR]

| | |
|----------|----|
| Yes | 1 |
| No | 2 |
| Not sure | 99 |

IF SELECTED CODE 1 IN Q23, ASK Q24-27.

Q15 Where did you see this advertising or information?

Select all that apply. [RANDOMISE CHANNELS. MR]

| | |
|--|----|
| Television | 1 |
| Radio | 2 |
| Newspaper | 3 |
| Website | 4 |
| Social media (Facebook, Twitter) | 5 |
| Word-of-mouth (family, friend, neighbour, colleague) | 6 |
| Letter box drop | 7 |
| [ANCHOR] Something else (please tell us _____) | 98 |
| [ANCHOR] Not sure | 99 |

Q16 What specific information have you seen about flooding in the last 12 months?

Select all that apply. [RANDOMISE. MR]

| | |
|--|----|
| Brochures and leaflets | 1 |
| Section 52 certificates | 2 |
| Videos or posts on social media | 3 |
| Information on websites | 4 |
| Weather warnings and forecasts | 5 |
| Information stalls or stands | 6 |
| Community meetings | 7 |
| Presentations at your workplace or community group | 8 |
| Letters addressed to your home | 9 |
| Television news program | 10 |
| Television advertising | 11 |
| Radio advertising | 12 |





| | |
|---------------------------------------|----|
| Radio programs | 13 |
| Doorknocking | 14 |
| Conversations with friends and family | 15 |
| Newspaper article | 16 |
| Newspaper advertising | 17 |
| Other (please tell us) | 97 |

Q17 Do you recall who provided this information?

Select all that apply. [RANDOMISE RESPONSES. MR]

| | |
|--|----|
| Bureau of Meteorology | 1 |
| Emergency services (police, fire brigade) | 2 |
| State Emergency Services (SES) | 3 |
| Local council | 4 |
| State Government | 5 |
| Water Retailer (South-East Water, City West Water, Yarra Valley Water) | 6 |
| Melbourne Water | 7 |
| Insurer | 8 |
| Department of Human Services | 9 |
| A friend / family / neighbour | 10 |
| Landlord / real estate agent | 11 |
| [ANCHOR] Other (please tell us _____) | 98 |
| [ANCHOR] Not sure | 99 |

SECTION G: DEMOGRAPHICS

Thanks for all your answers so far! We have just a few final questions to better understand who you are and the area you live in.

Q18 Are you...

| | |
|--------|---|
| Male | 1 |
| Female | 2 |

Q19 Which of the following best describes your age group? [SR]





| | |
|-------------------|---|
| Under 18 years | 1 |
| 18 – 24 years | 2 |
| 25 – 34 years | 3 |
| 35 – 44 years | 4 |
| 45 – 54 years | 5 |
| 55 – 64 years | 6 |
| 65 – 74 years | 7 |
| 75 years or older | 8 |

Q20 And is your home subject to any of the following? [SINGLE RESPONSE PER ROW]

| | Yes | No | Don't know |
|--------------------------------|-----|----|------------|
| SBO (Special Building Overlay) | 1 | 1 | 1 |
| Inundation Overlay | 2 | 2 | 2 |
| Floodway Overlay | 3 | 3 | 3 |

Q21 Which of the following best represents your household structure? [SR]

| | |
|---|---|
| Younger family (most children under the age of 8 yrs) | 1 |
| Older family (most children between 8 – 21 yrs) | 2 |
| Mature family (most children over the age of 21 yrs) | 3 |
| Adult shared house | 4 |
| Single/Couples – No kids | 5 |

Q22 One final question!

We're running an online discussion forum with people like you, talking about the information they have recently seen about floods, and we want you to be part of it!

The discussion forum is similar to an online message board and will run over 4-5 days for you to respond to each discussion throughout the week in your own time (takes just a few minutes per day).

If you participate in all discussions you will receive a \$15 e-gift card as a thank-you for your time AND your responses will help keep Melbournians safe during floods!

Would you be interested in taking part?

| | |
|--|---|
| Get paid for chatting online? Sure thing – I'm interested! | 1 |
| No thanks | 2 |





SHOW Q23 IF Q22=1

Q23 Great! Please enter your details below and we will be in contact with you via email soon with more information.

| |
|------------|
| First Name |
| Last Name |
| Email |

SECTION H: CLOSING

Thank you so much for completing this survey today.

This study has been conducted by Bastion Latitude on behalf of Melbourne Water. If you have any other comments you would like to make about this survey or about the topic, please type them in the box below.

Please press >> to submit your responses.



10.3 QUALITATIVE DISCUSSION GUIDE



DISCUSSION GUIDE

MELBOURNE WATER

Flood Preparedness
Progress
Discussion Guide v2

#18-097
JUNE 2018

SECTION A: INTRODUCTION

Welcome to the first topic of our week-long discussion all about floods. We will post a new topic each day, but feel free to comment whenever you feel like it on any discussion that is posted. Remember, we will read your comments and may have follow up questions that we would like you to respond to.

Give us as much detail as you can for each discussion and at the end you will get your \$15 e-gift card as a reward! Let's get right into it!

SECTION B: DISCUSSION 1 – ACTIONS TAKEN

Start by telling us a bit about how you have prepared for emergencies, including floods. Please get as in depth as possible, we want to know everything you can tell us!

- To begin, why do you prepare?
 - What role do you have vs government vs insurance in preparing for an emergency?
- How have you prepared? What actions have you taken? This could be for any emergency, but we are particularly interested in floods.
 - **PROBE:** Our 5 actions we are interested in.
- Why did you think to do these specific things? **PROBE:** Where did the information come from?
 - Did you speak with friend or family about it?

SECTION C: DISCUSSION 2 – THE ACTION ITSELF

Today we want to get specific and understand some details around the action you took.

- Why did you choose to do this particular action?
- How easy or difficult was it to do these things? What made this something you were able to do? (e.g. maybe it was simple, inexpensive or just part of an existing routine).
 - **Probe:** Difficulty, Cost, Ability, Resources, Routine, etc
- What has your experience been now that you took action? How has it changed how prepared you feel? Would you continue to upkeep/do this action?

1

Discover why
Uncover how.

83



- What else you are still considering doing in future to be prepared for an emergency? Why or why not?
- What about insurance? Does this play a part in what actions you take? In what way?

SECTION D: DISCUSSION 3 – BARRIERS

Thanks for your responses so far! Now that we know what you *have* done, we want to know a bit about what you have not.

- What have you intended to do to prepare yourself for an emergency or flood that you have not ended up doing?
 - What prevented you from doing it?
 - **Probe:** Difficulty, Cost, Ability, Time, Resources, Routine, etc
- What do you think might stand in your way when it comes to taking actions in the future?
- Do you feel there is enough information out there about action you could take?
- What would you like to know more about when it comes to preparing for an emergency or flood?
 - Where would you look?
- Where do you tend to get your information currently? **PROBE:** TV, social interaction, etc

SECTION E: DISCUSSION 4 – TRIGGERS

You made it! Our final discussion! We all have routines and it can take a lot to shake us out of these routines and do something we know we need to do (mow the lawn, go to the gym). Today we want to understand what you think is most effective in getting you to take actions to help prepare for a flood.

- To begin, if you have taken action, what do you think the moment was you decided to do so? In other words, did you act as soon as you saw a TV commercial about flooding, or were you sitting on the couch and remembered you needed to do it?
 - **Probe:** Did they set themselves a reminder, get pushed by someone else, etc?
- If you have not taken action you intended to, what stood in your way?
 - Is there anything that prompts action for you in other areas?
 - **Probe:** Calendar notifications, SMS, Weather warning, etc

Before you finish, remember to look back at your old posts to see if you have anything to add or if I have asked any other questions in response! It will only take a few minutes to finish up and then you get your reward!

SECTION F: THANK AND END COMMUNITY

2

Discover why
Uncover how.