



Phase 2 – Community Partnership Panels: Feedback Report

Maribyrnong River catchment flood mitigation study
March 2026

Executive Summary

This report provides a brief overview of the second round of Community Partnership Panels (Panels), which took place in October 2025 as part of Phase 2 of community and stakeholder engagement for the Maribyrnong River catchment flood mitigation study (the study).

In Phase 2, the Panels focused on gathering feedback from members about:



The Evaluation Criteria



The long-list of flood mitigation options (the long-list)



The engagement process

The Panels resulted in several valuable insights which the study team will use to help shape Phase 3 of the study.



Summary of activities

The first activity members engaged with as part of the Panels was a technical presentation and question and answer session delivered by a Principal Hydrologist from Jacobs. Following this, we gathered feedback from members through two primary activities:

- Group prioritisation, which focused on the Evaluation Criteria
- Table discussions on exploring the long-list.

At the end of each Panel, we asked members to complete a survey to gather their feedback about the Panels and the engagement process.

- There are differing opinions among Panel members about the level of detail which should be provided, with some wanting more detail and others wanting simplified information
- An appreciation for the advantages, disadvantages and broader complexities associated with the options
- The screening of the long-list broadly aligns with community expectations
- The most effective flood mitigation options should be prioritised
- Although some options have constraints associated with them, these can largely be overcome
- Non-structural options are important, but structural options should be prioritised.



Key takeaways

The second round of Panels revealed both shared and contrasting priorities, as well as differing ideas and concerns among members, resulting in several key takeaways for the study team:

- The protection of homes is most important
- The Evaluation Criteria is mostly accurate
- More visual aids might improve how we communicate complex information

Next steps



In mid-2026, we will deliver Phase 3 of the study, including:

- Sharing an updated version of the Evaluation Criteria
- Sharing the shortlist and schemes of flood mitigation options for feedback
- Holding the third and final round of Panels for the study.

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Acknowledgement of Country

Melbourne Water respectfully acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Owners and custodians of the land and water on which all Australians rely.

We pay our respects to Bunurong and Wurundjeri Woi-wurrung peoples as the Traditional Owners and custodians of the land and water of the Maribyrnong River. We pay our deepest respects to their Elders past, present and emerging.

We recognise and respect the continued cultural and spiritual connections that Aboriginal and Torres Strait Islander peoples have with the land and water they have cared for and protected for thousands of generations.

We demonstrate our ongoing commitment to reconciliation through our partnerships with Traditional Owners and the broader Aboriginal and Torres Strait Islander communities, as we work together to manage land and water now and into the future, while maintaining and respecting cultural and spiritual connections.

Introduction

In October 2025, Melbourne Water held the second round of Community Partnership Panels (Panels) as part of Phase 2 of the Maribyrnong River catchment flood mitigation study (the study). This report provides an overview of the Panels in Phase 2, summarises the engagement activities members participated in and details the key themes, feedback and findings of the Panels.

A quick recap

Together with the community, Melbourne Water is exploring flood mitigation options to help reduce flood risk for the lower Maribyrnong River catchment. The study forms part of the work needed to identify, develop and implement flood mitigation options that will help to reduce flood risk while also reflecting community values as much as possible. To learn more about the study, please visit the Melbourne Water Let's Talk website:

letstalk.melbournewater.com.au/maribyrnong-mitigation

Phase 1 of the study asked for feedback from community members and stakeholders about what is important to them, and what they value within their local environments and communities, to help inform the Evaluation Criteria. We also heard from community members and stakeholders about some of the flood mitigation options they wanted to see explored, to help inform the long-list of flood mitigation options. As part of Phase 1, we recruited members of the community and invited their participation in the first round of Panels for the study. To read more about the first round of Panels, please see the Phase 1 – Community Partnership Panels: Feedback Report, available on the Let's Talk website:

letstalk.melbournewater.com.au/maribyrnong-cpp

Focus of Phase 2 and about this report

Phase 2 of community and stakeholder engagement for the study focused on gathering feedback on the Evaluation Criteria and the long-list of flood mitigation options (the long-list). We asked for feedback on the Evaluation Criteria to help us understand if it appropriately reflects what is important to the community and stakeholders when it comes to reducing flood risk. In particular, we aimed to determine how well it reflects the feedback provided to us during Phase 1.

Additionally, Phase 2 involved calling on the community to join us in exploring the long-list. We asked for feedback on some of the flood mitigation options on the long-list, with the aim of helping us refine it into a shortlist. For more information about Phase 2 of the study, the Evaluation Criteria, and to view the long-list in full, please see the Long-list Handbook, available on the Let's Talk website:

letstalk.melbournewater.com.au/maribyrnong-long-list



Image 1: Panel members at the Panel.

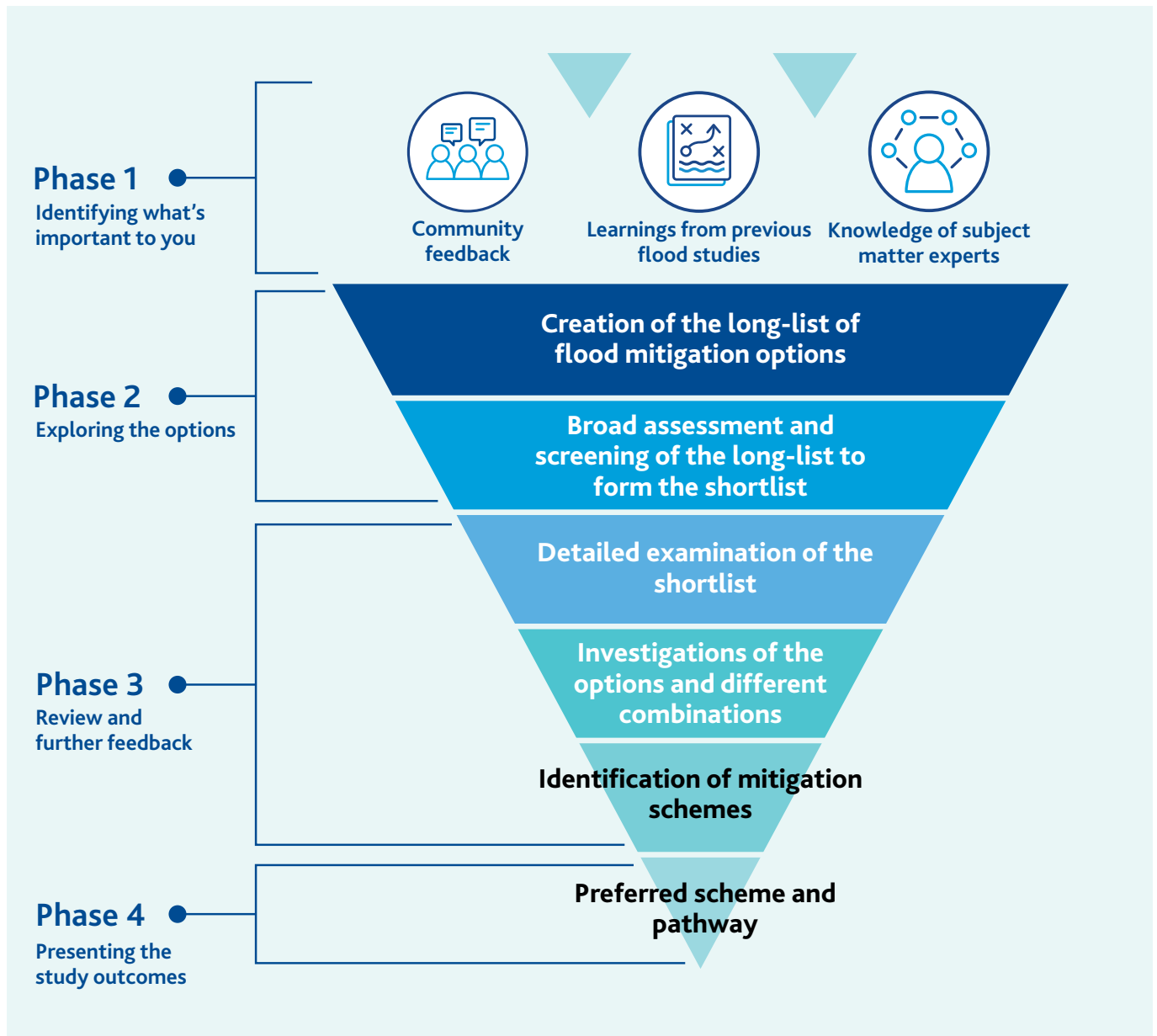


Figure 1: Phases of the study.

Aligning with the focus of community and stakeholder engagement in Phase 2, we undertook the second round of Panels for the study to seek feedback from members. This report provides an overview of the Panels in Phase 2, including, the engagement activities members participated in and the key themes, feedback and findings of the Panels.

Melbourne Water and Jacobs would like to extend our appreciation to all members for their continued participation in the Panels. It is important to recognise that the second round of Panels for the study took place in October 2025, three years on from the Maribyrnong River flood event of

October 2022. We especially want to highlight the generous contributions from members who shared their personal experiences of the October 2022 flood. We thank all members for the valuable insights and thoughtful feedback shared during the Panels.

Overview of the panels

This section of the report provides an overview of the Panels and their scope in Phase 2. Including a recap of the Terms of Reference, a summary of the Panel pre-reading materials and information about how feedback received during the first round of Panels helped inform the sessions in Phase 2.

For Phase 2 of the study, we invited the same community members and community group representatives who joined us in Phase 1, to participate in the second round of Panels. This consistent group of Panel members are working with Melbourne Water to assess and refine potential flood mitigation options over the course of the study. The enduring aim for the Panels is to foster effective partnerships between Melbourne Water and the community, leading to study outcomes which reflect the needs and priorities of the community as much as possible.

The three Panels saw participation from a total of 43 community members and representatives of community groups in the catchment area. To protect the privacy of members, feedback has been deidentified in this report. Each Panel was attended by representatives from Melbourne Water and Jacobs, including engagement, engineering, project management and hydrology specialists.

Scope of the Panels in Phase 2

Consistent with the aim of community and stakeholder engagement for Phase 2 of the study, the second round of Panels had two key objectives:

- Collect feedback on the Evaluation Criteria
- Explore the long-list of flood mitigation options and hear feedback on the options.

It is important to note that we are still in a relatively early stage of the study. As such, the Evaluation Criteria will continue to be refined. Also, the options on the long-list are conceptual only, meaning their location, scale and visual appearance will likely change. We recognise that some

members wanted to discuss the options in more detail and we will be able to share more detail in the next phase. As we progress through the study, we will use the Evaluation Criteria, and other assessment tools, to look at the flood mitigation options in increasing levels of detail. Towards the end of the study, we will conduct more detailed investigations into the options and the different combinations of options. It is also important to note that additional investigations and examinations of the options, and combinations of options, will likely continue beyond the life of the study.

As part of Phase 2, technical work for the study focused on the screening of the long-list and conducting high-level examinations of the options. Reflecting this, the Panels aimed to capture broad feedback from community members about their general perspectives on the Evaluation Criteria and initial views of the flood mitigation options on the long-list.

Terms of Reference

In Phase 2, members were asked to continue to adhere to the Terms of Reference which they agreed to as a condition of membership at the commencement of the Panels. The Terms of Reference articulate the aims of the Panels, including their scope and influence, to help make sure all parties involved can work towards a collective objective. Additionally, the Terms of Reference outline the responsibilities of all parties, including expectations that members act with respect, honesty and integrity throughout the entirety of their involvement in the Panels.

To read the Panel Terms of Reference in full, please visit:

letstalk.melbournewater.com.au/maribyrnong-cpp

Pre-reading materials

Ahead of the sessions, members were emailed a copy of the Long-list Handbook, containing information about the flood mitigation options and the Evaluation Criteria, to help provide context for the activities and to assist with guiding discussions. As the Long-list Handbook is a relatively long document, we did not ask members to read the document in full. Instead, we suggested that members familiarise themselves with its key themes and any of the options or other content that may have been of particular interest to them.

Use of Phase 1 feedback to inform future Panels

Feedback received during Phase 1 of the Panels influenced how we designed and delivered Phase 2, including:

- **More regular information sharing:** We kept Panel members up to date on the progress of the study via monthly updates. We also shared the summary report for the Phase 1 Panels ahead of public release and invited feedback from members on its accuracy
- **Structure of activities:** We designed the activities to be more self-directed, based on feedback that some activities in Phase 1 felt too restrictive
- **Location of the Panels:** All Panels were held at a community venue in Flemington that we received positive feedback about in Phase 1 for its accessibility and facilities
- **More pre-reading:** We prepared and shared more material ahead of the Panels, based on the feedback that some members felt unprepared in Phase 1.

We will continue to take feedback on board as we design future Panels and other community events.



Image 2: Table facilitator and Panel members.

Summary of activities

This section of the report provides a summary of the engagement activities conducted during the Panels and details some of the key themes and feedback we heard from members during the activities.

Members engaged in the following activities during the second round of Panels, namely:

- Presentation and Q&A – Technical specialist
- Group prioritisation – Evaluation Criteria
- Table discussions – Exploring the long-list
- Feedback surveys.

Presentation and Q&A - Technical specialist

Jacobs' Principal Hydrologist gave a presentation on the technical work that has been completed since Phase 1 of the study. The topics included the preparation of the long-list, the finalisation of the draft Evaluation Criteria and the initial screening of the long-list. The presentation also included a comparison of the storage volume of a selection of flood mitigation options which generated discussion during the subsequent question and answer session.

Members asked clarifying questions about the flood mitigation options, including why some options were excluded as a result of the screening while others were progressed. There was also discussion about which options are the 'best' or 'most effective', and how specific options would perform during a 1% AEP flood event (2100 scenario). AEP stands for Annual Exceedance Probability, and a 1% AEP flood means that there's a 1% chance of a flood this size occurring in any given year.

The screening of the long-list was a crucial step in the study's technical process, providing the foundation for more detailed analysis to occur as the study progresses. We have more work to do to understand how each of the progressed flood mitigation options might reduce flood risk in the lower catchment. What we do know, is that a combination of flood mitigation options, called a scheme, will be needed to effectively reduce flood risk. Flood mitigation schemes and additional details on the options will start to emerge as part of Phase 3 of the study.

Other topics discussed included the approval pathways for flood mitigation options when the study is complete. Many of the recommended option(s) will need to go through the relevant government approval process for it to be built. As part of the study we are considering feasibility, ability to implement and value for money, as this will be relevant for us when building a business case and seeking approvals from the relevant government agencies and departments.

During the session, we also heard feedback about the Evaluation Criteria. Our first group activity was focused on gathering this feedback, this is captured in the next section of the report.



Image 3: Technical specialist presentation to Panel members.

Group prioritisation – Evaluation Criteria

During the technical presentation, the study team explained how the Evaluation Criteria was developed and influenced by community feedback from Phase 1. The Criteria will be used in the assessments of the 'long-list' and 'shortlist' of flood mitigation options.

Each table was asked to discuss the Evaluation Criteria in groups using a series of prompts. The purpose of the activity was to help the study team understand how accurately the Criteria reflect the feedback members provided during Phase 1 and whether anything is missing or needs refining.

Members were able to approach the task how ever they liked and were supported by table facilitators. Each table approached the activity differently, leading to different insights across the Panels.

Key themes and feedback

Overall, members broadly agreed that the Evaluation Criteria accurately reflected their feedback from Phase 1. They noted that the 'Value for money', 'Ability to implement' and 'Redundancy' criteria were less reflective of their feedback, but most agreed with their inclusion. Some groups felt that they did not have enough information about the Evaluation Criteria, which made it challenging for them to engage in the activity.

We heard **differing opinions about the level of detail** provided in the Evaluation Criteria, with some members feeling it was too complex while others found it too simplistic. Some members expressed a desire for more detailed information about each of the individual criteria, for example, putting a dollar value to the number of people or properties impacted by the implementation of a flood mitigation option. One participant's opinion was that the Evaluation Criteria would not meet business case requirements. On the other hand, we heard from members that the way the Criteria was presented and the language used could have been simplified to make it easier to understand for a broader range of audiences.

Members discussed the **ranking of the various categories in the Evaluation Criteria**. We heard from some groups that 'Safety' should be valued as the highest priority. In contrast, some groups expressed that 'Property' and the protection of homes should come before safety. Some members explained that this feedback was based on the idea that 'Property' will likely favour flood mitigation options that reduce the amount of flood water in the lower catchment. Whereas flood mitigation options that perform well under the 'Safety' criteria could involve moving people away from flooded areas while their homes are still impacted. Additionally, some members explained that this view reflects their sense of personal safety as inherently linked to the protection of their home; largely, in relation to the idea that if property is protected from flood, this will result in safety. Some panel members also noted that during Phase 1, property was most cited when we asked what was important to community about their local area and environment. In particular, discussions about the property and safety criteria revealed broad understandings among members about the complexities involved in the development of the Evaluation Criteria.

There was considerable discussion around the 'Value for Money' criteria, with some groups feeling it was not relevant and others thinking it should be the most important consideration. Several members also commented that the 'Ability to implement' criteria or the overall effectiveness of an option should be the first consideration in the Criteria. **These discussions provided a great example of the diversity of perspectives across the Panels and the community.**

We heard feedback from some members in Phase 1 that they **wanted to see how the options performed against the Evaluation Criteria during the initial screening**. As part of Phase 2 of the study, we released the Long-list Handbook that included every flood mitigation option and the rationale for including or excluding it based on the screening. As we progress further in the study, we are committed to sharing more detailed information as it becomes available.

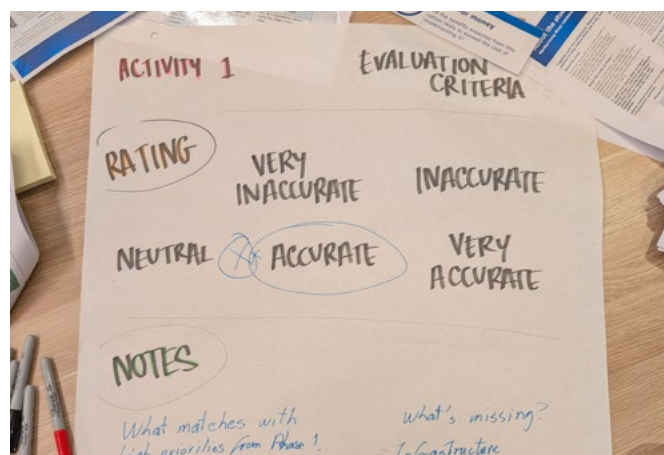
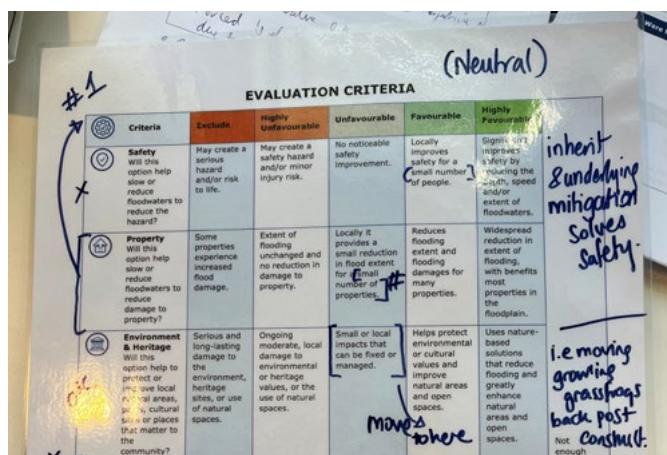


Image 4 and Image 5: Feedback provided by members on the Evaluation Criteria.

Comment snapshot

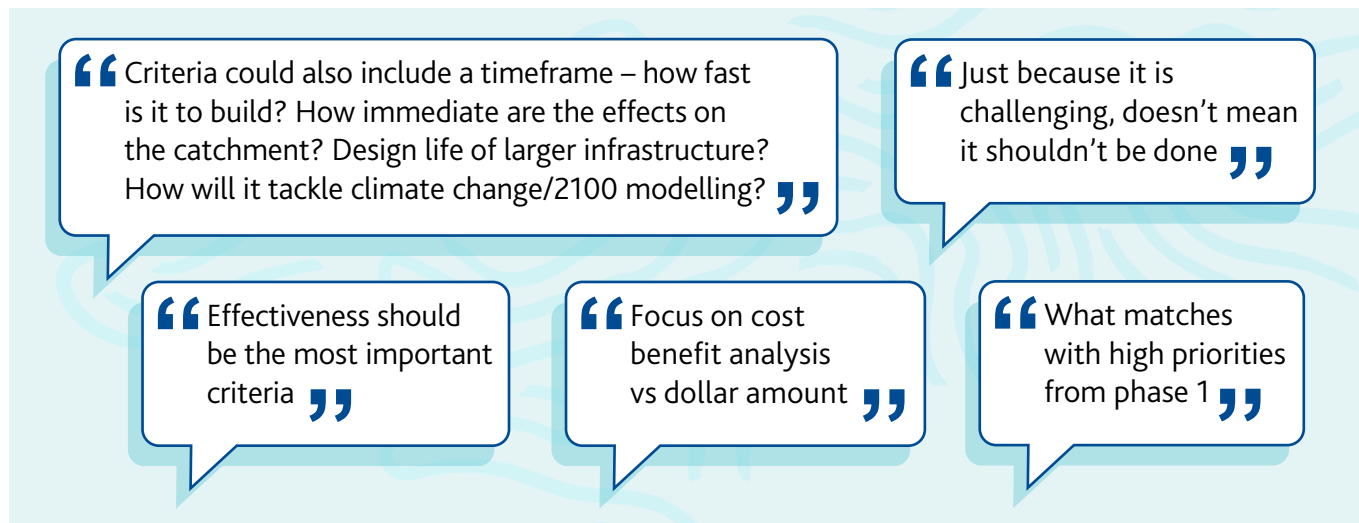


Figure 2: An example of some of the feedback provided by members during this activity.

Insights for the study team to consider

Feedback collected during the first activity revealed several insights for the study team to consider. Overall, we note the **Evaluation Criteria is mostly accurate but will require some adjustments** to better reflect community feedback, such as, reordering criteria, refining some details and updating language.

Additionally, the study team may **need to explore alternate ways to share complex information** during Phase 3 of the study, such as infographics or animations. Further, there is a **desire for more information about the Evaluation Criteria and its application** when assessing flood mitigation options. We are committed to sharing this level of detail on the shortlisted options as part of Phase 3 of the study.

Table discussions – Exploring the long-list

Following the group prioritisation activity, we encouraged members to screen the long-list and provide feedback on options during the table discussions activity. Given that each Panel was only 3 hours, it would have been impractical to ask members to reflect on and discuss every option on the long-list, of which, there are around 200. As such, members were asked to discuss a smaller sample of options, representative of the full long-list, at their tables in small groups. A sample of **progressed** options, **excluded** options and options **requiring further information** were all presented for discussion. We included a mix of structural and non-structural options, ranging from smaller localised options to those of a larger size or scale.

Each group at every Panel was encouraged to discuss four of the same options from the long-list. The study team chose the following four options, because we know the community have a relatively high level of interest in them:



Within the study, Stormwater Harvesting refers to an option category on the long-list which encompasses five excluded options relating to JJ Holland Park in Kensington. These options are very similar, so for the purposes of the activity, we asked members to discuss 'Stormwater Harvesting, JJ Holland Park' as if it was a single excluded option.

In addition to the four options noted above, members could elect to discuss some extra options and each group was randomly allocated an additional four options from the following list:

 At10 Tidal Barrage Along Maribyrnong Requires further information	 Cu20 Heavenly Queen Temple Culverts, layout 1 Progressed	 Cu50 Canning Street Bridge Culverts Progressed	 L042 Woods Street Levee, Ascot Vale Progressed	 NBS4 Leaky Dams Progressed
 NS15 Flood Resilient Homes and Flood Proofing Progressed	 NS20 Flood Warning Systems Progressed	 BR10 Pier Shielding on Raleigh Road Bridge Progressed	 NS60 Agency and Community Flood Preparedness Progressed	 RB20 Sunbury Retarding Basin Progressed
 RB45 Darraweit Retarding Basin D2 Progressed	 RB65 Wildwood Retarding Basin Progressed	 S0110 Fairbairn Park Progressed	 S060 Defence Site Maribyrnong Progressed	
 D010 Rosslynne Reservoir Excluded	 BG56 Residential Amenities Excluded	 S0100 Coulson Gardens Excluded		

During Phase 2, technical work for the study was largely centred around conducting a broad examination and screening of the long-list and high-level assessments of the options. To reflect this, the activity was designed to generate discussions around what the community generally thinks of some of the options, including:

- What they like or dislike about them
- Their broad proposed locations
- Potential impacts on their local environment or community amenity.

For the excluded options, members were asked to discuss how much they agreed with the rationale for their exclusion. Members were also provided with an additional prompt to assess the performance of the options using the Evaluation Criteria, to help the team gain further insight into the perspectives of the community about some of the advantages and disadvantages of the options.

Supported by table facilitators, members were free to discuss as many of the options as they liked during the activity. Additionally, some members chose to discuss other options from the long-list in the activity, rather than those detailed above. As such, some options were discussed by more groups and at different levels of detail and this is reflected in the discussion summaries below.

For some members, this activity was their first introduction to flood mitigation options and the technical thinking underpinning them. This exercise provided a strong starting point for members to start considering the range of options and to help with guiding conversations as more detail becomes available in Phase 3 of the study. The table discussions activity generated a variety of useful feedback and insights from members. There were several notable similarities and differences among each table and across all three Panels. The key themes and feedback from the table discussions activity is summarised in Table 1 below.

Key themes and feedback

Option	Discussion
 Arundel Retarding Basin (RB70) – Progressed	The Arundel Retarding Basin option (Arundel) is one of the most well-known options on the long-list, with many members stating they already had some awareness of Arundel prior to the Panels (although a note that within the study Arundel is a retarding basin, not a dam as was previously considered). Overall, we heard that members were broadly in favour of Arundel as an option, with the majority of members expressing that they think it is one of the best options on the long-list due to its ability to make a significant impact on reducing flood risk in the lower catchment. Some members noted that Arundel seemed to be a good option due to its large size allowing it to hold a significant volume of water during a flooding event, resulting in lower flood levels downstream. Additionally, many members commented that they generally liked the broad proposed location of the option meaning that it covers around 90% of the Maribyrnong catchment. Noting this location will ideally make the option effective in a variety of different flood scenarios. However, some members raised concerns with the option's large size and broad proposed location, particularly in relation to the potential for negative impacts on surrounding areas and private property. Further, several members expressed concerns with the possibility of inundating the Organ Pipes National Park in the event of a flood. Additionally, many members commented on the need to protect the Cultural Heritage of First Peoples and any important sites that potentially stand to be impacted by the option. Some members expressed that while they understand the option could result in negative environmental or Cultural Heritage impacts, this should not stop the option from going ahead. This perspective, as members explained, was based on an understanding that environmental and Cultural Heritage impacts can be mitigated through proper design and planning. Melbourne Water is engaging with Registered Aboriginal Parties in Victoria as we develop the study. Opinions among members about the potential legal, regulatory and cost challenges of the option were mixed. We heard some commentary that projects with similar challenges, or which are similarly expensive, regularly go ahead despite these factors. On the other hand, some members noted that these barriers might mean that implementation timeframes could be further extended for a number of years, as the option is assessed against all the necessary regulations and legislation. One of the factors many members disliked about this option was its lengthy timeframe for implementation. Noting that on top of the time it would take to construct the option, its cost, regulatory and legal context for development, and the environmental assessments and technical studies that would be required, would probably mean that the lower catchment would not see a reduction in flood risk for many years. Further, members expressed a desire for other complementary or localised options to be implemented along with the Arundel Retarding Basin option in the interim.

Option	Discussion
 Rivervue Retirement Village Levee (L010) – Progressed	Feedback from members about the Rivervue Retirement Village Levee option, and for most levee options, was largely mixed, with some commenting on the importance of the localised benefits of the option, and others considering most levee options to be generally unfavourable. Most members across all three Panels expressed that it was difficult to provide feedback on the Rivervue Retirement Village option without detailed information about how it would look, what it would be made from or the specific location of its alignment. We heard a lot of commentary about the impacts of this option, and all levee options, on visual amenity. For the Rivervue Retirement Village option, these comments mostly related to the potential for the option to negatively impact views and the value of properties both in and around Rivervue. Some members expressed that impacts to visual amenity from the option are not overly important to consider as long as it is likely to significantly reduce flood risk. A key concern raised by most members when discussing the Rivervue Retirement Village option, and when discussing most levee options, is the potential for water to be pushed elsewhere resulting in harm or increased flood risk in other areas. Further, we heard a lot about the need to implement this option in combination with other types of options, including retarding basins, one-way valves, pumping stations, and other levees, to offset the chances of negative impacts in other locations and to help reduce residual flood risk. A few members raised concerns about who would bear the costs of constructing and maintaining this option. Some also raised questions and made suggestions in relation to whether the option should be located on private land or if it would be more suitable on public land. Overall, members recognised that residents of Rivervue are a particularly vulnerable community and agreed they should be afforded protection from a flood event as a matter of urgency. Melbourne Water is conscious of this fact and has been working extensively with the owners of Rivervue, Council and VICSES since the October 2022 flood to increase flood preparedness among residents. Melbourne Water is actively reviewing priorities and exploring opportunities to bring forward implementation where possible. Many members who are not residents of Rivervue commented that they did not feel it was their place to comment on the option and suggested that the study team consult directly with residents about their preferences for the option. Melbourne Water and Jacobs reassured the members that there has been direct and regular engagement with residents at Rivervue over the course of the study to seek their feedback and will continue to do so.
 Maribyrnong Township Protection Levee (L030) – Progressed	Much of the feedback from members about the Maribyrnong Township Protection Levee option was broadly similar to that raised during discussions about the Rivervue Retirement Village option and most other levee options. Overall, members generally liked the idea of the option if the result was reduced flood risk for Maribyrnong Township. However, many felt they needed more information about its appearance and design before they could provide detailed feedback, especially the height of the levee. Additionally, some members commented that they are not in favour of the option, largely on the basis that they dislike levees in general. As raised during most discussions on various levee options, a lot of members expressed concern about the possibility of this option pushing floodwaters into new locations, resulting in harm to others or increased flood risk in nearby areas. Additionally, a few members commented this option would only be favourable if implemented alongside other options like retarding basins, one-way valves, pumping stations or other levees, to stop floodwaters from flowing upstream or downstream or impacting those on the opposite side of the river. Further, a few members raised concerns about the potential for a levee to be overtopped by flood waters in the event of a flood that exceeds the levee's capacity, potentially leading to members of the community thinking they are totally safe from a flood, when in fact there is still a degree of flood risk (a note that this is referred to as 'residual flood risk' which is the potential for flooding even after mitigation options, such as levees or retarding basins, have been put in place). The possible visual amenity impacts of the option was a key concern raised by members, who noted it might obstruct views of the river and general lines of sight for people in Maribyrnong. Other members raised issues with this option in relation to the possibility of it limiting community amenity, access and egress in and around Maribyrnong. Additionally, a few members discussed the potential for this option to make some people in Maribyrnong feel trapped, separated from the broader community or as though they are 'walled in' by the structure. As for a few other levee options, members commented that the option might be more favourable if it could be constructed with a walking track or bike path on top of it or in another way that provides additional recreational benefits.

Option	Discussion
 Stormwater Harvesting, JJ Holland Park – Excluded	Overall, the majority of members agreed with the rationale for excluding Stormwater Harvesting options at JJ Holland Park from the long-list. Many members commented that they like the option and think stormwater harvesting has potential benefits for the environment and as part of an integrated water management approach. However, they agreed it would not make a significant impact in terms of reducing flood risk from a Maribyrnong River flood event and therefore, it would not make sense for the study team to further pursue the option. In particular, we heard a lot of discussion around stormwater harvesting not being fit for the purpose of the study, given that it is designed to manage relatively small volumes of local runoff water and would not have the volume of storage necessary for assisting with a riverine flood event. A few members raised questions about whether the option could be combined with other stormwater harvesting options and implemented across the catchment so it could be scaled in a way that would significantly reduce flood risk. However, the general consensus was that this would likely still be relatively ineffective and that there are alternative options which could be implemented with better outcomes. Some members stated that flooding over roads from drains caused major problems and hazards during the October 2022 flood event, and as such, planning decisions and broader discussions about stormwater harvesting and local water management are important inclusions within the context of the study. However, many members noted that stormwater harvesting is something that should be taken up by local councils, separately from the study.
 Tidal Barrage Along Maribyrnong River (At10) – Requires further information	A small number of groups discussed the Tidal Barrage Along Maribyrnong River option noting, like the study team, they need more information before they can consider it in detail. A few members raised the issue of king tides and the impacts of tidal events on flooding from the Maribyrnong River, such as the October 2022 flood event. Members who discussed the option noted they would like to know how much impact it would have on reducing overall flood risk and how much it could help reduce hazards from flooding before providing further feedback.
 Residential Amenities (BG56) – Excluded	A few groups considered the Residential Amenities option agreeing it makes sense to exclude it from further investigations as part of the study. Members commented that the option, and other blue-green infrastructure, is small in scale and may not have enough storage available to make a difference in the event of a Maribyrnong River flood. Additionally, members noted that it is the responsibility of local councils to implement and manage blue-green infrastructure and therefore, the option falls outside the scope of the study. On a similar note, some members commented that blue-green infrastructure options should be considered and incorporated into the planning and design of other options based on the perceived benefits to the environment and that this might take place beyond the life of the study. One table took up the optional prompt of assessing the option against the Evaluation Criteria. Determining the option as 'doable' against the ability to implement criteria and 'TBC' for the value for money criteria, but that it performed badly against the safety, environment and property criteria.
 Pier Shielding on Raleigh Road Bridge (Br10) – Progressed	A few members discussed the Pier Shielding on Raleigh Road Bridge option, but feedback on this option during the Panels was limited. One member commented the option seemed pointless, another member commented that pier shielding on Canning Street Bridge might be more effective than on Raleigh Road Bridge.

Option	Discussion
 Heavenly Queen Temple Culverts, layout 1 (Cu20) – Progressed	A few groups chose to discuss the Heavenly Queen Temple Culverts, layout 1 option, stating that how much impact it would have on reducing flood risk was unclear. Some members raised questions about how the option would look in terms of aesthetics and around the potential for the option to impact locations of cultural significance. Broadly, the members who discussed the option noted that the benefits of the option currently seem limited but agreed it should be progressed as part of the study, so that it can be examined as part of a full scheme of options.
 Canning Street Bridge Culverts (Cu50) – Progressed	A small number of groups elected to discuss the Canning Street Bridge Culverts option as part of the activity, raising a variety of questions and concerns. Some members raised issues with the potential for the option to increase flood levels downstream and the impacts this might have on other areas. A few members noted they were not convinced the option would make a significant impact on reducing flood risk. However, a few members questioned if there might be some localised benefits for select areas along the Maribyrnong River as a result of the option.
 Rosslynne Reservoir (D010) – Excluded	Overall, groups that discussed the Rosslynne Reservoir option agreed with its exclusion from the long-list, with many conversations among members involving the idea of the option being unfit for the purposes of the study. Noting the existing structure was primarily designed for water supply storage, not flood mitigation, and raising that it would probably not significantly reduce flood risk. Members commented that the option would involve the technically challenging task of raising an existing structure. Also, members noted the Rosslynne Reservoir is already quite a few years old and there might be issues with its structural integrity, likely resulting in engineering complexities that would need to be dealt with if the option was pursued. As such, most members agreed the option would be difficult to implement with little benefit in terms of reducing flood risk. Therefore, it makes sense to exclude the option from further investigation as part of the study and that it would be better to invest in a new asset.
 Woods Street, Ascot Vale Levee (L042) – Progressed	The majority of the feedback from members about the Woods Street, Ascot Vale Levee option was broadly similar to that raised during conversations about other levee options. We heard that members wanted more information about the option, including its specific location, height and appearance. For this option, a few members noted they found it generally unfavourable because it would not protect a large number of homes. Also stating that if it would be better value for money to make these specific homes flood resilient or to buy-back the properties, these options should be pursued instead. Some members commented that the study needs to consider how the option would work in combination with other options, so as not to push floodwaters into new areas or cause harm in new locations.
 Leaky Dams (NBS4) – Progressed	Overall, the groups that discussed the Leaky Dams option expressed that they generally liked the idea, agreeing it should be further considered as part of the study. Some members raised questions about the water storage volumes of the option and whether several of them would be needed in order to make a significant impact on reducing flood risk. Additionally, we heard a few concerns about who would maintain the structures. Overall, we heard that members liked the potential environmental and community education benefits that could result from the Leaky Dams option.

Option	Discussion
 Flood Resilient Homes and Flood Proofing (NS15) – Progressed	Feedback from members about the Flood Resilient Homes and Flood Proofing option was mixed among groups and across the Panels. Overall, we heard that most members broadly liked the option and agreed it should be further investigated. Some members liked that the option could be implemented relatively quickly, in comparison to some other options on the long-list. We heard that some members would like to see this option considered by other organisations, including insurance companies. Many members raised questions around who would bear the costs of enacting this option, noting that if costs were to be covered by governments, it is much more favourable. We heard that some members would prefer for other types of mitigation options to be suggested through the study. Largely because they do not want the burden of this option to become the responsibility of communities and individuals, seeing flood mitigation as the responsibility of governments and other authorities.
 Flood Warning Systems (NS20) – Progressed	Members had varied feedback on the Flood Warning Systems option. Some members commented on the benefits of the option in relation to improving safety for communities and because it can be enacted across the entire Maribyrnong River catchment. Many members noted that while it would probably help improve safety, it would not help protect property. On a similar note, a few members commented that in theory the option sounds like a good idea and that it makes sense to pursue, but other mitigation options will still need to be enacted in any case. Some members raised questions about how this option would work and if it would involve signage, sirens or alerts on personal electronic devices. Some members communicated a degree of scepticism about if this option could be enacted in a way that would be effective. Noting previous flood warnings have proven inadequate and if any existing systems were to be used, they would require a great deal of innovation, refinement and improvement. One table took up the optional task of using the Evaluation Criteria to examine the option, scoring it 'good' for the safety criteria and value for money criteria. Additionally, the group scored the option as 'very good' for the environment criteria, 'ok' for the property criteria and noted it 'should be doable' for the ability to implement criteria.
 Agency and Community Flood Preparedness (NS60) – Progressed	Opinions among members and groups differed about the Agency and Community Flood Preparedness option. Several members commented that this option seemed like a 'non-negotiable' and that it should be a 'given'. Members explained that this is because it is the responsibility of the relevant agencies and authorities and they should be implementing flood preparedness programs, and working with the community to improve preparedness, regardless of the study. On the other hand, we heard that many members agreed the option should be progressed and it made sense to be investigated as part of the study. This is because they felt it could be enacted relatively quickly and, as such, the option would likely be a good first step to help improve safety while other flood mitigation options with longer timeframes are pursued. We heard a lot of commentary about some of the limitations of this option, namely, that it will not help prevent flooding, it will not protect property and it is 'reactive' rather than 'proactive'. Additionally, a few members raised concerns about the effectiveness of running flood preparedness drills or training noting that getting the community to participate might be challenging and therefore uptake of good flood safety habits would probably be limited. A few members who experienced the October 2022 flood event shared that they felt that a drill or training session would be inadequate to assist with preparing for a flood, commenting that unless an individual has their own lived experience of a flood, there is very little that can be done to prepare. We heard a few members would like to see signage about evacuation or advising the community not to enter flood waters as part of the option. A few members noted that making more educational materials about flood preparedness available to communities would be helpful as part of the option. Additionally, some members commented that the option could follow similar protocols and procedures to those used for bush fire or house fire preparedness programs.

Option	Discussion
 Sunbury Retarding Basin (RB20) – Progressed	A few groups discussed the Sunbury Retarding Basin option, with most noting they agree with the study team's assessment that it should be further considered as part of the study. Some members commented that as a 'secondary site' retarding basin option, the Sunbury option might have a few less environmental impacts and implementation challenges compared to some of the larger retarding basins on the long-list. Some members raised concerns with the broad proposed location of the option in terms of the potential impacts on private property in and around Sunbury, noting compensation for some landholders might be required. Some members suggested the option be considered in combination with other retarding basin options or other types of options if this would result in further reductions in flood risk. We heard that members wanted more information about the option including the volume of water it could store during a flood event.
 Darraweit Retarding Basin D2 (RB45) – Progressed	Conversations about the Darraweit Retarding Basin D2 option were broadly similar to those for the other 'secondary site' retarding basin options discussed during the Panels. Overall, we heard that members wanted more information about the option before providing feedback. One member noted that the study team should consider if this option could be combined with the Arundel option to improve the potential benefits of the option.
 Wildwood Retarding Basin (RB65) – Progressed	As above, we heard similar discussions about the Wildwood Retarding Basin option as for the other 'primary site' retarding basin options. Generally, members agreed with the study team in that the option needs consideration as part of the study and that it is likely to make a positive impact due to its ability to reduce riverine flooding. One table took on the optional task of assessing the option against the Evaluation Criteria, noting it would likely involve 'standard construction methods' for the ability to implement criteria and that it was 'TBC' in relation to the value for money criteria. The group rated the option as 'good (better than Arundel)' against the environment criteria, 'good' for the property criteria and 'very good' in relation to safety. Members noted that although the option is likely to be relatively expensive, they wanted to further interrogate what this means in the context of the study. Especially in relation to the probable cost-benefit ratio of the option and the potential for job creation.
 Fairbairn Park (S0110) – Progressed	Across all three Panels, no groups elected to discuss the Fairbairn Park option as part of the activity. For this option, the study team will consider community feedback received during other engagement activities in Phase 2.
 Defence Site Maribyrnong (S060) – Progressed	Feedback from members about the Defence Site Maribyrnong option was mixed across each of the groups and each of the Panels. Some members commented they liked the option due to the potential for the creation of additional recreational benefits, in addition to the ability of the option to help reduce flood risk. On the other hand, some members questioned the relatively small volume of water that could be stored by the option and if this would result in enough of a reduction in flood risk to make pursuing the option a 'good return on investment'. A few members made comments about the potential challenges that could be encountered when pursuing the option in relation to the heritage buildings on the site and the fact that the area is Crown Land. Most groups commented on the high likelihood that there is contaminated land at the site and the challenges this could present. Some members asked for more information about the contamination levels of the area to help inform their feedback. Many members raised concerns about water quality in relation to the possibility of contamination from the ground spreading into the water that would be stored at the site in the event of a flood, and the subsequent risk of this water flowing downstream and contaminating other areas. A few members commented that despite the high likelihood of contamination at the site, this could probably be managed with effective remediation, and the option should be pursued in any case.

Option	Discussion
 Coulson Gardens (S0100) – Excluded	Across all three Panels, no groups elected to discuss the Coulson Gardens option as part of the activity. For this option, the study team will consider community feedback received during other engagement activities in Phase 2.
 Kensington Banks Protection Levee (L056) – Progressed	The Kensington Banks Protection Levee option was not presented at the Panels for discussion, but one group elected to discuss it and to provide feedback. The group noted that although Kensington Banks already has a number of levees designed to provide flood protection, they feel they are inadequate and that more work needs to be done to fill any 'gaps' . Additionally, members noted that due to the 'medium to high' density housing in Kensington Banks, this option will likely provide 'good cost to benefit ratio'.

Table 1: Key themes and feedback from table discussions activity.

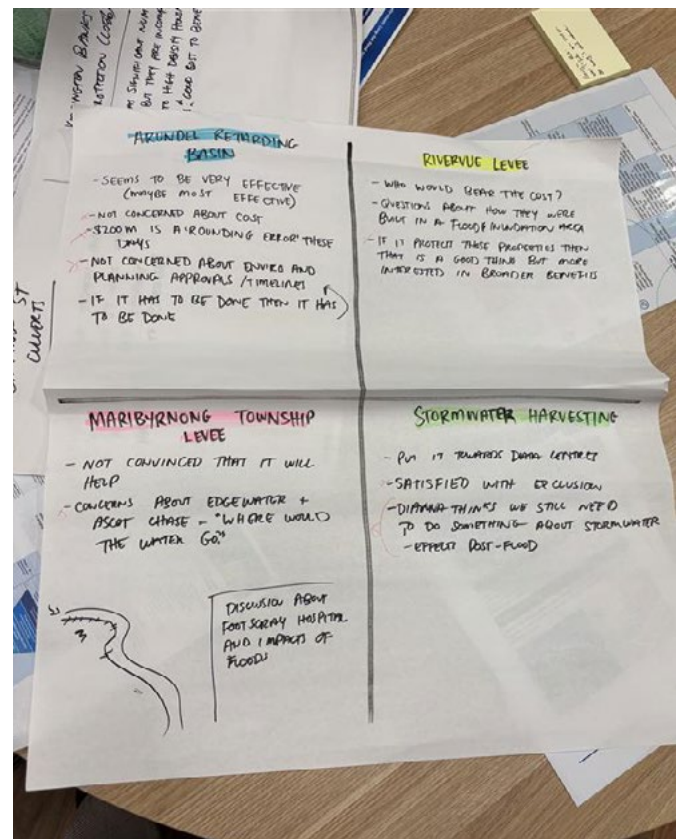
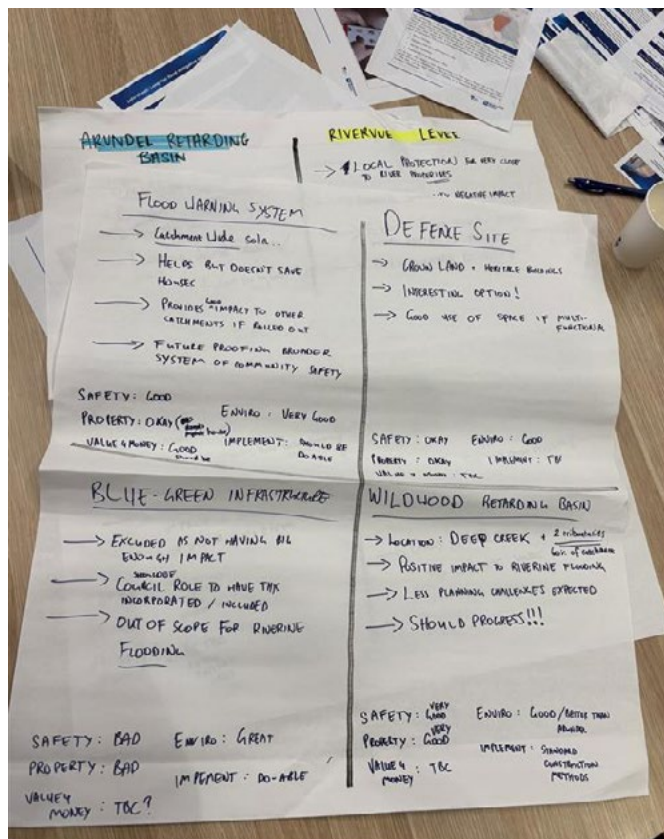


Image 6 and Image 7: Feedback from members on options, provided during the second activity.

Insights for the study team to consider

During the second activity, we collected valuable information from members about their perspectives on the options presented for discussion and on the long-list more broadly. Overall, discussions among members revealed **an appreciation for the complexities associated with many of the different options**. In the majority of conversations, members highlighted the potential benefits and advantages of an option but also made a point of underscoring the disadvantages or potential negative impacts for the same option. For example, when discussing the potential localised benefits of different levee options, we also heard about the potential for negative impacts on community amenity and the need to offset the chances of pushing water into new locations so as not to cause harm to others.

In relation to the screening of the long-list, feedback indicated that **the study team's assessments of the options so far are generally aligned with the expectations and perspectives of the community**. Noting most members agreed with how the study team categorised the options presented for discussion in the activity as progressed, excluded or requires further information.

We heard a lot about the **desire for the most effective options to be prioritised**. We heard from members that they felt Melbourne Water should focus on the most effective flood mitigation options, even if the options require overcoming considerable constraints. In other words, members are not overly concerned with how Melbourne Water address reducing flood risk, but rather they are primarily concerned with being presented with schemes that are most effective in achieving this outcome.

The study team collected a lot of feedback for consideration in relation to structural and non-structural options. Although most members generally agreed with the inclusion of non-structural options as part of the study, they also emphasised **non-structural options should not be prioritised over structural options**. Further, many members noted that non-structural options should be implemented as a 'minimum' of what the study ultimately proposes or that they should be suggested as complementary measures to structural options.

During the second activity, some members expressed **disappointment with the level of detail we were able to provide about the options** at this phase of the study. They questioned why feedback was sought before we were able to provide detailed information. For example, some members found it challenging to comment on structural options like levees or retarding basins without knowing their exact locations or without being able to visualise the options in their context and surrounding environments. Others highlighted that understanding the number of properties protected by each option was critical to providing feedback.

The study team acknowledges and respects these perspectives. While detailed technical information was not yet available, it was important to seek community input early to gauge community preferences for the different types of options so the study team can focus more closely on these options before progressing further in the study. This approach ensures that options unlikely to gain community support are identified early. The study team maintain that it is important to seek feedback from the community at every major phase of the study to help include the voices of those in our communities from the outset and as we make decisions throughout the life of the study. Noting that additional information and detail on the options will be provided as part of Phase 3.

Comment snapshot



Comment snapshot



Figure 3: An example of some of the feedback provided by members during this activity.



Image 8: Discussion and insights following the second activity.

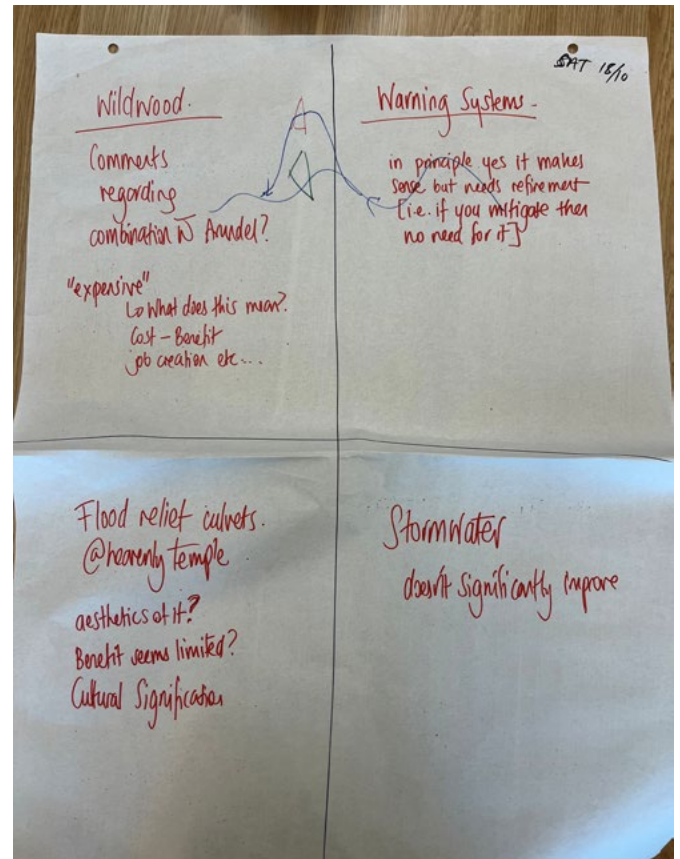
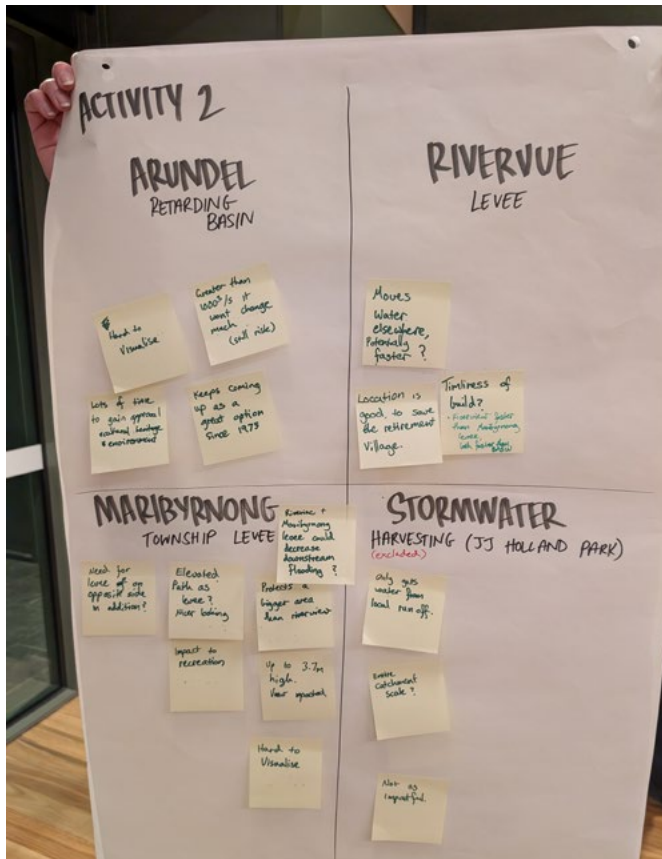
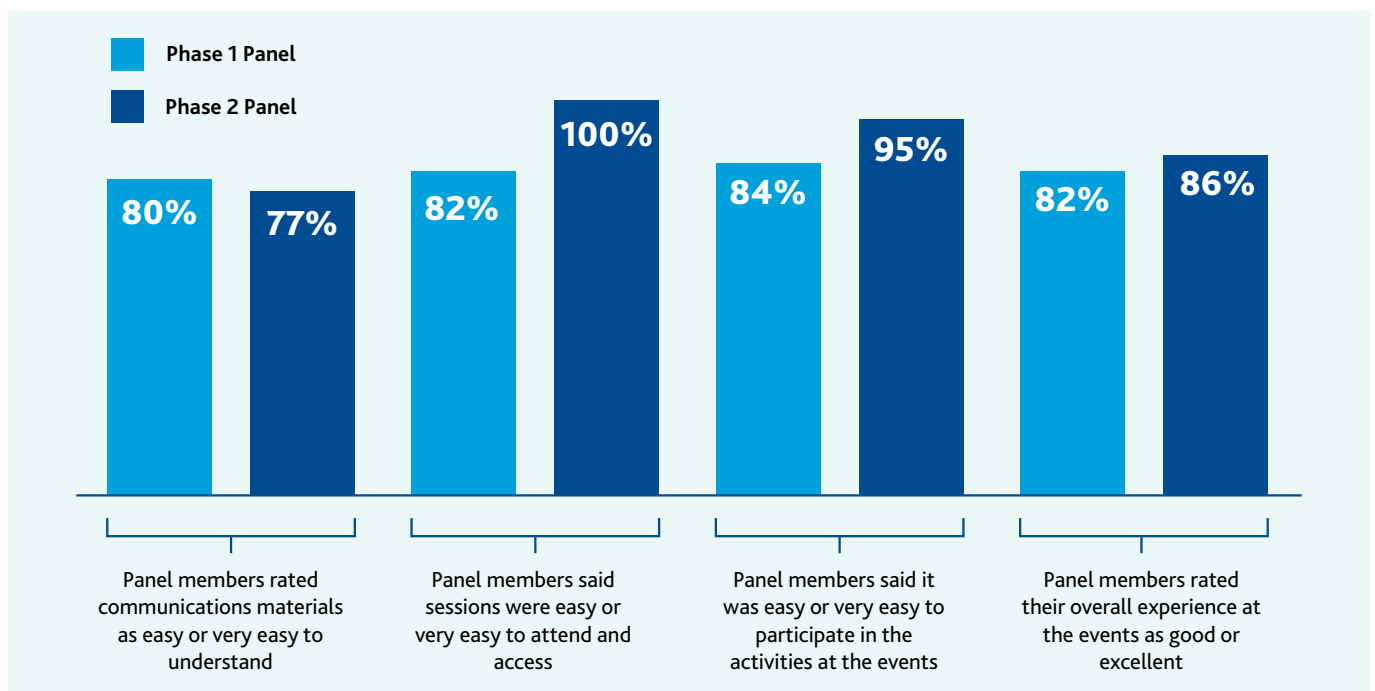


Image 9 and Image 10: Feedback from members on options, provided during the second activity.

Feedback surveys

At the end of each Panel, we provided members with a survey to ask for their feedback on the engagement process, their experience at the event and what they thought of the engagement activities. Recognising that a few members declined to participate in the surveys, this summary should be considered reflective of the large majority of members. This feedback will be used to help inform the final round of Panels in Phase 3 of the study.

According to our engagement feedback surveys:



Overall, these numbers reflect a general improvement in how members rated their experience at the Panels, compared to the feedback we received in Phase 1. Although, it is worth noting the rating of communications materials as 'easy or very easy to understand' fell slightly from 80% in Phase 1 to 77% in Phase 2.

The majority of members found at least one activity or element of the session to be engaging. The group activities, such as exploring the long-list, were favoured by members, with many noting they generated nuanced and constructive discussions. Many members stated they found the discussions valuable as they were able to converse with others in their community who also want to achieve positive outcomes as a result of the study.

Some members wanted more technical information to be provided and felt their ability to provide constructive feedback during the activities was limited by a lack of detail. Others indicated the information was too complex and that it would be easier to understand with additional images and maps to assist with visualising the information. Some members expressed that having pre-reading materials sent to them prior to the sessions helped make the sessions more productive.

Members highlighted the importance of having a technical specialist and effective facilitators attend and deliver the sessions noting this helped with answering complex questions, keeping the activities focused and allowing members to speak directly with the study team. Many members mentioned the technical presentation and question and answer activity as one of the most engaging and valuable parts of the session.

Overall, the majority of members were pleased with how the sessions were run. We have considered the feedback carefully with the aim of improving how we plan and deliver future engagement events. The study team thanks members for their constructive feedback about the Panels.

Comment snapshot



Figure 4: An example of some of the feedback provided by members during this activity.

Key takeaways

As described throughout this report, there were interesting similarities and differences in the views of members and their priorities for the study in the second round of Panels. This section of the report summarises our key takeaways.

- **Protection of homes is most important:** Reflecting the feedback we heard in Phase 1, many members reiterated that protecting homes should come above all else when assessing flood mitigation options
- **The Evaluation Criteria is mostly accurate:** Feedback across the Panels highlighted that the Evaluation Criteria largely reflects community aspirations for the study but will require some adjustments to better reflect community feedback
- **More visual aids:** Many members felt it was hard to understand how the Evaluation Criteria was applied to the options to date and how it will be used in future. Additionally, we heard it was difficult to provide feedback on structural options like levees or retarding basins without knowing what they look like in their context, considering their impact on visual amenity. Many members wanted to visualise flood mitigation options and requested visual aids to support their discussions and understanding
- **Differing opinions on the level of detail provided:** Similar to feedback we received in Phase 1, some members requested more technical information about the study and the options. On the other hand, some members noted the communications materials provided were too complex and suggested they be further simplified. We are working to strike the right balance in information sharing and are equally committed to providing as much information as is available and practical in each phase of the study
- **An appreciation for the advantages, disadvantages and broader complexities associated with the options:** Overall, discussions highlighted that members acknowledge each option will have associated advantages and disadvantages. Feedback from members indicated they understand the complexities associated with the options and expect many of them will result in a variety of outcomes and impacts, some of which could be positive, and some of which could be negative
- **The screening of the long-list broadly aligns with community expectations:** Overall, sentiments from members about the progressed options presented for discussion aligned with the study team's assessment that they should be further investigated. Additionally, discussions about the excluded options revealed most members agree with their exclusion and that it 'makes sense' for the purposes of the study
- **The most effective options should be prioritised:** Some members felt the options likely to be most effective at reducing flood risk should be prioritised in the study, expressing that factors like cost or associated impacts should be treated as secondary considerations. Further, some members emphasised the specific options proposed by the study are not overly important to them, if they will effectively achieve the outcome of reducing flood risk
- **Constraints can be overcome:** Many members felt that whilst they understand some options have environmental and Cultural Heritage constraints, these could be addressed as part of government approval processes and should not stop options progressing in the study. In light of this, some members recognised that options with fewer constraints and shorter implementation timeframes might need to be pursued as interim measures
- **Non-structural options are important but structural options should be prioritised:** Many members support the implementation of non-structural options, such as Flood Warning Systems or Agency and Community Flood Preparedness, to help reduce flood risk. However, some members felt they should not be prioritised at the expense of structural options.



Image 11: Technical specialist presentation.

Other observations

Over the course of the Panels, lots of important feedback emerged which did not directly relate to the activities or was otherwise outside the scope of the study. By 'scope' we mean the set of goals and objectives that guide our work, the specific mandate which gives the study its authority to operate, and the limits of what the study can and cannot address. Although we might not be able to address much of this feedback directly within the framework of the study, we recognise the importance of capturing it in this report and its relevance to the broader context that surrounds the study.

Melbourne Water maintains a regular dialogue with many of the other external organisations and groups who also play a role in water management and flood risk management for the lower Maribyrnong River catchment. Where possible, we are committed to sharing this feedback with the relevant stakeholders who may have comparatively more authority to work towards addressing some of the feedback and to help inform their decision making.

A desire for a more integrated approach to water management from authorities to improve localised outcomes for communities. During discussions of non-structural options, and options within the blue-green infrastructure and stormwater harvesting categories, we consistently heard that members want to see an increasingly integrated approach to water management from the various authorities with a level of responsibility in the sector. Members noted that in order to be successful, within the scope of the study or otherwise, many of the options discussed will require effective coordination and alignment between Melbourne Water, local councils, the Victoria State Emergency Service, the Bureau of Meteorology, various departments of the state and federal governments, and numerous other agencies. Many members provided feedback around a need for more streamlined communications and clarity around roles and responsibilities between these organisations to improve how water is managed at a local level.

A need for more involvement from all levels of government, on the issue of flood risk in the lower Maribyrnong River catchment. Some members raised questions about how frequently Melbourne Water are engaging with different levels of government about the study and asked about the level of interest in the study within government. Members expressed that they want to see their representatives engaging more with constituents about flood risk. Additionally, we heard they want the issue of flood risk to become a higher priority item on the political agenda.

More information about timeframes and what comes next, beyond the life of the study, including the implementation of the options. We heard commentary from members around the need to consider how the construction of options might best be staged to help improve flood risk. Some members raised questions around the potential for future development in various areas around the catchment and how this might impact flood risk. Additionally, we heard feedback about the need to present a strong business case to support efforts to secure funding for the options when the study is over. This feedback, along with other comments we heard, reflects that the community are thinking about the issue of flood risk in timeframes which extend well beyond the life of the study and the need to communicate what will happen next.

Some discussions among members indicated a lack of trust in Government bodies and low expectations for the study to deliver outcomes of value for the community. We heard from members who have lived in the catchment area for decades and who have participated in other previous flood studies. Despite this work, flood risk in the lower Maribyrnong River catchment remains an ongoing issue. We heard from members about how three years on from the Maribyrnong River flood event of October 2022, they are frustrated by the slow pace of action. The study team respects this feedback and these experiences. We recognise that by asking for community feedback on the study and inviting members to participate in Panels, we are ultimately asking for a significant level of trust to be placed in the study team, our process and our work. This is important work and it is essential we get it right. For this reason, it was necessary for Melbourne Water to complete its updated modelling of the Maribyrnong area before embarking upon this project. Additionally, some members raised questions about the transparency of the communications materials provided at the Panels and if they are genuinely reflective of the technical work undertaken by the study team.

The study team respects this feedback and these experiences. We recognise that by asking for community feedback on the study and inviting members to participate in the Panels, **we are ultimately asking for a significant level of trust to be placed in the study team, our process and our work.**

It is important to be clear that the study forms part of the work needed to identify, develop and implement flood mitigation options that will help to reduce flood risk in the lower Maribyrnong River catchment. This process will take time and will extend well beyond the life of the study. This being said, a key goal for the study team has been to reflect the values of the community as much as possible. Further, the study team have tried to strike a balance between providing robust information which accurately reflects the work of the study technical team while also maintaining an appropriate level of accessibility in the materials. We are keen to continue this dialogue with members including in the third and final round of Panels in 2026. The study team are grateful for the trust members have afforded us so far through their continued participation in the Panels and in the thoughtful feedback communicated to us, it is incredibly valuable to us.



Next steps

■ This section of the report summarises the next steps for the study and the third and final round of Panels.

Melbourne Water and Jacobs want to reiterate our thanks to members for maintaining a culture of openness and respect during the Panels, especially considering the challenging personal experiences faced by previous flood events. We look forward to continuing to hear from panel members as we progress the study.

The feedback collected during the Panels is being considered by the Study team as part of the shortlisting of flood mitigation options. We will share the shortlist as part of phase 3 of the study.

Within the next 3 months we will start Phase 3 of the study, this will involve:

- Commencing the next phase of community engagement
- Sharing an updated version of the Evaluation Criteria
- Sharing the shortlist of flood mitigation options for feedback
- Running the third and final round of Panels for the study.

If you would like to keep up to date with the study, visit the Let's Talk website, letstalk.melbournewater.com.au/maribyrnong-mitigation and select the 'follow' button at the top of the page.

Speak to the team

To speak with the team, please call 131 722 or email enquiry@melbournewater.com.au

