17 March 2023





Dear

## MELBOURNE WATER'S REVIEW OF MARIBYRNONG RIVER FLOOD IN 2022

Thank you for informing the City of Melbourne of Melbourne Water's review of the Maribyrnong River Flood which occurred in 2022. Please find enclosed our submission which provides details on how the City of Melbourne was impacted by the 2022 Maribyrnong River Flood Event and issues and information the Independent Review Panel should consider.

The City of Melbourne has a strong interest in this review as a section of the lower reaches of the Maribyrnong River is within the City of Melbourne and it is one of the city's key waterways.

The City of Melbourne is keen to learn and gain insights from this review in order to strategise ways to further protect our communities, assets, and waterways.

| For any queries regarding this matter, | please contact | on |
|--|----------------|----|
| or email at                            | or telephone   |    |

Yours sincerely,



City of Melbourne



# "Share your experiences and help us understand how you were impacted during the Maribyrnong River Flood Event."

# The City of Melbourne's interest in the review

The City of Melbourne has a strong interest in this review, as a section of the lower reaches of the Maribyrnong River is within the City of Melbourne and it is one of the city's key waterways. The City of Melbourne is also keen to learn and gain insights from this review in order to strategise ways to further protect our communities, assets, and waterways.



1. Map of the City of Melbourne with the Maribyrnong River identified in red.

## The impact of the 2022 Maribyrnong River flood event on the City of Melbourne

The City of Melbourne experienced some damage to infrastructure, properties and businesses, however, the proactive measures taken by the City of Melbourne as well as the topography of the area, meant the City of Melbourne was spared from the worst of the flooding.

In the City of Melbourne three businesses were severely impacted, five businesses had light to medium impact and there was one residential apartment block in Hobsons Road where the basement flooded, and approximately 80 vehicles were damaged and resident's personal belongings in the storage cages in the basement were also damaged.

The City of Melbourne had taken action to minimise the impact of any potential flood in the following ways. Riverside Park is a flood retarding basin and has a levee bank along the eastern side of Maribyrnong River. Stormwater drains from the Riverside Park retarding basin are connected to large underground outfall drain which discharges into the river. This



drain has a non-return valve which prevents river water from flowing back into the drain when the river level rises due to flooding.

During the October 2022 flood event:

- the levees prevented flood water overtopping from the Maribyrnong River;
- the non-return valves prevented river water backflow along the stormwater drains;
- Riverside Park and the adjacent areas were flooded as the non-return valves closed and stormwater could not drain under gravity into Maribyrnong River due to high water level in the river.

During this rain event the following sections of roads at various locations within the municipality were flooded, as stormwater could not drain under gravity into Maribyrnong River due to elevated water level in the river:

- A section of Hobsons Road close to the river;
- A section of Childers Street adjacent to newly constructed rain garden; and,
- A section of Dynon Road.

A recently completed raised road section (bund) in Hobsons Road close to the riverbanks has prevented flood water overtopping this section of the road. This bund was constructed by the developer of adjacent land as part of development works. This was a Melbourne Water planning permit requirement. This bund performed as intended and prevented river water from flooding Hobsons Road.

The following flood recovery works were completed by City of Melbourne after the flooding:

- Traffic management services at Kensington Road and Hobsons Road, which reopened at 7pm on the Sunday after the flood.
- There was approximately a week of tidy up (scraping silt and clearing debris from roads, footpaths, and public spaces) along the Maribyrnong River.
- Council provided skips to impacted businesses and apartments, so owners and occupiers could clear damaged goods.
- Testing and disposal of material removed from the sites.
- Pit and pipe inspection and cleaning as required.

## The issues and information the Independent Review Panel should consider

### Communications around flooding

Community concern has been expressed about lack of any notification and emergency warnings for the Kensington and West Melbourne areas in the lead up to the flooding incident. The following was submitted by a local community member to our Participate Melbourne engagement platform: *"The whole of Hobsons Road (Kensington) was badly affected by flooding in October 2022 - far more than the usual standing water after heavy rain - but no notifications from emergency apps were given that action was required."* 



# City of Melbourne's submission to Melbourne Water's review of the 2020 Maribyrnong River flood

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Many community members have indicated that they relied on the local SES flood guide for 'Kensington and North Melbourne' <u>b90a8d4d-6eb2-e9e8-eb33-8e6b7fa0cc4e</u> (ses.vic.gov.au) . Community members have expressed concern about information presented in this guide which seems to indicate that in a 1 in 100 year flood event, Riverside Park would not flood and that Flemington Racecourse would. This guide was last reviewed in 2021. Additionally, one of the most badly impacted areas in our municipality was West Melbourne, yet the flooding guide is titled only for 'Kensington and North Melbourne' areas. This document should be updated to include more accurate modelling and also renamed to help ensure greater awareness of flooding risks for West Melbourne businesses and residents.



# 2. Map of City of Melbourne showing where Flemington, Kensington and West Melbourne adjoin the Maribyrnong River

In addition to notification and emergency warnings, the public are asking for more transparent flood risk information.

City of Melbourne carried out a survey in 2020 to understand our community's awareness and preparedness for extreme weather, including flooding. The results provide a rich data set and insight into what our community is doing to prepare for floods, what community would like to see Council do and how they would like to receive that information. City of Melbourne has shared this report with Melbourne Water previously and considers that it could potentially benefit this Review – we would welcome working in partnership to deliver actions identified through this research.



City of Melbourne's submission to Melbourne Water's review of the 2020 Maribyrnong River flood

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We would support a stronger focus on the need to identify vulnerable groups likely to be disproportionately impacted by flooding including elderly people, people experiencing homelessness, renters and those who speak a language other than English.

Our 2020 extreme weather research showed communities with higher incidences of not being prepared for flooding include those who lived in Docklands / Southbank (44%) and the northern suburbs of the municipality (43%), and those who speak a language other than English (43%). A quarter (25%) said they had home and contents insurance that covered flooding. We found the following communities are less likely to be insured for flooding:

- 14–34 year olds (48% uninsured)
- those who speak a language other than English (49%)
- renters across all house types (53%)
- those who live in high-rise apartments (8+ stories, 50%).

### Approach to flood modelling and predictions

The Planning Institute of Australia has recommended that a framework be established for a consistent and publicly accessible dataset for coastal and riverine flooding to inform land use decisions.

In the City of Melbourne's submission to the Melbourne Water Flood Strategy for Port Phillip and Westernport, Council raised the issue that flood information is currently difficult to navigate. There is a need to provide fit-for purpose information, including up to date flood modelling and mapping to our community and to ensure appropriate development in flood zones.

There is a need to streamline planning scheme amendments using the best available information about future conditions, including sea level rise and increased climate change rainfall intensity. In high-risk areas, flood models need to be updated regularly as knowledge advances.

For councils, the biggest challenge in having up to date models is the quality of data on the drainage network.

A key question that should be addressed by the Committee is whether the flood data in relation to the Maribyrnong River is up to date and whether in light of climate change there are sufficient measures in place to mitigate the impacts of flooding. This is a matter for the agency with expertise in these matters, Melbourne Water.

The City of Melbourne in partnership with Melbourne Water recently exhibited planning scheme amendment C384 to introduce up to date flood modelling for some catchments in the city. This data had last been updated about 20 years ago. The process has been long and complex and did not include all catchments. Notably the Maribyrnong River was not part of the review.

Because of the impact of climate change, there should be a requirement that in the metropolitan area Melbourne Water update flood data and review the mitigation measures which are in place at least every five years.



City of Melbourne's submission to Melbourne Water's review of the 2020 Maribyrnong River flood

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Because of the risk to life and property the Department of Transport and Planning should be able to introduce updated flood data into planning schemes using Ministerial powers under section 20(4) of the Planning and Environment Act, 1987.

There should also be consistency with flood data used in the building permit system.

## Strategic planning

There are lessons to be drawn from this event for managing flood in other inner urban areas, particularly, in urban renewal areas such as Arden and Fishermans Bend, which also face significant flood risk.

Flood mitigation measures that meet current standards for protection of lives and property, sustainability and urban design need to be implemented by the planning authority or rezoning proponent, before development is allowed. As more flood prone areas in metropolitan Melbourne are developed this is becoming more and more important. Development should not be allowed until the land can be made safe.

The Melbourne Water Flood Strategy for Port Phillip and Westernport recognises that agencies will need to work together to reduce flood risk. These inner urban areas are an example of where we require Melbourne Water's guidance and active involvement in the planning and delivery of flood management projects.

### Flemington Racecourse wall

The City of Melbourne's former Planning, Development and Services Committee considered at its meeting on 9 October 2003 a series of planning applications including the proposed flood wall along the Maribyrnong River and Smithfield Road frontages of Flemington Racecourse. The planning applications were referred to the City of Melbourne by the former Department of Sustainability and Environment. The applications constitute the major elements of the Flemington Racecourse Masterplan. The Committee resolved to:

- acknowledge the strategic significance of the VRC Flemington Racecourse and Royal Agricultural Society Showgrounds sites to the culture of Melbourne life;
- inform the appropriate State Government Minister that the Council cannot support the VRC Flemington Racecourse Masterplan
- request the Minister to undertake a comprehensive strategic plan for the Maribyrnong valley area, including the Showgrounds area, before the VRC Flemington Racecourse Masterplan can be reconsidered and
- note that this decision is being made by the Committee under delegation from the Council and is subject to the referral notice process.