

Flood risk in Banyule

Transcript

Nicole Sutherland, Melbourne Water, Manager Strategic Flood and Drainage Planning:

In Banyule, several flood maps are being updated to reflect different types of flooding across the area as part of the Greater Melbourne Flood Information Program.

There are four flood maps in total, each representing different sources of flooding such as stormwater and major waterways.

It's helpful to start with a general picture of flood risk across the municipality.

Based on the current stormwater flood modelling, which represents a flood event with a 1% chance of occurring in any given year – some suburbs experience higher levels of impact than others.

In Banyule, suburbs including Heidelberg West, Ivanhoe, Bundoora and Greensborough are among the most affected under this flood scenario.

At the moment, this consultation is focused on stormwater flooding. This includes drainage systems and some smaller waterways, such as Salt Creek and Banyule Creek.

Flood information for major waterways, including the Yarra River, Plenty River and Darebin Creek, will be shared at a later stage and is not part of this current consultation.

The map also shows different hazard levels, which reflect how deep or how fast floodwater might flow.

Across Banyule:

- Around 44% of flood affected properties that have been identified are in the lower hazard categories (such as H1 and H2)
- Around 56% of flood affected properties have been identified within the higher hazard categories (such as H3 to H6)
- This is based on a future flood scenario in the Year 2100.

In general:

- H1 (or low hazard): refers to flooding that is usually shallow and may collect in streets, gardens or driveways after heavy rain.

- H2 to H3 (or moderate hazard): is water that may be deeper, faster flowing and could carry debris, damage fences or gardens, and in some cases enter homes with lower floor levels.
- In H4 to H6 (or a higher hazard): Floodwater may be very deep and flow very quickly, which poses a greater risk to people and property.

In Banyule, many of the higher hazard areas are influenced by the landscape – where water flows more quickly from higher areas to lower areas.

Like most parts of Melbourne, Banyule has experienced flooding in the past.

The municipality is bordered by major waterways, including:

- The Yarra River
- Darebin Creek; and
- The Plenty River

Areas close to these waterways have typically been kept as open space or parkland, reflecting their long history of flooding, as this is a more suitable land for flood prone areas.

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However, much of Banyule's flood risk today is driven by localised stormwater and flash flooding.

These flood events can happen when rainfall is intense and falls over a short period of time, affected streets, drainage lines and low-lying areas – often with limited warning.

Recent examples include significant storms:

- On Christmas Day in 2011, where intense hail was followed by rain causing flash flooding across the region; and
- On 29th December 2016, a severe storm cell led to flash flooding in areas including Rosanna, Heidelberg, Bundoora and Lower Plenty.

Melbourne Water takes an integrated approach to managing flood risk.

This means combining:

- Drainage infrastructure upgrades;
- Improving planning and development controls; and
- Targeted investigations and flood studies

To better understand and reduce flood risk over time.

There have already been a number of drainage improvement projects completed in Banyule, helping to reduce flood impacts in some areas.

Work is ongoing, with additional projects being prioritised.

This includes proposed works in the St Helena-East sub-catchment.

Projects like this focus on improving how stormwater is managed in areas identified as higher risk.

Managing flood risk is a shared effort.

Melbourne Water and Banyule City Council work closely with other major authorities and infrastructure projects – such as:

- North East Link;
- Level Crossing Removal projects; and
- Rail and transport upgrades

These partnerships help ensure that flood and drainage considerations are built into major projects, improving outcomes for the community wherever possible.

When you explore the draft flood map, you'll notice that they also show natural drainage paths.

These are the paths where water naturally follows across the landscape during heavy rainfall, as it moves downhill toward the Yarra River and ultimately out to the bay.

Understanding these flow paths can help explain why certain areas are more prone to flooding.

This information is designed to give you a clearer understanding of flood risk across Banyule – and what's being done to manage it.

We encourage you to explore the flood maps, learn more about your local area, and share your local knowledge to help improve the information.

To hear answers to some of our most commonly asked questions, watch the final video of the series.

Together, we can plan for a safer and more flood resilient future.