

Flood risk in Moonee Valley

Transcript

Andrew Mellor, Melbourne Water, Manager Flood Awareness Communications:

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

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

Moonee Valley experiences a range of different flooding types.

This includes:

- Waterway flooding from major waterways such as the Maribyrnong River, Moonee Ponds Creek and Steele Creek;
- Local stormwater flooding, caused by short, intense rainfall overwhelming the drainage system;
- Overland flow and ponding, which can occur due to blockages like debris, tree roots and drainage issues; and
- Increased runoff from urban development, where more hard surfaces - like roads and roofs - can cause water to run off more quickly.

These factors can combine to create flooding in different parts of the municipality.

Based on flood modelling for a storm with a 1% chance of occurring in any given year, suburbs including Moonee Ponds, Essendon, Ascot Vale and Flemington are among the most impacted by stormwater flooding.

At the moment, this consultation is focused on stormwater flood maps. This includes drainage systems and some smaller waterways. We previously released updated flood information for the Lower Maribyrnong River in 2024 and this is already available online.

Flood information for the Moonee Ponds Creek and Steele Creek will be shared at a later stage and is not part of this current consultation.

The flood maps also show different hazard levels, which reflect how deep or how fast floodwater might flow.

Across Moonee Valley:

- Around 81% of flood affected properties that have been identified are in the lower hazard categories (such as H1 and H2)
- Around 19% 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.

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

The municipality is bordered by major waterways, including:

- The Maribyrnong River, and
- Moonee Ponds Creek

Significant floods have occurred along the Maribyrnong River, with the 1906, 1916, 1974 and 2022 floods recorded among the largest events.

Along Moonee Ponds Creek, water levels can rise and fall very quickly. Low-lying sections along this creek, including parts of the Moonee Ponds Creek Trail – are known to flood regularly during heavy rainfall.

For Steele Creek, flooding is often contained within open space areas, but it does have some flooding that can affect roads and nearby properties.

However, much of Moonee Valley's flood risk today is driven by localised stormwater and flash flooding, which can occur quickly and sometimes with little warning.

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.

This approach helps reduce flood impacts over time and supports better long-term planning.

There have been several drainage improvement projects completed in Moonee Valley, helping to reduce flood impacts in some areas. For example, the Aberfeldie Main Drain flood mitigation project was completed in 2016.

As part of this project, a diversion drain along Vida Street was constructed to significantly reduce overland flow and flood depth in the area.

In 2024, Melbourne Water developed a new flood model for the Lower Maribyrnong River catchment.

This model provides a clearer and more up-to-date picture of both current and future flood risk along this important waterway. You can explore this information through an online flood map available on our website.

We're also working with the community to explore options to help reduce flood risk in the Lower Maribyrnong area.

When you explore the draft stormwater flood maps, you'll notice natural drainage paths.

These show how water moves across the landscape during heavy rainfall – helping explain why some areas are more prone to flooding than others.

This information is designed to help you better understand flood risk in Moonee Valley - 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.