

What is a Flood Study?

A flood study, along with data collection, is the first step in understanding the flood risk in a Local Government Area (LGA). It is a technical investigation of flood behaviour from small floods up to the largest possible flood.

A flood study models where water flows in heavy storms, how deep the water can become and how dangerous the flows are. A flood study allows council to identify the risks from different sized floods across the LGA. This helps in managing buildings and Council assets and in planning for future development.

The City of Parramatta's 2023 Draft Flood Study uses new technology to model both flooding from the river and creeks and overland flooding (which is flooding due to surface run-off flows or overflow from stormwater drainage systems). The flood study not only looks at the current flood risk but also future flood risks including those that may result from climate change.



Why does Council need to prepare a new flood study?

The NSW Government requires Council to carry out a comprehensive flood study into all types of flooding across its LGA using current flood modelling techniques.

The NSW Government requires that local councils manage the risk of flooding within their Local Government Area (LGA). More details about these requirements can be found at **environment.nsw.gov.au/topics/water/floodplains/floodplain-guidelines**.

There have been several previous flood studies completed in the City of Parramatta LGA. However, the existing flood studies do not cover all of the LGA and do not model all types of flooding.

Most of Council's current flood studies are based on mainstream flooding from rivers and creeks. This is the first flood study that includes flooding due to overland flow, the flooding due to surface run-off flows or overflow from stormwater drainage systems.

There are also several parts of the LGA that have not had a flood study. These areas include the upper reaches of the catchments that represent local overland flow areas. (Overland flow areas are areas where local runoff flows to, these areas flood during and after heavy storms due to water from drains and stormwater rather than overflowing water from a river, stream or dam).

Modelling of the local catchment system, including overland flooding, is the key to improving Council's existing flood information. As flood modelling techniques have been updated, new technologies allow us to more accurately model the flood conditions within the catchment area.

A new flood study will provide the opportunity to use new 2D flood modelling software to better determine hydraulic flood conditions. It should be noted that while most of the LGA is included in the new flood study, there are remaining sections that will be studied separately.



What are the benefits of the new flood study?

There are several benefits provided by the new flood study including:

- provides Council with an understanding of flood risk across the LGA so it can manage existing development and plan for future development
- helps emergency services (e.g. NSW State Emergency Services [SES], Police) understand the impacts on people's safety when various levels of flooding occur
- helps landowners to understand their flood risk so they can be better prepared for flooding.



Has Council identified more properties that are at risk of flooding?

Several thousand additional properties will be included as being flood affected due to a change in the way flooding is defined to include overland flow from local catchments.

Most of these properties will only be very rarely affected by flooding, but knowing where the extent of the flooding could occur will allow City of Parramatta Council to take actions to reduce or eliminate the risk of flooding to these properties.

Approximately 7,581 parcels of land have been defined as flood affected due to the change.

It should be noted that some of these properties have a very low risk of flooding. However, there are several that will have a medium to high risk of flooding.

Is my property at risk of flooding?

Your property may be at risk of flooding. You may know this from previous flooding. However, due to drought conditions and other factors, there are many parts of the LGA that have not recently experienced large flooding events and therefore landowners may not be aware of their flood risk.

You can find out more about your property's flood risk by getting involved in the draft flood study public exhibition consultation (see details below).

You can also learn more about flooding and register for flood alerts at Council's FloodSmart page cityofparramatta.co/floodwarning

How can my property be at risk of flooding when it is not near a river or creek?

The flooding from the stormwater system including gutters and drains can be difficult to imagine in comparison with flooding from a river or creek where the level of water is easily seen. However, this type of flooding which is called 'overland flow' can be dangerous as it usually rises quickly after local heavy rain e.g. thunderstorms.

The new Draft Flood Study uses new modelling technology to map both flooding from rivers and creeks and overland flooding, flooding from overflowing stormwater drainage systems.



My property has never flooded, why does the model say my house is at risk of flood?

The Draft Flood Study uses the latest technology and information to model floods of various sizes from the smallest to the largest, known as the Probable Maximum Flood (PMF).

For the first time, the model maps both flooding from rivers and creeks and overland flooding - flooding which results from water moving across the City via overflows from stormwater systems. The model also takes into account climate change.

While in recent years we have not had floods of the size of those experienced in the 1980s, changing weather conditions are likely to see flooding in the future. The 2023 Draft Flood Study tells us the likely areas and depth of flooding so we can prepare and stay safe.

If my property is at risk of flooding will this affect its value?

It is important to understand that properties now considered to be at risk of flood (flooding detected in the new flood model) have always had a flood risk.

All properties at risk of fooding will now have flood risk noted on their property certificates.

Simply putting a "flood risk notification" on an individual property does not typically affect house prices. House prices are largely based on the size and presentation of the house itself, demand from people wanting to live in the area, and economic conditions at the time of sale.

Will notification of flooding affect my property's insurance?

The insurance industry already has a good understanding of flood risk across the LGA and property insurance premiums are set accordingly. The new flood study will provide the insurance industry with a more refined understanding of flood risk, which in some cases may affect insurance premiums.

All landowners with properties at risk of flooding should consider flood insurance and discuss this with their insurance provider.

How can I learn more about my property's flood risk?

Council is conducting a series of community information sessions. Pre-book your appointment by going to participate.cityofparramatta.nsw.gov.au/flood-study

Sessions are being held in Dundas, Epping, Ermington, Parramatta, Rosehill, Telopea, Toongabbie, Wentworthville and Winston Hills.

Book a 15-minute phone appointment with a Council Officer. Visit Participate Parramatta to make your appointment. **participate.cityofparramatta.nsw.gov.au/flood-study**

You can also learn more by visiting Council's website. cityofparramatta.co/floodwarning participate.cityofparramatta.nsw.gov.au/flood-study



How do I make a submission on the draft flood study?

You can comment on the draft flood study by booking a phone appointment, attending a community information session or through Council's Participate Parramatta page: participate.cityofparramatta.nsw.gov.au/flood-study

Materials are available in Arabic, English, Hindi, Korean and Simplified Chinese. However, anyone requiring assistance accessing information in another format is encouraged to contact Council on 1300 617 058. Email and postal submissions can also be made. Email: FloodSmart@cityofparramatta.nsw.gov.au

Postal Submissions:

Chief Executive Officer City of Parramatta Council PO Box 32, Parramatta NSW 2124 Attention: 2023 Draft Flood Study team

Who do I contact for more information?

Contact the 2023 Draft Flood Study team on 1300 617 058 or email: FloodSmart@cityofparramatta.nsw.gov.au

How do I book an appointment to talk about flooding?

You can book phone appointments or meetings with the flood team by visiting Participate Parramatta participate.cityofparramatta.nsw.gov.au/flood-study

Fifteen minute phone appointments are available.

Community information sessions will be held at Dundas, Epping, Ermington, Parramatta, Rosehill, Telopea, Toongabbie, Wentworthville and Winston Hills.

Pre-book your appointment through Council's Participate Parramatta page: participate.cityofparramatta.nsw.gov.au/flood-study

