

# Flood Study

NOVEMBER 2019

## Hunters Hill LGA Flood Study

### Why did Council prepare the Plan?

The NSW government has requested all councils in NSW to prepare a plan and policy to manage flood-prone land. The government has offered to contribute to the cost of developing the plan. The NSW Government's Flood Prone Land Policy (1984) highlights that the management of flood-prone land is primarily the responsibility of local councils. The development of the plan and policy will bring us in line with the majority of other councils in NSW that have already adopted a plan.

### What is the process to develop the Plan?

Council has engaged consultants to prepare the draft Hunters Hill Local Government Area Flood study. They have extensive experience in similar urban catchments, having previously carried out similar studies for City of Sydney, North Sydney Council, Inner West Council, Sutherland Shire Council and others.

In particular the Project Team have expert technical and practical experience in:

- Urban flood estimation;
- Planning controls specific to overland flow issues;
- Establishing controls which will ensure that as development/redevelopment occurs in the catchment flood risk will be mitigated over time;
- Deriving the Flood Planning Area (FPA).

The diagram below follows the Floodplain Development Manual (2005) which provides guidance for Councils to fulfill their obligations of the Flood Prone Land Policy. It shows the process for plan preparation, implementation and review.



The Plan will ensure that new developments are adequately protected and do not make flooding worse. It will also provide Council with options to manage its flood-prone land in future stages.

### Why is Council identifying properties affected by mainstream flooding or overland flow?

Flooding can cause significant threats to property and to life. The NSW Government's Flood Prone Land Policy (1984) emphasises that the management of flood-prone land is, primarily, the responsibility of local councils.

### How do I know if my property has been identified as flood affected or affected by overland flow?

Properties have not yet been formally identified. Upon identification, those affected will be notified.



## What method did the consultants use to do the flood studies?

Consultants have used software that uses aerial laser survey data of the entire study area, combined with design rainfall data generated from Bureau of Meteorology data, and information on Council's storm water system to model flood behaviour.

## How will Council identify flood-affected properties?

The following criteria will be used to identify properties in the preliminary Flood Planning Area (FPA):

- FPA (mainstream flooding of Tarban Creek): The 1 in 100 year Flood (1% AEP) peak flood level within Tarban Creek plus 0.5m buffer then extending the level perpendicular to the direction of flow; and/or
- FPA (local overland flooding): Properties affected in a 1 in 100 year storm event by overland flow with depth greater than 0.15 metres, excluding properties inundated with less than 10% of the property area OR lots traversed by flow conveyance in the 1% AEP OR lots that are traversed by trunk drainage.

## What is the '1 in 100 year Flood' or 1% AEP (Annual Exceedance Probability)?

This is a flood that will occur or be exceeded on average once every 100 years. It's probability of occurrence is 1% in any given year. Some parts of Australia have received multiple 100 year floods in one decade. On average, if you live for 70 years in the same area, you have a better than even chance of experiencing a 100-year flood.

## Frequently asked questions

### What does being flood-affected or affected by overland flow mean for my property?

Being affected will impact the property if a Development Application is lodged. There will be certain requirements and controls to ensure the property is at a certain flood planning level. If the level is below it will be in the Flood Planning Area which is subject to a review of the development against flood-related development controls.

### My property has never flooded - why might it be considered flood-affected?

Floods do not occur on a regular pattern, there may be a period of none or several. Following extensive rain every water course may flood. For example, in Brisbane before the 2011 river disaster the previous flood was in 1974, many residents who moved in recent times may have never considered flooding as an issue.

### Where can I look at flood and overland flow mapping for my property?

A plan of Council's area showing details of two-dimensional mapping for the full range of flood including the design flood ie. the 1 in 100 flood event, is available in the publicly exhibited Draft Flood Study.

### Does Council have past records of my property flooding?

Council does not retain specific flood records for individual properties

### I still don't think my property is flood/overland flow affected - What can I do?

Members of the public can make a written submission to Council to raise flood-related issues. All written submissions during the public exhibition period will be considered by Council.

### Will being flood-affected increase my property insurance?

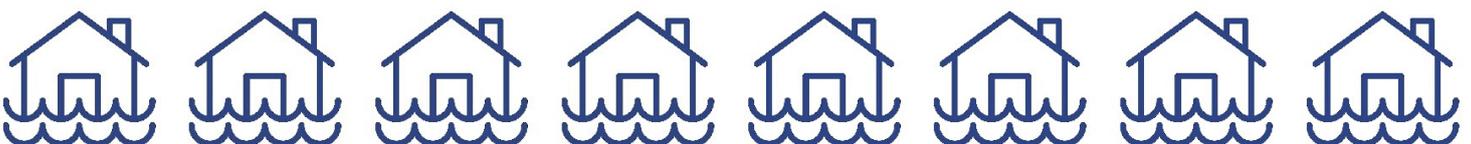
Council cannot provide advice about insurers underwriting guidelines. Your policy is a matter between you and your insurer so you will need to discuss this with them directly. Please contact your insurer.

### Will being flood-affected impact the value of my property?

There are many factors that can affect the value of any property including inflation, a change in interest rates, increased aircraft noise or construction of a new road or shopping centre nearby. The extent to which a property's value is affected once it has been identified as flood-affected or affected by overland cannot be objectively ascertained.

### Will I have to undertake a flood study when I want to develop my land?

It depends on the scale of the development but the vast majority of Development Applications will not require flood assessments.



The floor levels in my property are above the flood planning level - why has it been identified as flood control lot?

Flood prone land is all land inundated by the probable maximum flood (PMF) level. All properties within the extent of PMF is flood-affected. However, properties at or below the 1% AEP will be identified on the 10.7(2) certificate [see next FAQ] as having controls for flooding or overland flow.

10.7(2) does not identify properties affected by floods rarer than the 1 in 100 year flood.

Properties can be identified as being flood control if they have ground inundation regardless of the floor levels in the building. The controls are to ensure any future developments of the property are appropriate for the Flood Planning Area and not built below the flood level. Property owners can seek flood level information about their property from Council. This information may be used with surveyed floor levels to confirm that properties floor levels are above the Flood Planning Level for insurance purposes.

How can I get a Section 10.7 Certificate for my property?

Section 10.7 Planning Certificates are issued in accordance with the Environmental Planning & Assessment Act 1979. 10.7(2) is compulsory with the sale of the land and contains information on whether or not a property is subject to overland or flood-related development controls. 10.7(5) is not compulsory and it may contain more information if the property has been determined as being affected by flooding or overland flow for the full range of flood up to the PMF.

Where can I find the Draft Hunters Hill Local Government Area Flood Study?

You can visit our website at [www.huntershill.nsw.gov.au](http://www.huntershill.nsw.gov.au) or visit us at the Customer Service Centre, 22 Alexandra Street, Hunters Hill, from 8.30am until 4.30pm, Monday to Friday, or by clicking below



<http://www.huntershill.nsw.gov.au/wp-content/uploads/2019/10/Draft-Flood-Study-Report.pdf>

When was the last flood in the area?

Small floods occur in Hunters Hill every few years including the events on the 28 November 2018 and the 4 June 2016.

What about flooding problems in my street that happen all the time?

Development over the past 100 years has left many areas with infrastructure which may struggle carrying water from storms. This results in flooding of public and, in some cases private, property. Council undertakes upgrades of its piped storm water system on a priority basis across the local government area as funding allows. The current studies are the first stage of addressing the flood problem. Management and mitigation measures will be considered in future stages.

Why can't council fix all flooding?

Council's piped storm water system is designed to tackle minor storms with the aim of reducing day-to-day nuisance flooding, while major storms are tackled via overland flow paths with the aim of protecting life and property in major events. This major/minor principle is standard industry practice, as it is impractical to provide piped drainage systems for major storm events. It is not viable to design the drainage to solve all potential flooding risk.

What about climate change and sea level rise?

Council's flood studies investigated the impact of potential sea level rise and rainfall increase on flood levels. It has adopted a climate change-induced sea level rise of a 0.9m rise by the year 2100 for its flood modelling. This is aligned with the NSW Government's Sea Level Rise Policy Statement 2009 and the Coastal Planning Guidelines 2010.