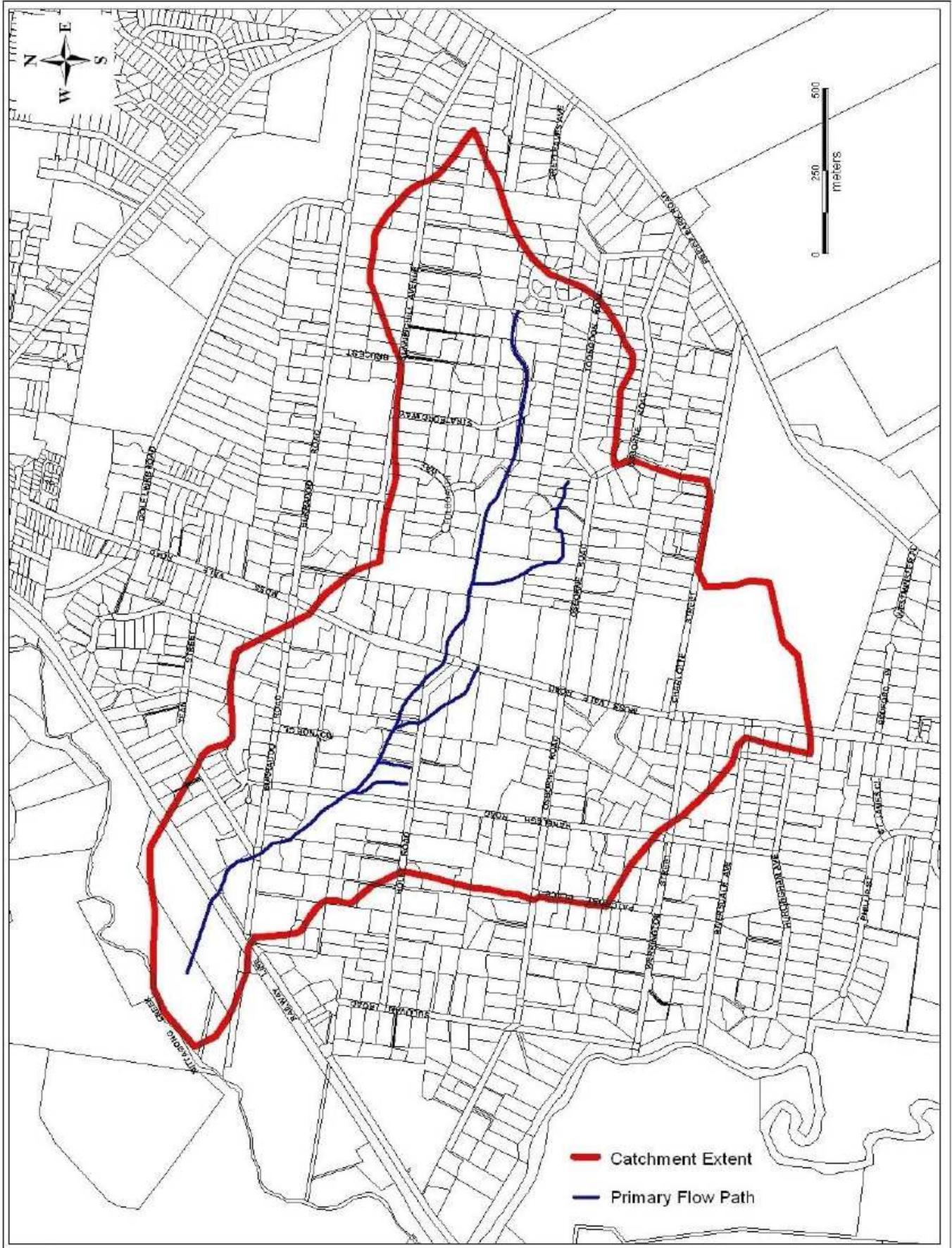


Burradoo BU2 Catchment Flood Study

FREQUENTLY ASKED QUESTIONS

Where is the Burradoo BU2 Catchment?



What is a flood study?

A flood study is a comprehensive technical investigation of flood behaviour that defines the extent of flooding, flood levels, and flow velocity for various flood events. The flood study constitutes the major technical foundation from which a floodplain risk management plan is formulated.

There are two major components to a flood study:

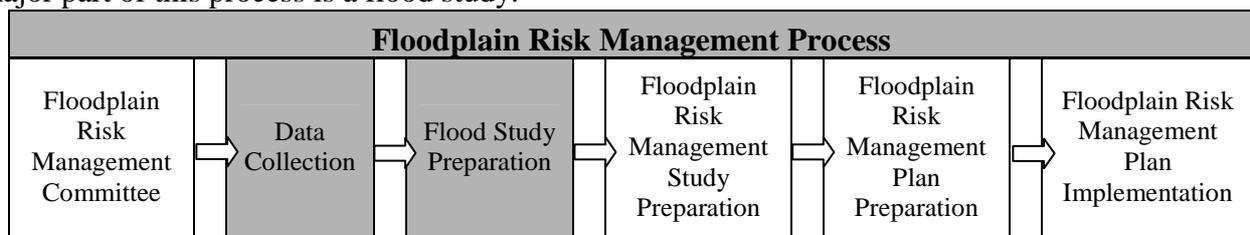
- the estimation of flood discharges for floods of various severities (hydrologic aspects), including the probable maximum flood; and
- the determination of water levels, velocities and depths of flooding for those floods (hydraulic aspects).

Why does Council carry out flood studies?

Under NSW legislation, Councils have the primary responsibility for management of development within floodplains. To appropriately manage development, Councils need a strategic plan which considers the potential flood risks and balances these against the beneficial use of the floodplain by development. To do this, Councils have to consider a range of environmental, social, economic, financial and engineering issues.

This strategic plan is prepared in a floodplain risk management study. The outcome of the study is the floodplain management plan, which details how best to manage flood risks in the floodplain for the foreseeable future.

A major part of this process is a flood study.



What is the x year flood?

The X year flood is defined as a flood that will occur or be exceeded on average once every X years.

For example: A 100 year flood has a probability of 1% of occurring in any given year. If your area has had a 100 year flood, it is a fallacy to think you will need to wait another 99 years before the next flood arrives. Floods do not happen like that. Some parts of Australia have received a couple of 100 year floods in one decade. On average, if you live to be 70 years old, you are likely to experience a 100 year flood.

What is the probable maximum flood (PMF)?

The PMF is the largest flood that could possibly occur. It is a very rare and improbable flood. Despite this, a number of historical floods in Australia have approached the magnitude of a PMF. Every property potentially inundated by a PMF will have some flood risk, even if it is very small. Under the State Government changes implemented during 2001, Councils must now consider all flood risks, even these potentially small ones, when managing floodplains.

As part of the State Government changes, the definitions of the terms 'flood liable', 'flood prone' and 'floodplain' have been changed to refer to land inundated by the PMF.

How big are the flood events that are being considered?

It is necessary to understand that the flood events that are being considered in the flood study are significantly larger than most recent flooding events in the catchment. For example, an assessment of rainfall data from the June 2007 event indicates that event had a recurrence frequency of less than 1 year. That is, on average that sort of event should occur at least annually.

What does the flood study mean to me?

Council has not previously carried out flood mapping in the BU2 catchment. There are a number of implications from the flood study that need to be considered by landowners and residents within the catchment. The availability of the flood study does not increase the risk of flooding to your property it just identifies that there is a potential risk.

Flood liable land - The State Government changed the meaning of the terms 'flood prone', 'flood liable' and 'floodplain' in 2001. Prior to this time, these terms generally related to land below the 100 year flood level. Now it is different. These terms now relate to all land that could possibly be inundated, up to an extreme flood known as the probable maximum flood (PMF). This is a very rare flood.

The reason the Government changed the definition of these terms was because there was always some land above the 100 year flood level that was at risk of being inundated in rarer and more extreme flood events. History has shown that these rarer flood events can and do happen (e.g. the 1990 flood in Nyngan, the 1996 flood in Coffs Harbour, the 1998 flood in Katherine, the 2002 floods in Europe, etc).

Development Impacts – Now that Council has mapped the extent of the 1 in 100 year flood it is expected that all properties up to 0.5m above the 100 year flood level will be subject to some form of development controls (eg floor level controls).

Flooding Extents – The flood extent maps identify the potential flood extents for various standard design rainfall events. For example the 5 Year Peak Water Level figure identifies the extent of flooding that may be experienced on average once every 5 years. This mapping does **not** indicate that the residence on the property will experience above floor flooding if it is within this zone, although this may occur in some circumstances, just that the property may experience some form of inundation from flood waters.

Flood Hazard Precincts – The current version of the flood study has classified properties in terms of hazard as simply high or low. When the project moves to the floodplain risk management study the mapping will be carried out in line with the recently adopted Bowral Floodplain Risk Management Study with four risk categories.

What information will be available for my property?

Once Council adopts the flood study following the public exhibition and review flood level information will be available in the catchment in the form of a flood certificate.

Council will charge a fee for the provision of a flood certificate but this will be determined when the study is adopted.

Council currently charges \$124.00 for a flood certificate for Bowral or Berrima.

What impacts will the flood study have on the Section 149 certificate for my property?

Properties within the extent of the Probable Maximum Flood (PMF) will have the following note added to their Section 149(2) certificate.

At its meeting of the 26th August 2009 Council resolved to place on public exhibition a Final Draft Burradoo BU2 Flood Catchment Assessment Study by consultants Cardno Lawson Treloar. Further details may be obtained by contacting Councils Infrastructure Services Division."

Will flood levels change?

All mapping undertaken by Council is subjected to ongoing review. As these reviews take place, it is conceivable that changes to the mapping will occur, particularly if new flood level information or ground topography information becomes available. However, this is not expected to occur very often and the intervals between revisions to the maps would normally be many years. Many Council's have a policy of reviewing and updating floodplain management studies and plans about every five years. This is the likely frequency at which the maps may be amended.

How are these studies funded?

Flood studies and floodplain risk management studies are often carried out under NSW State Government guidelines and are funded on a 1:1:1 basis between the Federal and State Governments and Councils.

This funding arrangement is also available for the construction of flood mitigation works.

Where can I get more information?

A copy of the flood study will be available for review at the customer services counter at the Civic Centre in Moss Vale.

Copies of the flood extent mapping and other relevant information will be available on the Council website www.wsc.nsw.gov.au

A copy of the State Government Floodplain Development Manual can be found at www.dnr.nsw.gov.au/floodplains/manual.shtml

Otherwise further information can be obtained by phoning the Council offices on (02) 4868 0888.