Introduction
Warringah and Pittwater Councils are carrying out a flood study to understand flood risks in the Narrabeen Lagoon catchment. The study includes areas draining to Narrabeen Lagoon such as South Creek, Middle Creek, Deep Creek, Mullet Creek and Narrabeen Creek. This study updates the 1990 Narrabeen Lagoon Flood Study as well as flood studies for individual creeks, and provides a holistic assessment of flooding within the catchment.

The Draft Narrabeen Lagoon Flood Study is on public exhibition from Monday 15 July to 12 August and you are invited to have your say.

Flooding in the Narrabeen Lagoon Catchment
The main aim of the study is to define current and future flood behaviour in the Narrabeen Lagoon catchment.

Flooding in Narrabeen Lagoon comes from two main sources:
1. significant catchment rainfall
2. oceanic inundation (tide and storm surge)

Flooding in the Narrabeen Lagoon Catchment
The Flood Study Map shows the extent of flood prone land, which is defined as the area affected by the Probable Maximum Flood (PMF, i.e. the largest flood that could conceivably occur). Properties affected by the Flood Planning Level, i.e. the 1 in 100 year flood plus 0.5m freeboard, (see image and explanation in FAQs below) are shaded on the map.

How am I affected?
The Flood Study Map shows the extent of flood prone land, which is defined as the area affected by the Probable Maximum Flood (PMF, i.e. the largest flood that could conceivably occur). Properties affected by the Flood Planning Level, i.e. the 1 in 100 year flood plus 0.5m freeboard, (see image and explanation in FAQs below) are shaded on the map.

The Floodplain Risk Management Study will outline what can be done to manage flooding in the Narrabeen Lagoon catchment through the identification, assessment and comparison of various risk management options.

The Floodplain Risk Management Plan will contain several management measures and strategies. These will help guide and coordinate the responsibilities of government and the community in undertaking flood management works and initiatives. Preferred options will be publicly exhibited and subject to revision in light of community response.

Data Collection
Flood Study
Floodplain Risk Management Study & Plan
Implementation of Plan

Floodplain Risk Management Process
Under the NSW Government’s Flood Prone Land Policy, councils have the primary responsibility for managing flood prone areas, with financial and technical support provided by the State Government.

Floodplain risk management considers the consequences of flooding on the community and aims to develop appropriate actions to minimise and mitigate the impacts of flooding. The Flood Prone Land Policy specifies a staged approach to the floodplain management process:

What happens next?
After the public exhibition of the Draft Narrabeen Lagoon Flood Study, all comments will be reviewed and final amendments made to the study. Once adopted by both Warringah and Pittwater Councils, the study will be used in the preparation of the Narrabeen Lagoon Floodplain Risk Management Study and Plan.

As part of the community consultation, the Draft Narrabeen Lagoon Flood Study will be on public exhibition from Monday 15 July to Monday 12 August, 2013. You are invited to participate in the study by providing comment on the draft report, available from warringah.nsw.gov.au, pittwater.nsw.gov.au, Warringah Council Chambers and Pittwater Council offices and libraries.

Community Input
Community involvement in managing flood risks is essential for:
• raising awareness in the community about the potential for flooding in the catchment
• improving the decision making process
• identifying local concerns and values

Certain flood related development controls may apply to flood prone properties. For instance, residential properties affected by the Flood Planning Level may be subject to minimum floor level requirements. For further information visit warringah.nsw.gov.au or pittwater.nsw.gov.au.
FLOODING IN THE NARRABEEN LAGOON CATCHMENT
What can I do?
To make a submission on the Draft Narrabeen Lagoon Flood Study, write to the General Manager of your local Council marked ‘Submission – Draft Narrabeen Lagoon Flood Study’:

Warringah Council
725 Pittwater Road
Dee Why
NSW 2099
or email council@warringah.nsw.gov.au

Pittwater Council
PO Box 882
Mona Vale
NSW 1660
or email pittwater_council@pittwater.nsw.gov.au

Submissions close Monday, 12 August, 2013.

One-on-one community information sessions
Saturday 20th, Friday 26th, Tuesday 30th July
9.30am - 5pm
Coastal Environment Centre, Pelican Way, Lake Park Road
North Narrabeen

Monday 22nd July
9.30am - 5pm
Tramshed Arts & Community Centre, 1395A Pittwater Road,
Narrabeen

BOOKINGS ARE ESSENTIAL:
Warringah Council area: Pittwater Council area:
Valerie Tulk
9942 2111
or valerie.tulk@warringah.nsw.gov.au
Debbi Millener
9970 1111
or floodplain@pittwater.nsw.gov.au

Frequently Asked Questions
Why does Council study flooding?
NSW Local Governments have responsibility for identifying and then managing the risk to life and property from flooding, and have a duty of care to disclose this information to the community. Local Governments must act in accordance with the NSW Flood Prone Land Policy, which aims to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone property. One of the most important steps in this process is increasing our community’s awareness of flooding so that people are better able to understand and plan for the flood risks they face.

What areas are included in the Draft Narrabeen Lagoon Flood Study?
Narrabeen Lagoon is fed primarily by South Creek, Middle Creek, Deep Creek, Mullet Creek and Narrabeen Creek. As a result the study area extends to include parts of Mona Vale in the north, Belrose in the west and Beacon Hill in the south.

Which areas could be flooded?
The Draft Narrabeen Lagoon Flood Study map shows land that would be affected by the Probable Maximum Flood (i.e. the largest flood that could conceivably occur). Properties affected by the Flood Planning Level (i.e. the 1 in 100 year flood plus 0.5m freeboard) are also shaded on the map.

What is a 1 in 100 year flood?
A 1 in 100 year flood occurs on average once every 100 years, i.e. there is a 1% chance of a flood of this size occurring at a particular location in any given year. This does not mean that if a location floods one year, it will definitely not flood for the next 99 years. Nor, if it has not flooded for 99 years that it will necessarily flood the next year. Some parts of Australia have received a couple of 1 in 100 year floods within a decade of each other.

What is Freeboard?
Freeboard is included in the Flood Planning Level as a buffer, to account for factors such as wind, waves, unforeseen blockages, other localised hydraulic effects and uncertainties in the modelling and determination of flood levels. Freeboard is typically 0.5m above a flood level.
What does this mean for property owners?
For most people, there is nothing for you to do in response to this flood study, as there is no immediate change to your situation. However property owners who are planning redevelopment of their property may need to take some additional steps as part of the consent process because flood related development controls apply. This could include the requirement to have the floor levels of new residential developments set at or above the Flood Planning Level and out of flood danger.

My property was never classified as ‘flood prone’ or ‘flood liable’ before. Now it is. Why?
The flood levels from this draft flood study are slightly higher in some areas than those previously adopted for the 1990 Narrabeen Lagoon Flood Study. The main reasons for this difference include more advanced models and calibration data, better understanding of entrance conditions, improved surveys and changes in land use.

What are councils doing to manage flood risk?
Councils prepare flood studies and plans according to the NSW Government’s Floodplain Development Manual (2005), and implement associated recommendations with the financial and technical assistance of NSW Government through its Flood Prone Land Policy. Land use planning through development controls is one of the most effective means of managing flood risk in the catchment. Additional flood mitigation measures in the catchment currently include: the management of the Narrabeen Lagoon entrance, implementing a flood warning network and raising flood awareness in the community.

Will this affect property values?
Studies show that an actual flood event, rather than a flood planning notation on a Section 149 Certificate, is more likely to have an effect on property values.

Will this affect my insurance premiums?
Individual insurance companies typically identify Flood Prone Land and assess risk through their own flood studies, analysis and flood mapping exercises, irrespective of whether Council has undertaken a flood study. These calculations are outside Council’s control. The information is then used to set policies and premiums. Flood studies conducted by councils may be used by insurance companies to refine their flood profiles, potentially excluding properties that would otherwise be included through more risk-averse calculations.

Council’s primary responsibility is to identify and then manage the risk to life and property from flooding, and has a duty of care to disclose this information to the community. The Draft Narrabeen Lagoon Flood Study represents significant advances since previous flood studies in the catchment and is a public document, which all members of the community, including insurance companies, are able to access.

What can I do to prepare in case of a flood?
The State Emergency Service has a useful website providing advice on how to manage flood risk. Visit www.floodsafe.com.au for more information.

What should I do in the event of a flood?
If it is a life threatening situation, call 000. In the event of floods, storms or tsunamis, please contact the State Emergency Service (SES) on 132 500 or visit their website at www.ses.nsw.gov.au.

Where can I find out about Council’s flood related development controls?
Links to flood related development controls can be found at warringah.nsw.gov.au and pittwater.nsw.gov.au

Further information
The Draft Narrabeen Lagoon Flood Study and more Frequently Asked Questions can be found at warringah.nsw.gov.au and pittwater.nsw.gov.au

This project is supported by the NSW and Commonwealth Governments through the Natural Disaster Resilience Program