



THE ENTRANCE PENINSULA

COMMUNITY PRECINCT

ENCOMPASSING: THE ENTRANCE; THE ENTRANCE NORTH; LONG JETTY TOOWOON BAY; BLUE BAY & SHELLY BEACH

Wyong Shire Council's Senior Planning Engineer (Hydrology) Natural Resources, Lara Critchley's presentation, 16 March, 2010 at 7:00pm on "Tuggerah Lakes Floodplain Risk Management Study and Plan"

Lara was welcomed by the chairperson of T.E.P.C.P, Vivienne Scott, and thanked for her attendance to address the Precinct Committee on the Floodplain Risk Management Study and Plan. Supporting Lara Wyong Shire Council's Martin Johnson, Manager, Natural Resources and Legal & Policy and Shah Alam, Engineer Hydrology.

Lara advised that Council is preparing a floodplain risk management plan for the area you live, work or socialise in. Broad community involvement in the plan preparation, from the beginning, should produce the best prospect for community acceptance of, and commitment to, the resulting Management Plan. The **NSW Floodplain Development Manual**, the management of flood liable land, sets out how Council should approach the study. She explained that every creek and river floods in a different way, so an important part of formalising the plan is Community Consultation and community input. To this end Lara referred to the questionnaire that had been sent out to everyone living in a flood effected suburbs. The study area covers all the areas (not just the flood prone areas) around Tuggerah Lake, Budgewoi Lake and Lake Munmorah. The survey asks what you think and what you think should be done.

Lara's Power Point presentation gave an explanation of the meaning of some of the terms uses to describe rainfall and flood events. One of these was the **Probable Maximum Flood (PMF)** which is the largest flood that could possibly occur at a particular location, usually estimated from probable maximum precipitation. It explained that flooding was a relatively **high stream flow** which overtops the natural or artificial banks in any part of a stream, river, channel, estuary lake or dam; and/or **local overland flooding** associated with drainage before entering a watercourse; and/or coastal inundation resulting from super elevated sea levels and or waves overtopping coastline defences excluding tsunami. A Floodplain is the area subject to inundation by floods up to and including the Probable Maximum Flood (PMF) event, also referred to as flood prone land.

The survey was particularly interested in how flooding had affected residents. For example in the 2007 flood houses were flooded for up to three days. The sewer had to be turned off in some locations resulting in a health risk if you stay in your home. Then the need for evacuation plans comes into play and evacuation can be difficult. The presentation then showed pictures of flooding in the Shire, like Porters Creek flooding in October 2004; Ourimbah Creek and Tuggerah Lakes flooding in June 2007; Wyong River flooding in June 2007 where a nursing home had to be evacuated; Urban flooding in Wyong town centre June 2007 and a slide of Urban nuisance flooding in June 2007 showing plastic bins washed away.

What is a Floodplain Risk Management Plan?

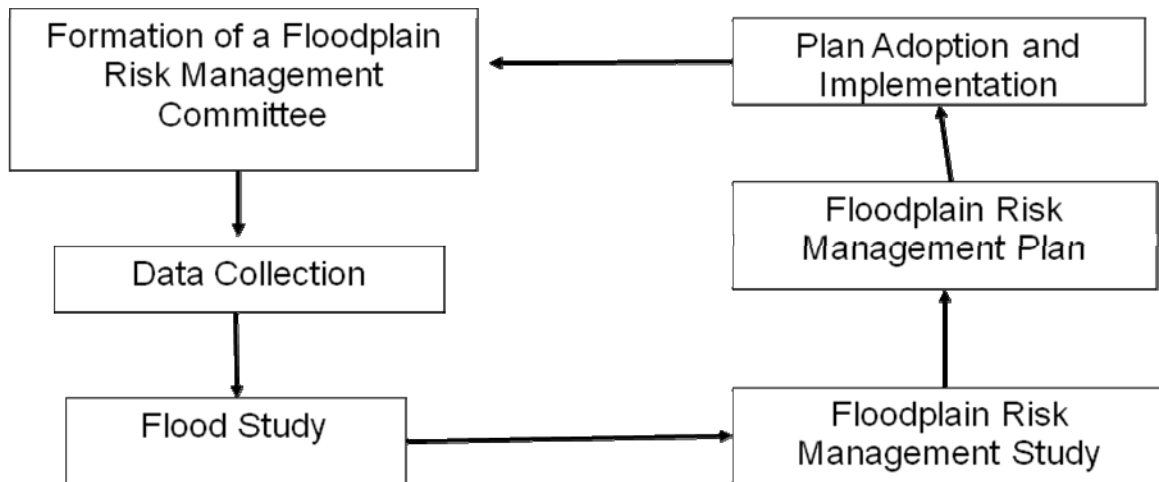
- a management plan developed in accordance with the principles and guidelines of the NSW Floodplain Development Manual (2005).
- The plan includes information on how particular areas of floodprone land should be managed to achieve specific objectives as well as managing the existing flood risk.

Why do we need a Floodplain Risk Management Plan for Tuggerah Lakes?

- Reduce the social and financial costs from the risks associated with occupying the floodplain

- Increase the sustainable benefits of using the floodplain; and
- Improve or maintain floodplain ecosystems dependent on flood inundation

Steps Involved in Formalising Floodplain Risk Management Study and Plan



Flood Study – Tuggerah Lakes catchment

- Completed in 1994;
- Design flood levels for PMF, 1%, 5%, 20% and 50% AEP design storm events;
- Approximately 8,700 properties are affected by flood planning level,
- Approximately 2,800 properties with floor levels below the flood planning level.

Floodplain Risk Management Study

- Study for the Tuggerah Lakes area is currently being carried out by WMA Water
- Analyse all factors and risks associated with flooding
- Analyse potential risk management options

Flood Risk Management Options

Property Modification Measures:

- Zoning, Voluntary House Raising, Building and Development Controls, Flood proofing Building

Response Modification Measures:

- Community Awareness, Flood Prediction and Warning, Local Flood Plan, Evacuation Arrangements

Flood Modification Measures:

- Retarding Basins, Levees, Channel Improvements, Flood Gates, Opening or dredging the Entrance channel

Property Modification Measures:



Floor above Flood
Planning Level

Property Modification Measures:



Inappropriate
Planning

Property Modification Measures:

Voluntary house
raising so the
floor level is
above Flood
Planning Level



Flood Modification Measures:



Culvert
upgrades

Flood Modification Measures:



Flood Levee at
Maclean

How can you help?

As an inhabitant of the Tuggerah Lakes area, the community has a key role in the preparation, implementation and success of the Floodplain Risk Management Plan.

How?

- By providing any information in relation to historic flood events or flooding experiences, and/or
- suggestions of how Council can manage flood prone land.

What are the outcomes of the Plan?

Develop a Plan that

- Reduces flood risk to the community
- Increases community resilience to flood risk
- Introduce planning controls that are specific to all flood prone areas in Tuggerah Lakes area.
- Create greater community awareness that Council is actively involved with floodplain management
- Provide information for preparing Local Flood Plans – for SES.

Where to from here?

- Final draft of plan → public exhibition for review and comment,
- Final report and plan → sent to Council for adoption.
- Adopted plan → implement recommendations, such as planning controls and construction works.
- The Plan will be reviewed every 5 years