Hawkesbury City Council

Attachment 3 to item 148

Draft Flood Policy 2020

date of meeting:11 August 2020
location:by audio-visual link
time:6:30 p.m.

Hawkesbury City Council

Policy

DRAFT

Flood Policy 2020

Adopted by Council at the Ordinary Meeting Held on <<insert date when adopted>>

Hawkesbury City Council

Division:	City Planning	**Policy Number:**	Enter No
Branch:	Strategic Planning	**Adopted Date:**	Enter Date
Responsible Officer:	Manager Strategic Planning	**Next Review Date:**	Enter Date
Director:	City Planning	**Version:**	Enter No

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1 TITLE

Flood Policy 2020.

2 PURPOSE

The purpose of this policy is to:

- highlight Council's position in respect of the need for a collaborative approach across all levels of government to respond to issues associated with floodplain management across the Hawkesbury-Nepean Valley, and
- set the information and development controls to be used for the preparation and assessment of Development Applications for land affected by the 1 in 100 year flood event to address the requirements of Clause 6.3 *Flood planning* of Hawkesbury Local Environmental Plan 2012.

3 SCOPE

Council recognises the need for a collaborative approach to floodplain management across the Hawkesbury-Nepean Valley as outlined in the Resilient Valley, Resilient Communities – Hawkesbury-Nepean Valley Flood Risk Management Strategy 2017 prepared by Infrastructure NSW. The Resilient Valley, Resilient Communities Strategy prepared by Infrastructure NSW in particular states that:

> *"Resilient Valley, Resilient Communities – the Hawkesbury-Nepean Valley Flood Risk Management Strategy is a comprehensive long-term framework for the NSW Government, local councils, businesses and the community to work together to reduce and manage the flood risk in the Hawkesbury-Nepean Valley."*

This Policy applies to all Development Applications for any development in the Hawkesbury City Council Local Government Area on land that is subject to inundation in a 1 in 100 year flood event.

Figures 1 and 2 show the extent of flooding within the Hawkesbury Local Government Area, including the areas subject to inundation in the 1 in 100 year and Probable Maximum Flood event.

This Policy does not apply in the circumstances of local overland flooding or local drainage inundation as defined in the Floodplain Development Manual and determined by Council.

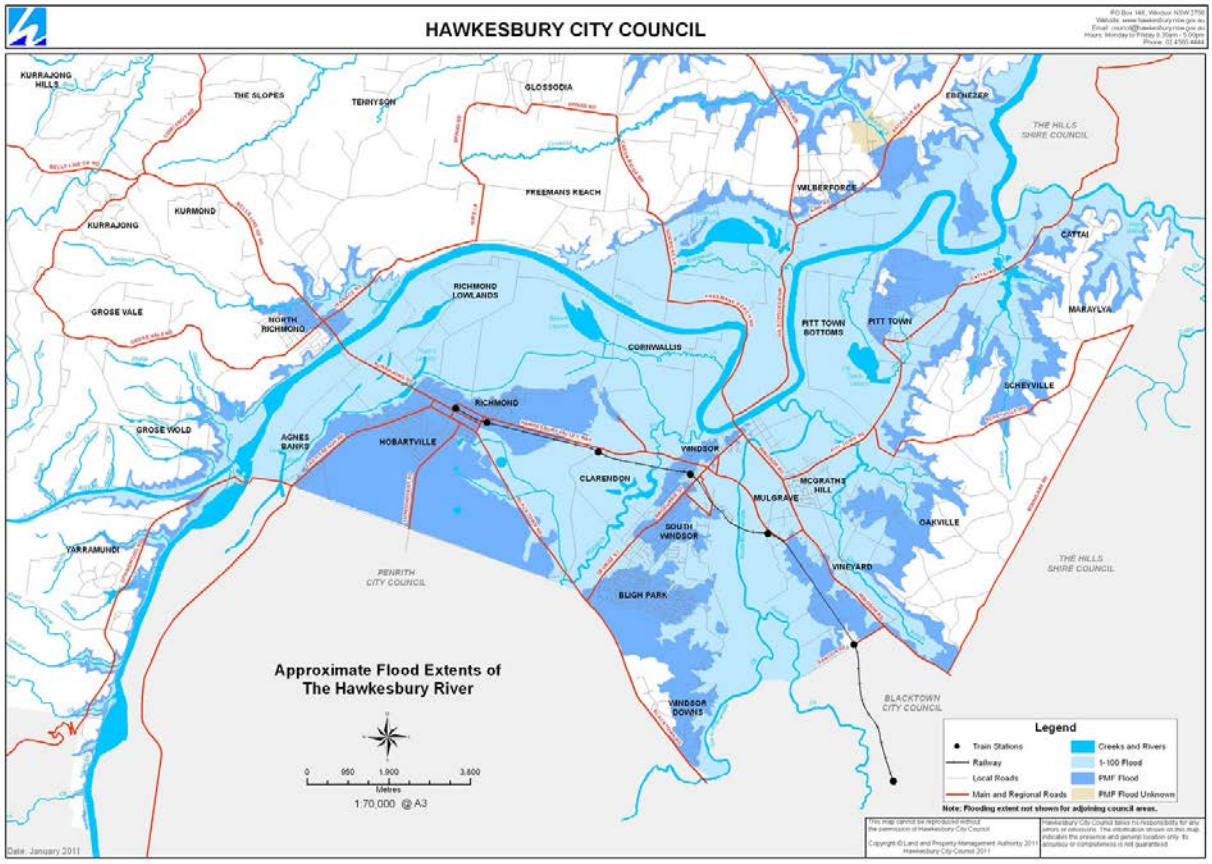

Figure 1 - Flood Extent Map – South

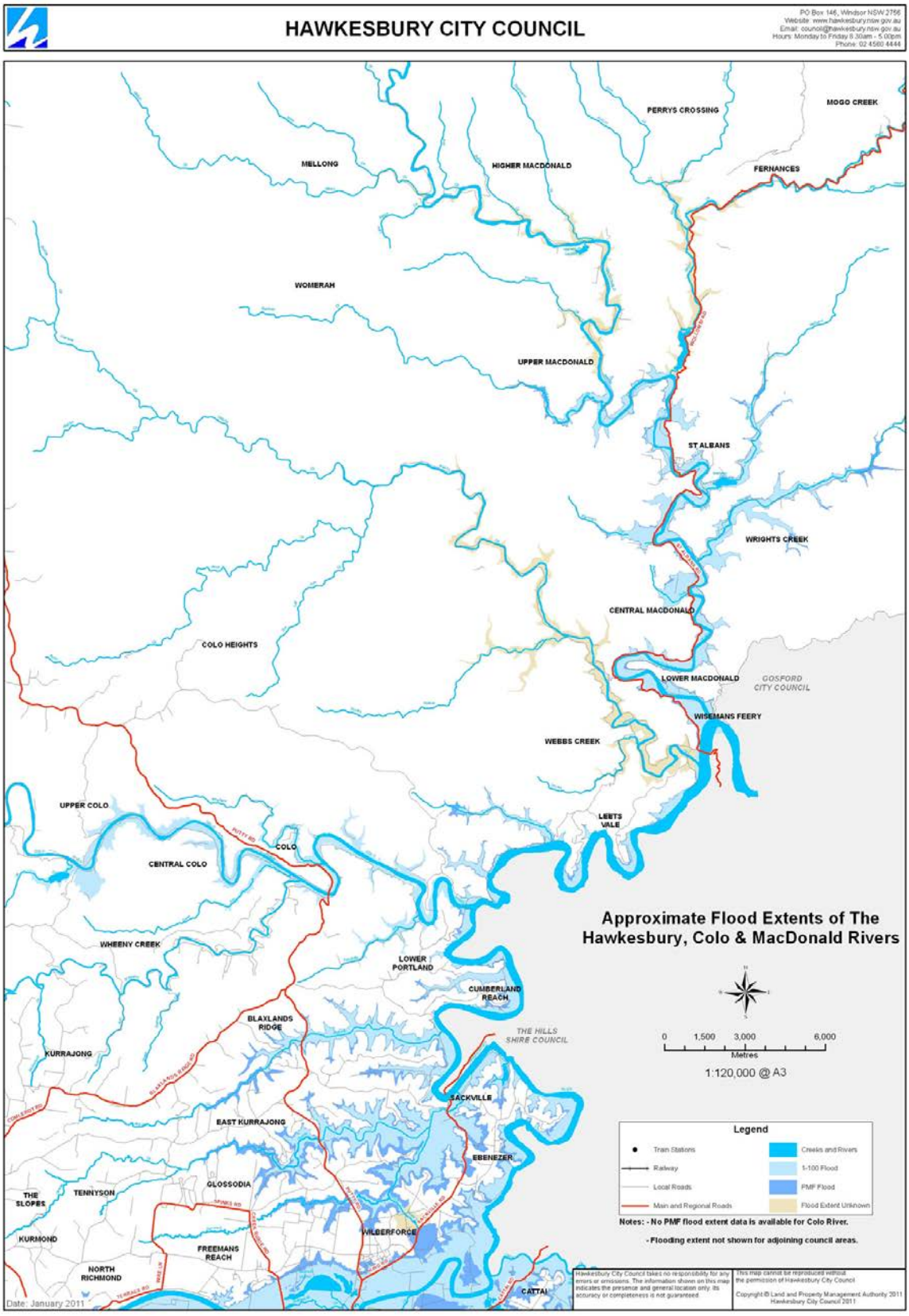

Figure 2 - Flood Extent Map - North

4 BACKGROUND

Context

The Hawkesbury-Nepean Valley has one of the most significant flood risk exposures within Australia. Infrastructure NSW's Flood Strategy Resilient Valley, Resilient Communities states: "The (Hawkesbury-Nepean) Valley has a high flood hazard, with both historical and geological evidence of widespread flooding across the Valley. Climate change may further increase the severity and frequency of the flood hazard in the future.

There is also a high level of flood exposure as the floodplain is located in an area with a large and growing population, and one of Australia's most significant and diverse economies. Expanding urban development across the Valley means that flood exposure will increase in the future. Up to 134,000 people live and work on the floodplain and could require evacuation. This number is forecast to double over the next 30 years. Over 25,000 residential properties and two million square metres of commercial space are currently subject to flood risk, and this will increase significantly in the coming years.

The flood risk is heightened by a number of factors:

- insufficient road capacity to safely evacuate the whole population in a timely fashion
- a fragmented approach to managing flood risk
- low community awareness about the flood risk.

In addition to the above, there is a high risk of infrastructure failure of facilities and systems i.e water, wastewater, power, gas etc.

The Insurance Council of Australia considers this Valley to have the highest single flood exposure in New South Wales, if not Australia."

Within the Hawkesbury Local Government Area, the risks to life and property are significant given the depths of floodwaters and local and regional evacuation constraints. During major flood events, significant areas of land are inundated, flood islands are formed, isolating communities, and these islands have the potential to be fully inundated. Approximately 15,172 buildings are within the floodplain, 13,418 of which are residential dwellings. If evacuation does not occur, risks to life are increased through isolation. Depths of floodwaters are high within the Hawkesbury Local Government Area and therefore most existing buildings are subject to potential failure during a flood.

The last major flood in the Hawkesbury occurred in 1992, some 28 years ago with a minor flood occurring February 2020. During this period many new residents have moved into the area with no knowledge or experience of flooding in the Hawkesbury Local Government Area. Conversely, long time residents have not experienced flooding greater than a 1 in 30 year event for a considerable period of time.

Council recognises the need for a collaborative approach to floodplain management across the Hawkesbury-Nepean Valley as outlined in the Resilient Valley, Resilient Communities – Hawkesbury-Nepean Valley Flood Risk Management Strategy 2017 prepared by Infrastructure NSW. The Resilient Valley, Resilient Communities Strategy prepared by Infrastructure NSW in particular states that:

> *"Resilient Valley, Resilient Communities – the Hawkesbury-Nepean Valley Flood Risk Management Strategy is a comprehensive long-term framework for the NSW Government, local councils, businesses and the community to work together to reduce and manage the flood risk in the Hawkesbury-Nepean Valley."*

Council acknowledges that there are nine key outcomes of the Resilient Valley, Resilient Communities – the Hawkesbury-Nepean Valley Flood Risk Management Strategy 2017 that are being progressed or investigated, including:

- Coordinated flood risk management across the Valley
- Reduced flood risk in the Valley by raising Warragamba Dam Wall
- Strategic and integrated land use and road planning
- Accessible contemporary flood risk information
- An aware, prepared and responsive community
- Improved weather and flood predictions
- Best practice emergency response and recovery
- Adequate local roads for evacuation
- Ongoing monitoring and evaluation, reporting and improvement of the Flood Strategy

5 POLICY DETAILS

Hawkesbury City Council supports and encourages the need for regional flood mitigation measures in the Hawkesbury-Nepean Valley to be investigated and implemented by the Commonwealth and NSW State Governments and other relevant Authorities to ensure that the flood risks experienced by existing and future residents in the valley are reduced. These regional measures are too great a burden for one Council to carry and there is a need for a committed regional approach, by all relevant Authorities, to address these existing risks.

Council recognises the need for a collaborative approach across all levels of government to respond to the need for regional flood mitigation measures in the Hawkesbury-Nepean Valley.

The requirements of Council's document titled 'Schedule of Flood Related Development Controls' are to be applied when assessing an application on flood affected land to which Clause 6.3 – *Flood* Planning of Hawkesbury Local Environmental Plan 2012 applies.

6 ROLES AND RESPONSIBILITY

Authorised Officer	Roles & Responsibilities
Manager Strategic Planning	• Review and management of Policy
Manager Development Services	• Ensure Development Services Section implements Policy
Development Planners, Building Certifiers, Development Engineers	• Implementation of Policy

7 DEFINITIONS

Australian height datum (AHD) — a common national surface level datum approximately corresponding to mean sea level.

Compatible development — is development for a type of land use shown as being compatible for a Hazard Category within Table 2 to this Policy.

Design flood — is a statistical estimate of a flood based on probability analysis of flood and/or rainfall data.

Development application (DA) — is a formal request for consent to carry out proposed development, such as change of use of land, subdivide land, and carry out building, landscaping and other work.

Effective warning time — the time available after receiving advice of an impending flood and before the floodwaters prevent appropriate flood response actions being undertaken. The effective warning time is typically used to evacuate people, transport their possessions, move farm equipment, move stock and raise furniture.

Filling of Land	is the raising of the level of the land by the importation of fill material to the site or by earthworks being carried out on the site, however does not include topdressing.
Flood	relatively high stream flow which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam and/or local overland flooding associated with major drainage before entering a watercourse, as defined by the Floodplain Development Manual (NSW Government 2005).
Flood certificate	A certificate obtained from Council which details the hazard category of a site and which hydraulic classification (Floodway, Flood Storage, and Flood Fringe) applies to that site.
Flood compatible building materials	materials used for the reduction or elimination of flood damage including those materials that are resistant to damage when inundated.
Flood fringe areas	the remaining area of flood prone land after floodway and flood storage areas have been defined.
Flood hazard	the potential for damage to property or risk to persons during a flood.
Flood liable land	is synonymous with **flood prone land**, that is land susceptible to flooding by the Probable Maximum Flood (PMF) event.
Flood planning level (FPL)	the level of a 1 in 100 year flood event.
Flood risk	the risk to human life and property and is the combination of the consequences of flooding and the likelihood of flooding.
Floodplain	area of land which is subject to inundation by floods up to and including the Probable Maximum Flood (PMF) event - that is, flood liable land.
Flood probability	the size of a flood is described in terms of the chance or probability of that flood occurring in any 1 year, and for example can be expressed in the following ways: • 1 in 100 year flood event; • 1:100 ARI (Average Recurrence Interval); • 1% AEP (Annual Exceedance Probability). Average Recurrent Interval (ARI) is measured in years: e.g. a 100 year ARI flood is a flood that occurs (or is exceeded) on average once every 100 years. Annual Exceedance Probability (AEP) is measured as a percentage: e.g. a 1% AEP flood is a flood that occurs (or is exceeded) on average once every 100 years. Also expressed as a 100 year event.
Flood storage areas	those parts of the floodplain that are important for the temporary storage of floodwaters during the passage of a flood.
Floodway areas	those areas of the floodplain where a significant discharge of water occurs during floods. They often align with naturally defined channels. Floodways are areas that even if only partially blocked, would cause a significant redistribution of flood flow, or a significant increase in flood levels.

Habitable floor area	a room used for normal domestic activities and includes a bedroom, living room, lounge room, music room, television room and/or home theatre room, kitchen, dining room, sewing room, study, playroom/rumpus room and sunroom. It excludes a bathroom, laundry, water closet, food-storage pantry, walk in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes drying room, and other spaces of a specialised nature that are occupied only infrequently.
Habitable floor level	means the level of the habitable floor area provided in reference to the Australian Height Datum (AHD).
Incompatible development	is development for a type of land use shown as being incompatible for a Hazard Category within Table 2 to this Policy.
Local overland flooding	flood inundation by local runoff rather than overbank discharge from a stream, river, estuary, lake or dam.
Probable maximum flood (PMF)	that could conceivably occur at a particular location. The PMF the PMF is the largest flood defines the extent of the floodplain.
Raised building construction	is building construction utilising bearers and joist or suspended slab techniques.
Regional evacuation route	is the evacuation routes shown on Map 1: *Regional Evacuation Routes within the Hawkesbury-Nepean Valley* of Chapter 4, Volume 3 of the Hawkesbury Nepean Flood Plan (State Emergency Services, September 2015).

8 RELATED DOCUMENTS

Legislation

- Hawkesbury Local Environmental Plan 2012.

Safe Work Method Statements (SWMS)

- N/A

Related policies

- N/A

Procedures

- Schedule of Flood Related Development Controls

Templates

- N/A

Guidelines

- N/A

Fact Sheet

- N/A