

Development Assessment Guideline:

An Adaptive Response to Flood Risk Management for Residential Development in the Penrith City Centre

28 June 2019

This Guideline provides an overview of the Adaptive Management Framework to manage the development of flood-affected areas in the Penrith City Centre located below the Probable Maximum Flood (PMF¹) level.

This Guideline outlines a staged approach to the management of new residential development on flood-affected areas located within the Penrith City Centre.

Introduction

Penrith is identified as one of the Metropolitan clusters of the Western Parkland City in the *Greater Sydney Regional Plan - A Metropolis of Three Cities*. It is important we plan for residential opportunities in Penrith which are in an attractive urban context, and in close proximity to the Western Sydney Aerotropolis.

To manage the flood risk in the Penrith City Centre, an Adaptive Management Framework has been developed by the NSW Government and Penrith City Council (Council). This coordinated approach to flood risk management allows for development to continue based on ongoing flood risk management, where ongoing development in the Penrith City Centre is considered in line with evacuation capacity and capacities to recover. This is consistent with the NSW Government's policies to create a resilient Hawkesbury Nepean Valley.

In 2017, the NSW Government released *Resilient Valley, Resilient Communities: the Hawkesbury-Nepean Valley Flood Risk Management Strategy* (Flood Strategy). The Flood Strategy outlines nine outcomes supported by a series of actions to reduce flood risk to life, property and social amenity from regional floods in the valley now and into the future.

By working together, the NSW Government and Council will deliver this framework to allow the community of the City Centre to adapt to flood risks as the population grows.

Purpose of the Guideline

This Guideline has been prepared to assist Council to assess development applications for residential development in the Penrith City Centre as the Adaptive Management Framework stages are implemented. This Guideline will ensure the rate of new dwellings does not exceed the ability to safely evacuate the community in the event of an extreme flood event.

Specifically, the Guideline:

- provides an overview of the Adaptive Management Framework to manage the development of land below the PMF level in the Penrith City Centre (as defined in the *Penrith City Council Local Environment Plan 2010*);

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- provides guidance on the implementation of the Adaptive Management Framework through the development assessment process for new residential development within the Penrith City Centre (as identified in the Penrith City Council Local Environment Plan 2010); and
- allows Council to consider further development of the Penrith City Centre as evacuation opportunities are identified and implemented through the Adaptive Management Framework.

Residential opportunities in Penrith City Centre

Penrith is a river city on the edge of the Hawkesbury-Nepean floodplain. Parts of the city centre can be affected by infrequent but severe to extreme floods. As Penrith grows it is important to acknowledge that, as with all waterway cities across Australia, Penrith can experience flood events. A proactive approach to flood management to build resilience into the city as it grows has been developed.

The Greater Sydney Region Plan and Western City District Plan set out that Greater Penrith is a part of the Metropolitan Cluster in the Western Parkland City. The *Western City District Plan* has also identified a Collaboration Area for Greater Penrith, which includes the Penrith City Centre.

The development of the Western Sydney Aerotropolis, together with enabling infrastructure including the North-South Rail Link from the airport to St Marys, will enable Penrith to grow further.

The Greater Penrith to Eastern Creek Growth Area will build on opportunities created by the Western Economic Corridor, seeking to integrate land use and transport planning to guide redevelopment.

The District Plan has also identified a collaboration area for Greater Penrith, which covers the Penrith City Centre health and education precinct.

Building resilience to flooding

The unique topography and settlement pattern of the Hawkesbury-Nepean Valley means it has a high risk to severe and extreme event floods. Many areas of the Valley have a high-level flood exposure, with both historical and geological evidence of widespread flooding.

The high flood risk to life in the Hawkesbury-Nepean Valley is due to:

- population growth,
- the need to match road capacity to the demands to safely evacuate the valley in a timely manner ahead of roads being isolated,
- multiple agencies having responsibility to manage flood risk, and

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- low levels of flood risk awareness in the community.

The nature of flooding in the Hawkesbury Nepean Valley means a severe to extreme flood event will likely result in flood waters remaining high for up to three days. This can impact essential services and utilities for periods that last several weeks or longer depending on the nature of the flood. A comprehensive evacuation process is necessary to provide safety for the community.

The evacuation roads away from the Hawkesbury-Nepean are shared and interconnected between Windsor, Bligh Park, Richmond and Penrith. Management of the shared evacuation capacity is necessary to provide safety for the community.

The NSW Government's *Floodplain Development Manual 2005* guides floodplain management and development in areas at risk of flooding. Councils are responsible for managing flood risk in their local government areas.

Given its economic importance, and the links with the Flood Strategy, a specific strategy is needed for the Penrith City.

Adaptive Management Framework

The purpose of the Adaptive Management Framework (Framework) is to ensure development within the Penrith City Centre can continue while ensuring the rate of new dwellings does not exceed the ability to safely evacuate the community in the event of a severe or extreme flood event. The Framework identifies the work that will be undertaken to identify greater evacuation capacity and emergency management planning in severe to extreme flood events.

The Adaptive Management Framework allows for a staged approach to development and development decisions, dependent on further investigations and decisions relating to evacuation of the floodplain. This approach to flood evacuation will enable Penrith to continue to grow in the future.

There are three stages in the Framework that will be used to match development and greater resilience to flood management.

Stage One:

Planning and development for an additional 4,050 dwellings within the Penrith City Centre can be accommodated utilising existing infrastructure and State Emergency Services emergency capabilities. During this stage, and to prepare for additional development in future stages, the following activities will be undertaken:

- Council will develop a Masterplan for the Penrith City Centre, including resilient building controls, detailed traffic and transport assessment, and an updated contributions plan to support the increased development proposed for the Penrith City Centre;

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- Council monitors the development of new residential buildings in the affected area,
- Communication strategies will be explored to encourage commercial and employment activities in the Penrith City Centre to respond earlier to a risk of a severe to extreme flood event that may require evacuation;
- State agencies and Council will investigate all feasible complementary evacuation processes that could allow development above 4,050 dwellings within the existing planned infrastructure;
- Infrastructure NSW will continue to implement the *Hawkesbury-Nepean Flood Risk Management Strategy 2017* and work with Council to build resilience and increased flood awareness; and
- The Department of Planning and Environment will develop and implement the regional land use planning framework.

Stage Two:

The growth potential for a further 6,000 dwellings (in addition to the 4,050), could be taken up once the requirements of Stage One are met and additional evacuation capacity to accommodate the additional dwellings has been agreed to by the NSW Government and actioned. During the second stage an improved management plan for flood resilience will be prepared in a collaborative way by the NSW Government and Penrith City Council. The aim of the management plan is to reduce the residual risks of evacuation in the Penrith City Centre by:

- improving emergency management procedures, including use of the resources of Council; and
- identifying and resolving infrastructure blockages and funding requirements, examining how greater evacuation capacity can be created.

Stage Three:

Before proceeding with Stage Three, the NSW Government will consider the growth potential for an additional 4,000 dwellings and options to facilitate the proposed growth.

During this stage government agencies will investigate using infrastructure upgrades to either reduce the likelihood of the risks or the consequence of the risk through improved evacuation.

Changing the likelihood of the risk can be achieved through the implementation of the nine key outcomes from the *Hawkesbury-Nepean Valley Flood Risk Management Strategy*, and greater flood mitigation capacity increases the flood warning period and provides greater certainty to predictions on flood height and peaks.

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Where this Guideline applies

For the purposes of the Adaptive Management Framework “affected area” means land in the Penrith City Centre (as defined in the *Penrith City Council Local Environmental Plan 2010*) that is below the PMF level.

When this Guideline applies

- This Guideline applies when a consent authority (typically the Council) considers a development application for new residential development in the affected area. The Guideline is prescribed as an additional matter for consideration under clause 92 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation).

What this Guideline requires

- New residential development in the affected area must be consistent with the Adaptive Management Framework described in this Guideline, particularly the dwelling thresholds set for each stage of the Framework.
- To ensure consistency, or in circumstances where Council is concerned these thresholds may be exceeded, Council can consider granting a deferred commencement consent in accordance with the *Environmental Planning and Assessment Act 1979* (the Act) and the Regulation. The condition of the deferred commencement consent can require the applicant to seek written confirmation from the Council that dwellings to be constructed are within the applicable threshold stage before the consent can operate.
- Modifications to development consents that propose an increase in the number of dwelling also need to be assessed under this Guideline. Modifications are not to be used to exceed the threshold levels, and must not vary provisions or conditions that give effect to or are consistent with Adaptive Management Framework.

Penrith City Council will be responsible for monitoring dwellings constructed in the affected area and will maintain a register of development consents for the purposes of monitoring the threshold levels. Certifiers will also need to ensure they comply with the requirements of the Act and Regulation when providing copies of their certificates to the Council.

Council will use the dwelling monitor to ensure threshold levels are not exceeded without the actions under each stage being finalised and approval being granted by the NSW Government.

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Rezoning decisions

Planning proposal relating to additional residential development in the Penrith City Centre are assessed separately from this Guideline, for consistency with the Flood Strategy. By working collaboratively, Penrith City Council and the NSW Government are ensuring zonings can create enough residential dwelling capacity to meet projected needs up to 2041 while ensuring the area can be evacuated safely.

Further Information

Please contact the Department of Planning and Environment (www.planning.nsw.gov.au) or Penrith City Council (www.penrithcity.nsw.gov.au)

¹ PMF probable maximum flood is defined in the NSW Government's Floodplain Development Manual (2005) as the largest possible flood that defines the extent of flood prone land.