

Appendix C Draft Flood Planning Matrix

Draft Flood Planning Matrix – Blackbutt Creek Catchment

Planning Consideration	Flood Risk Precincts (FRPs)																								
	Low Flood Risk							Medium Flood Risk					High Flood Risk												
	Critical Uses and Facilities	Sensitive Uses and Facilities	Subdivision	Residential	Commercial and Industrial	Tourist Related Development	Recreation and Non-Urban	Concessional Development	Critical Uses and Facilities	Sensitive Uses and Facilities	Subdivision	Residential	Commercial and Industrial	Tourist Related Development	Recreation and Non-Urban	Concessional Development	Critical Uses and Facilities	Sensitive Uses and Facilities	Subdivision	Residential	Commercial and Industrial	Tourist Related Development	Recreation and Non-Urban	Concessional Development	
Floor Level	3		2, 6	5, 6	2, 6	1, 6	4				2, 6	5, 6	2, 6	1, 6	4									1, 6	4
Building Components	2		1	1	1	1	1				1	1	1	1	1									1	1
Structural Soundness	2		1	1	1	1	1				1	1	1	1	1									1	1
Flood Effects	1	1	1	1	1	1	1			1	1	1	1	1	1									1	1
Car Parking and Driveway Access	1, 2		1, 2	1, 2	1, 2	1, 2					1, 2	1, 2	1, 2	1, 2										1, 2	

Colour Legend: Not Relevant Unsuitable Land Use

Note:

- Critical uses and facilities include emergency service facilities, hospitals and residential care facilities.
- Sensitive uses and facilities include seniors housing, child care centres, education establishments, respite day care centres, and public utility undertakings which are essential during or after a flood.
- Concessional development is development which continues an existing use without significantly increasing flood risks.

General Notes

- Freeboard equals an additional height of 300mm where peak flow rates in the Design Flood Standard are less than 20m³/s and 500mm where peak flow rates in the Design Flood Standard are greater than 20m³/s.
- The relevant environmental planning instruments identify development permissible with consent in various zones in the LGA. Refer to Ku-ring-gai Council LEP 2015 and Draft LEP 2013. Notwithstanding, constraints specific to individual sites may preclude Council granting consent to certain forms of development on all or part of a site. This matrix identifies where flood risks are likely to determine where certain development types will be considered "unsuitable" due to flood related risks.
- Filling of the site, where acceptable to Council, may change the FRP considered to determine the controls applied in the circumstances of individual applications.
- Refer to Section 24D of the KDCP for planning considerations for proposals involving only the erection of a fence. Any fencing that forms part of a proposed development is subject to the relevant flood effects and Structural Soundness planning considerations of the applicable land use category.

Floor Level

- All floor levels to be no lower than 300 mm above the highest existing ground level along the associated flow path unless justified by site specific assessment.
- Habitable floor levels to be no lower than the Design Flood Standard Level plus freeboard.
- Habitable floor levels to be no lower than the PMF level. Non-habitable floor levels to be no lower than the PMF level unless justified by a site specific assessment.
- Floor levels to be no lower than the design floor level. Where this is not practical due to compatibility with the height of adjacent buildings, or compatibility with the floor level of existing buildings, or the need for access for persons with disabilities, a lower floor level may be considered. In these circumstances, the floor level is to be as high as practical, and, when undertaking alterations or additions, no lower than the existing floor level.
- The level of habitable floor areas to be equal to or greater than the Design Flood Standard Level plus freeboard. If this level is impractical for a development in a Business zone, the floor level should be as high as possible.
- Non-habitable floor levels - to be determined.

Building Components and Method

- All structures to have flood compatible building components below the Design Flood Standard Level plus freeboard.
- All structures to have flood compatible building components below the PMF level.

Structural Soundness

- Applicant to demonstrate that the structure can withstand the forces of floodwater, debris and buoyancy up to and including a Design Flood Standard Level plus freeboard. An engineer's report may be required.
- Applicant to demonstrate that any structure can withstand the forces of floodwater, debris and buoyancy up to and including a PMF. An engineer's report may be required.

Flood Effects

- A flood study to be provided to demonstrate that the development: (i) will not be subject to inundation from flows causing damage to property/belongings, (ii) be subject to structural damage from flows or associated debris, (iii) impede the passage of stormwater and cause afflux, (iv) divert flows onto adjacent properties, and (v) increase downstream velocities for the design flood standard (KDCP 24D.3). An engineer's report may be required.

Car Parking and Driveway Access

- Open car parking spaces or carports shall have minimum surface levels as high as practical, but are not permitted to be established in areas where vehicles would become buoyant in an overland flow zone.
- Garages must have a minimum height above the design flood standard level of 150mm and 300mm for the Design Flood Standard peak flow rate of less than and greater than 20m³/s, respectively.