

4. FLOODPLAIN MANAGEMENT POLICY

It is important to understand the state legislation that overarches all local planning so as to enable appropriate floodplain risk management measures to be proposed that meet both state and local statutory requirements. This section discusses the state legislation that influences planning in relation to flood risk at the local government level.

The NSW Environmental Planning and Assessment Act 1979 (EP&A Act) provides the framework for regulating and protecting the environment and controlling development.

Pursuant to Section 117(2) of the EP&A Act, the Minister has directed that Councils have the responsibility to facilitate the implementation of the NSW Government's Flood Prone Land Policy. Specifically, Direction 4.3 states:

Objectives

The objectives of this direction are:

- *to ensure that development of flood prone land is consistent with the NSW Government's Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005, and*
- *to ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land.*

Clause (3) of Direction 4.3 states:

- *This direction applies when a relevant planning authority prepares a planning proposal that creates, removes or alters a zone or a provision that affects flood prone land.*

Clauses (4)-(9) of Direction 4.3 state:

- *A planning proposal must include provisions that give effect to and are consistent with the NSW Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005 (including the Guideline on Development Controls on Low Flood Risk Areas).*
- *A planning proposal must not rezone land within the flood planning areas from Special Use, Special Purpose, Recreation, Rural or Environmental Protection Zones to a Residential, Business, Industrial, Special Use or Special Purpose Zone.*
- *A planning proposal must not contain provisions that apply to the flood planning areas which:*
 - *permit development in floodway areas,*
 - *permit development that will result in significant flood impacts to other properties,*
 - *permit a significant increase in the development of that land,*
 - *are likely to result in a substantially increased requirement for government spending on flood mitigation measures, infrastructure or services, or*
 - *permit development to be carried out without development consent except for the purposes of agriculture (not including dams, drainage canals, levees, buildings or structures in floodways or high hazard areas), roads or exempt development.*

- *A planning proposal must not impose flood related development controls above the residential flood planning level for residential development on land, unless a relevant planning authority provides adequate justification for those controls to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General).*
- *For the purposes of a planning proposal, a relevant planning authority must not determine a flood planning level that is inconsistent with the Floodplain Development Manual 2005 (including the Guideline on Development Controls on Low Flood Risk Areas) unless a relevant planning authority provides adequate justification for the proposed departure from that Manual to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General).*
- *A planning proposal may be inconsistent with this direction only if the relevant planning authority can satisfy the Director-General (or an officer of the Department nominated by the Director-General) that:*
 - *the planning proposal is in accordance with a floodplain risk management plan prepared in accordance with the principles and guidelines of the Floodplain Development Manual 2005, or*
 - *the provisions of the planning proposal that are inconsistent are of minor significance.*

4.1.1. NSW Flood Prone Land Policy

The primary objectives of the NSW Government's Flood Prone Land Policy are:

- to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone land, and
- to reduce public and private losses resulting from floods whilst utilising ecologically positive methods wherever possible.

The NSW Floodplain Development Manual 2005 (the Manual), relates to the development of flood prone land for the purposes of Section 733 of the Local Government Act 1993 and incorporates the NSW Flood Prone Land Policy.

The Manual outlines a merits approach based on floodplain management. At the strategic level, this allows for the consideration of social, economic, cultural, ecological and flooding issues to determine strategies for the management of flood risk.

The Manual recognises differences between urban and rural floodplain issues. Although it maintains that the same overall floodplain management approach should apply to both.

4.1.2. Section 149 Planning Certificates

Section 149 of the EP&A Act states:

- *A person may, on payment of the prescribed fee, apply to a council for a certificate under this section (a planning certificate) with respect to any land within the area of the council.*
- *On application made to it under subsection (1), the council shall, as soon as practicable, issue a planning certificate specifying such matters relating to the land to which the certificate relates as may be prescribed (whether arising under or connected with this or any other Act or otherwise).*

- *The regulations may provide that information to be furnished in a planning certificate shall be set out in the prescribed form and manner.*

The Environmental Planning and Assessment Regulation 2000 prescribes the matters which must be included in an s.149 Planning Certificate, including whether a parcel of land is subject to controls relating to flooding.

4.1.3. State Environmental Planning Policy (Exempt and Complying Development Codes (2008))

The aims of State Environmental Planning Policy (Exempt and Complying Development) 2008 (SEPP) are:

This Policy aims to provide streamlined assessment processes for development that complies with specified development standards by:

- *providing exempt and complying development codes that have State-wide application, and*
- *identifying, in the exempt development codes, types of development that are of minimal environmental impact that may be carried out without the need for development consent, and*
- *identifying, in the complying development codes, types of complying development that may be carried out in accordance with a complying development certificate as defined in the Act, and*
- *enabling the progressive extension of the types of development in this Policy, and*
- *providing transitional arrangements for the introduction of the State-wide codes, including the amendment of other environmental planning instruments.*

4.1.4. General Housing Code

Part 3 of the SEPP relates to the "General Housing Code".

Division 1 of Part 3 of the SEPP, which comprises clauses 3.1-3.6 of the SEPP, relates to:

Development that is complying development under this code

Clause 3.1 states:

3.1 Land to which code applies

This code applies to development that is specified in clauses 3.2-3.5 on any lot in Zone R1, R2, R3, R4 or RU5 that:

- (a) *has an area of at least 200 m², and*
- (b) *has a width, measured at the building line fronting a primary road, of at least 6 m.*

Clause 3.2 of the SEPP states:

3.2 New single storey and two storey dwelling houses

The erection of a new single storey or two storey dwelling house is development specified for this code.

Clauses 3.3-3.5 generally relate to single and two storey dwelling houses and ancillary development.

Division 2 of Part 3 of the SEPP contains:

Development standards for this code

Subdivision 9 contains:

Development standards for particular land

Subdivision 9 contains Clause 3.36C of the SEPP which relates to development standards for the General Housing Code on "flood control lots". A "flood control lot" is defined in the SEPP as:

flood control lot means a lot to which flood related development controls apply in respect of development for the purposes of industrial buildings, commercial premises, dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (other than development for the purposes of group homes or seniors housing).

Note. This information is a prescribed matter for the purpose of a certificate under section 149 (2) of the Act.

As such, a "flood control lot" is a lot where the Council has provided for flood related development controls, which are all lots with notation on a s.149 Planning Certificate that flood related development controls apply. This is generally land which falls within the "Flood Planning Area".

Clause 3.36C states:

3.36C Development standards for flood control lots

(1) *This clause applies to:*

(a) *to all development specified for this code that is to be carried out on a flood control lot,*

and

(b) *in addition to all other development standards specified for this code.*

(2) *The development must not be on any part of a flood control lot unless that part of the lot has been certified, for the purposes of the issue of the relevant complying development certificate, by the council or a professional engineer who specialises in hydraulic engineering as not being any of the following:*

(a) *a flood storage area,*

(b) *a floodway area,*

(c) *a flow path,*

(d) *a high hazard area,*

(e) *a high risk area.*

(3) *The development must, to the extent it is within a flood planning area:*

(a) *have all habitable rooms no lower than the floor levels set by the council for that lot, and*

(b) *have the part of the development at or below the flood planning level constructed of flood compatible material, and*

- (c) *be able to withstand the forces of floodwater, debris and buoyancy up to the flood planning level (or if on-site refuge is proposed, the probably maximum flood level), and*
- (d) *not increase flood affectation elsewhere in the floodplain, and*
- (e) *have reliable access for pedestrians and vehicles from the development, at a minimum level equal to the lowest habitable floor level of the development, to a safe refuge, and*
- (f) *have open car parking spaces or carports that are no lower than the 20-year flood level, and*
- (g) *have driveways between car parking spaces and the connecting public roadway that will not be inundated by a depth of water greater than 0.3 m during a 1:100 ARI (average recurrent interval) flood event.*
- (4) *A standard specified in subclause (3) (c) or (d) is satisfied if a joint report by a professional engineer who specialises in hydraulic engineering and a professional engineer who specialises in civil engineering confirms that the development:*
 - (a) *can withstand the forces of floodwater, debris and buoyancy up to the flood planning level (or if on-site refuge is proposed, the probable maximum flood level), or*
 - (b) *will not increase flood affectation elsewhere in the floodplain.*
- (5) *If a word or expression used in this clause is defined in the Floodplain Development Manual, the word or expression has the same meaning as it has in that Manual unless it is otherwise defined in this clause.*
- (6) *In this clause:*

flood compatible material means building materials and surface finishes capable of withstanding prolonged immersion in water.

Floodplain Development Manual means the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005.

flow path means a flow path identified in the council's flood study or floodplain risk management study carried out in accordance with the Floodplain Development Manual.

high hazard area means a high hazard area identified in the council's flood study or flood risk management study carried out in accordance with the Floodplain Development Manual.

high risk area means a high risk area identified in the council's flood study or floodplain risk management study carried out in accordance with the Floodplain Development Manual.

4.1.5. Summary of State Legislative and Planning Policies

From the above discussion of the General Housing Code, it is clear that, unless a lot affected by flooding is included as a "flood control lot", an s.149 notification is not applied and, as a result, planning controls relating to flooding do not apply and Exempt Development can be undertaken. This highlights the importance of Council undertaking Flood Studies (such as this FRMS) to ensure appropriate properties are tagged and planning controls applied to reduce the risk and impact of flooding for current and future occupants.

4.2. Local Council Policy

Updated and relevant planning controls are important in flood risk management. Appropriate planning restrictions, ensuring that development is compatible with flood risk, can significantly reduce flood damages. Planning instruments can be used as tools to guide new development away from high flood risk locations and ensure that new development does not increase flood risk elsewhere. They can also be used to develop appropriate evacuation and disaster management plans to better reduce flood risks to the existing population. Councils use Local Environmental Plans (LEPs) and Development Control Plans (DCPs) to govern control on development with regards to flooding.

The three former Northern Beaches councils all had well developed approaches to flood risk management, however each was different in a number of ways which resulted in different experiences and outcomes for flood affected residents and businesses. Following amalgamation, Council harmonised the way that flooding is managed, including the relevant Development Control Plan clauses and design standards that stipulate the requirements for developing on flood prone land.

An LEP guides land use and development by zoning all land, identifying appropriate land uses that are allowed in each zone, and controlling development through other planning standards and DCPs. LEPs are made under the EP&A Act 1979 which contains mandatory provisions on what they must contain and the steps a Council must go through to prepare them. In 2006 the NSW Government initiated the Standard Instrument LEP program and produced a new standard format which all LEPs should conform to.

Manly Lagoon is covered by two LEPs. Manly (Northern Beaches South) LEP was adopted in 2013 and Warringah (Northern Beaches Central) LEP was adopted in 2011. Both were prepared under the Standard Instrument LEP program.

4.2.1. Manly Local Environment Plan 2013 (MLEP2013)

Clause 6.3 of MLEP 2013 relates to flood planning and states:

6.3 Flood planning

(1) *The objectives of this clause are as follows:*

(a) *to minimise the flood risk to life and property associated with the use of land,*

(b) *to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,*

(c) *to avoid significant adverse impacts on flood behaviour and the environment.*

(2) *This clause applies to land at or below the flood planning level.*

(3) *Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:*

- (a) is compatible with the flood hazard of the land, and*
- (b) is not likely to significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and*
- (c) incorporates appropriate measures to manage risk to life from flood, and*
- (d) is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and*
- (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.*
- (4) A word or expression used in this clause has the same meaning as it has in the Floodplain Development Manual (ISBN: 0 7347 5476 0), published by the NSW Government in April 2005, unless it is otherwise defined in this clause.*
- (5) In this clause:*
flood planning level means the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5 metre freeboard.

4.2.2. Warringah Local Environment Plan 2011 (WLEP2011)

Clause 6.3 of WLEP 2011 relates to flood planning and states:

6.3 Flood planning

- (6) The objectives of this clause are as follows:*
 - (a) to minimise the flood risk to life and property associated with the use of land,*
 - (b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,*
 - (c) to avoid significant adverse impacts on flood behaviour and the environment.*
- (7) This clause applies to land at or below the flood planning level.*
- (8) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:*
 - (a) is compatible with the flood hazard of the land, and*
 - (b) is not likely to significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and*
 - (c) incorporates appropriate measures to manage risk to life from flood, and*
 - (d) is not likely to significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and*
 - (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.*
- (9) A word or expression used in this clause has the same meaning as it has in the Floodplain Development Manual (ISBN: 0 7347 5476 0), published in 2005 by the NSW Government, unless it is otherwise defined in this clause.*

(10) In this clause:

flood planning level means the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5 metre freeboard.

4.2.3. Manly Development Control Plan 2013

Section 5.4.3 of the Manly DCP 2013 (as amended August 2017) addresses flood prone land. It provides maps of high, medium and low flood risk planning precincts and a matrix of requirements which are varied by flood risk and land use, and includes provisions for flood effects caused by development, drainage infrastructure and creek works, building components and structural soundness, storage of goods, flood emergency response, floor levels, car parking, fencing and pools which are based on the defined risk and land use. For the majority of instances the Flood Planning Level is used as the required level, however in some cases the PMF also needs to be considered (for example, in the case of evacuation or in the provision of essential services or vulnerable development).

The performance criteria that must be met are:

1.1 Performance Criteria

- (a) **Site layout and built form:** The site layout and ultimate built form of the proposed development should be compatible with the flood risk. Site analysis and layout should incorporate flood risk as a critical element in site planning.
- (b) **Public interest:** The proposed development should not result in increased risk—to human life or damage to property or infrastructure—beyond acceptable limits.
- (c) **Private and public cost:** The economic and social costs, which may arise from damage to property from flooding, should not be exacerbated by proposed development.
- (d) **Flood effects caused by development activity:** Development should not detrimentally increase the potential flood effects on other development or properties either individually or in combination with the cumulative impact of development that is likely to occur in the same floodplain.
- (e) **Drainage infrastructure and creek works:** Any proposed works on drainage infrastructure or natural creeks, whether or not carried out as flood modification measures, shall:
 - a. Not cause adverse flooding impacts;
 - b. Not result in a loss of flood storage;
 - c. Increase protection of existing and proposed development; and
 - d. Not have a detrimental impact on the environment.
- (f) **Building components:** Building components and materials likely to be affected by flood waters should be designed, built and installed so as not to be damaged by those floodwaters.
- (g) **Structural soundness:** The proposed development shall be designed and constructed so that it remains structurally sound for its intended life taking into account all the likely flood events during that lifetime.

- (h) **Storage of goods:** Goods that are likely to amplify the damages arising from flood events—including but not limited to pollutants and toxic chemicals—shall be stored so as not to find their way into floodwaters.
- (i) **Flood emergency response:** Proposed developments should only be permitted where effective warning time and reliable access is available for evacuation from an area potentially affected by floods to an area free of risk from flooding. Such an area may be within the same building where a shelter-in-place option is appropriate and achievable. The emergency response should be consistent with the Flood Emergency Response Planning for Development in Pittwater Policy where it applies to the land. The proposed development should have procedures in place (such as warning systems, signage or evacuation drills) so that people are aware of the need to evacuate and relocate goods and motor vehicles during a flood and are capable of identifying an appropriate evacuation route.
- (j) **Floor levels:** All floor levels within a proposed development shall be set at the required prescriptive level with additional consideration for the following:
 - a. The passage of flood waters;
 - b. The purpose for which that floor area is to used;
 - c. The relationship with the surrounding roadways;
 - d. The relationship with the existing building if the proposal is an extension; and
 - e. Surrounding built form and streetscape.
- (k) **Fencing:** Fencing shall be designed and constructed so that it does not impede and/or direct the flow of floodwaters, add debris to floodwaters or increase flood affectation on surrounding land.

4.2.4. Warringah Development Control Plan 2011

Part E11 of the Warringah Development Control Plan 2011 addresses flood prone land. The clause is identical to the Clause 5.4.3 of the Manly Development Control Plan, 2013 described above.

4.2.5. Summary of Council Policy

Both Warringah and Manly LEPs have been prepared under the Standard Instrument LEP program and include the relevant Flood Planning sections. Further planning control for flood affected properties is provided in the DCPs. Later stages of this study will consider potential changes to the local planning policies which may improve clarity and/or consistency across the Manly Lagoon catchment.

4.2.6. Flood Risk Management Policy

The Flood Risk Management Policy establishes the flood risk management approach within the Northern Beaches Council Local Government Area (LGA). It lists Councils objectives for managing flood risk and a range of strategic and operational actions that Council undertakes to identify, manage and respond to flooding.