

**FILE NO:** PSC2015-01399

**TITLE:** FLOODPLAIN RISK MANAGEMENT

**POLICY OWNER:** ASSET SECTION MANAGER

**PURPOSE:**

Port Stephens Council is committed to managing flooding across the Local Government Area using an integrated risk management approach, in order to:

1. Systematically reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone property, hence reduce the losses resulting from floods;
2. Recognise that appropriately developed flood prone land is a valuable resource to the community, land holders and the economy and these lands should not be sterilised by unnecessarily restricting its development;
3. Consider floodplain risk as early as possible in the planning and development process using the best available flood information;
4. Classify land in terms of floodplain risk so that decisions take into account the risk while recognising the social, economic and environmental values of flood prone land;
5. Provide the framework to manage floodplain risk through cost-effective measures that address existing, future and continuing risks in a hierarchy of avoidance, minimisation and mitigation as identified in local floodplain risk management studies and plans;
6. Remain consistent with the floodplain risk management principles outlined in the State Government's Flood Prone Land Policy and Floodplain Development Manual 2005.
7. Facilitate the systematic collection of flood information and floodplain risk data, and the provision of such information in a timely way so that residents can understand the severity of floodplain risk and plan their affairs accordingly; and,
8. Promote the integration between Council's floodplain risk management activities and flood-related emergency management undertaken by the State Emergency Service and the Port Stephens Local Emergency Management Committee.

The measurement of success for this policy is the implementation of the integrated risk management approach.

## CONTEXT/BACKGROUND:

Port Stephens covers a diverse number of catchments, generally flowing to the Hunter Estuary or the Port Stephens Estuary. The area has a number of creeks, rivers, estuaries, foreshore areas, stormwater channels and drains which are impacted by flooding or coastal inundation, sometimes with little or no warning.

Flooding is a significant issue affecting existing and future development throughout Port Stephens and may involve significant risk, including risks to life and property. While it is not usually cost-effective to entirely eliminate all floodplain risks, the risks can be managed.

Council has been undertaking the necessary flood studies in accordance with the State Government's Floodplain Development Manual 2005. Where the catchments cross local government boundaries, Council has been working in collaboration with neighbouring councils.

The *Local Government Act* (section 733) provides Council with a general exemption from liability with respect to flood liable land if the necessary studies and works are carried out in accordance with the principles contained in the NSW Floodplain Development Manual 2005.

## SCOPE:

While local government in NSW has the primary responsibility for controlling the development within flood-prone land, both the State Government (for example, Crown developments and state significant developments) and the Federal Government (for example, development on Commonwealth land) consider development on the floodplain.

Both local government and the State Government (principally through the State Emergency Service) are responsible for managing floodplain risk.

## DEFINITIONS:

|                                      |   |
|--------------------------------------|---|
| Flood prone land (flood liable land) | Land that is likely to be inundated by the probable maximum flood (PMF is the largest flood that could conceivably occur in a particular catchment) and defines the "floodplain" for that catchment.  |
| Flood Planning Level                 | The level of the 1% AEP (annual exceedance probability) flood event in the year 2100 plus 0.5 metre freeboard, except for overland flooding areas where a freeboard of 0.3 metre is applied. The area of land below the Flood Planning Level (i.e. the Flood Planning Area) is subject to flood-related development controls. |

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|------------------------|--|
| Floodway area          | Land that is a pathway taken by major discharges of floodwaters, the partial obstruction of which would cause a significant redistribution of floodwaters, or a significant increase in flood levels. Floodways are often aligned with natural channels, are usually characterised by deep and relatively fast flowing water, and have major damage potential. |
| Flood Storage area     | Those parts of the floodplain that are important for the temporary storage of flood waters. The loss of storage areas may increase the severity of flood impacts by reducing natural flood attenuation.  |
| Flood Fringe area      | The remaining land in the Flood Planning Area after the Floodway area and Flood Storage area have been defined.  |
| Overland flow path     | Areas of inundation by local runoff rather than inundation created by overbank flows discharging from a watercourse.   |
| High Hazard flood area | The area of flood which poses a possible danger to personal safety, where the evacuation of trucks would be difficult, where able-bodied adults would have difficulty wading to safety or where there is a potential for significant damage to buildings.  |
| Low Hazard flood area  | The area of flood where, should it be necessary, a truck could evacuate people and their possessions or an able-bodied adult would have little difficulty in wading to safety.   |

## **POLICY STATEMENT:**

Council will manage the risk of flooding on lands in accordance with State Government's Flood Prone Land Policy and Floodplain Development Manual 2005. This can be summarised as:

1. Following the State Government directed process for each catchment, including:
  - Formation of a Floodplain Risk Management Committee, including members from council, community and state government agencies.
  - Collection of social, economic, flooding, ecological, land use, cultural and emergency management data.
  - Undertaking a flood study, in accordance with "Australian Rainfall & Runoff" published by Engineers, Australia, to define floodplain risk throughout the catchment, including hydrologic and hydraulic aspects of floods of varying severity.
  - Identifying, assessing and comparing various risk management options through a Floodplain Risk Management Study.

- Developing a Floodplain Risk Management Plan outlining the implementation of acceptable flood response and property modification measures, and is formally approved by Council after public exhibition.
2. Categorising floodplain risk in terms of the hazard (low hazard and high hazard), the location (floodway area, flood storage area and flood fringe area) and the chance of the flood occurring in any one year (the annual exceedance probability (AEP)), namely:
    - Minimal risk flood prone land (above the Flood Planning Level and below the Flood prone land extent).
    - Low hazard – flood fringe area.
    - Low hazard – flood storage area.
    - Low hazard – floodway area.
    - Low hazard – overland flow path.
    - High hazard – flood fringe area.
    - High hazard – flood storage area.
    - High hazard – floodway area.
    - High hazard – overland flow path.
  3. Keeping the Flood Hazard Maps up-to-date by incorporating relevant information from Council adopted Flood Studies, Floodplain Risk Management Plans, flood modification measures and approved filling within the floodplain which may change the categorisation of floodplain risk.
  4. Undertaking a comprehensive benefit-cost analysis of proposed flood modification measures (for example, levees, retarding basins, flood gates) in each catchment using a standard approach and include those measures with a benefit: cost ratio greater than 1 into Council's Strategic Asset Management Plan (where possible Council will seek State and Federal government funding for such measures).
  5. Considering property modification measures including voluntary purchase or house-raising and Development Control Plan changes based on the floodplain risk categories.
  6. Utilising a site-specific risk management approach for the finished floor level for non-residential developments, focussed on reducing risk-to-life and risk-to-property, based on the floodplain risk categories and specified in Council's DCP.
  7. Ensuring that the State Emergency Service and the Port Stephens Local Emergency Management Committee are provided with the most up-to-date flood information so they can include it in their emergency response and recovery planning.
  8. Ensuring that decisions relating to flood prone land do not have adverse consequences for emergency management or cause adverse impacts on flooding in other locations.

9. Ensuring that new Council assets have an appropriate floodplain risk category, so that future generations of residents and ratepayers are not inordinately burdened.
10. Developing a system for the timely provision of up-to-date flood information, to facilitate the assessment of development applications, to achieve a merit-based outcome for each floodplain risk category for an individual site.

### **POLICY RESPONSIBILITIES:**

Assets Section Manager has overall responsibility for this Policy.

Engineering Services Manager and Principal Flooding & Drainage Engineer is responsible for the implementation of the engineering aspects of this Policy, including management of the Floodplain Risk Management process.

Strategy and Environment Section Manager is responsible for the implementation of the strategic planning aspects of this Policy, including consideration of floodplain risk as early as possible in the planning process and the provision of the most up-to-date flood information through the issuing of Section 149 certificates.

Development Assessment and Compliance Section Manager is responsible for the implementation of the development assessment aspects of this Policy, including a merit-based consideration of the floodplain risk categories for an individual site, focussed on reducing risk-to-life and risk-to-property, based on advice provided by Assets Section Manager, Engineering Services Manager and Principal Flooding & Drainage Engineer whose expert knowledge would need to be provided in making such decisions.

Communications Section Manager is responsible for the implementation of the communications aspects of this Policy, including assisting in the coordination of community engagement through the Floodplain Risk Management process.

Facilities and Services Group Manager is responsible for the integration between Council's floodplain risk management activities and flood-related emergency management undertaken by the State Emergency Service and the Port Stephens Local Emergency Management Committee.

### **RELATED DOCUMENTS:**

- *Local Government Act 1993*
- *Environmental Planning and Assessment Act 1979*
- *Water Management Act 2000*
- *Hunter Water Act 1991*

- *State Emergency and Rescue Management Act 1989*
- The State Government's Flood Prone Land Policy 2005
- The State Government's Floodplain Development Manual 2005
- Port Stephens Local Environment Plan 2013
- Port Stephens Development Control Plan 2014

### CONTROLLED DOCUMENT INFORMATION:

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| This is a controlled document. Hardcopies of this document may not be the latest version. Before using this document, check it is the latest version; refer to Council's website <a href="http://www.portstephens.nsw.gov.au">www.portstephens.nsw.gov.au</a> |                                  |                         |                  |
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| <b>Adoption date</b>  | 12 December 2017                 |                         |                  |

### VERSION HISTORY:

| Version | Date        | Author                      | Details   | Minute No. |
|---------|-------------|-----------------------------|---|------------|
| 1       | 16 Dec 2008 | Integrated Planning Manager | Areas affected by flooding and/or inundation.                 | 384        |
| 2       | 27 Oct 2015 | Asset Section Manager       | Draft Floodplain Risk Management Policy for Public Exhibition | 323        |
| 2.1     | 8 Mar 2016  | Asset Section Manager       | Floodplain Risk Management Policy                             | 054        |

|     |               |                       |  |     |
|-----|---------------|-----------------------|--|-----|
| 3   | 12 Dec 2017   | Asset Section Manager | Updated to new template, overland flooding areas, definitions, and policy responsibility.  | 322 |
| 3.1 | 10 April 2018 | Asset Section Manager | Reconciled definitions against other Council documentations and modified as required. Modified Council officer titles to reflect current role title. Modified Policy responsibilities as required. | 080 |