

3 Implementation

Planning for stronger, more resilient floodplains is a journey towards achieving better floodplain management through the land use planning process. Whilst not all Councils require assistance in achieving this objective, some do and may benefit from the use of this Guideline.

Floods are the most manageable of all natural disasters. Unlike other natural disasters, generally there is an understanding of where floods will occur and estimates of the likelihood of flooding, flood behaviour and the consequences of flooding in some cases. On the other hand the unpredictability of Severe Tropical Cyclone Yasi meant it was not known when it would make landfall until just hours before it crossed the coast. Therefore, through a combination of learning from the Yasi experience and analysing its aftermath, we can plan more efficiently for similar events and, at the same time, create more resilient communities.

New Construction Standards

The Australian Building Codes Board has developed a draft national Standard for Construction of Buildings in Flood Hazard Areas (draft Standard), which is scheduled to be introduced into the Building Code of Australia (BCA) in 2013, following appropriate consultation. The scope of the draft Standard is limited to class 1 (houses and townhouses), class 2 (units and flats), class 3 (hotels, motels and backpackers), class 4 (caretakers dwelling), class 9a (health care) and class 9c (aged care) buildings. It provides specific performance requirements and deemed-to-satisfy (DTS) provisions for the design and construction of new buildings in a flood hazard area, as designated by the relevant authority (ie. Local Government).

DLGP is proposing early adoption of the draft Standard as a new mandatory part of the Queensland Development Code (QDC). Additional non-mandatory provisions, which are currently outside the scope of the draft Standard, are also proposed to be included in the QDC to be adopted by Local Governments on a voluntary basis through a planning scheme, Temporary Local Planning Instrument, or by resolution. It is proposed that the new QDC will apply to new buildings and additions to existing buildings, but not generally to building alterations (for example, internal repairs such as adding bathroom or removing a wall).

However, unless there is appropriate mapping to indicate a building is within a flood prone area, these new provisions may not be triggered.

Temporary State Planning Policy

To assist in this process the Authority partnered with DLGP to implement a new Temporary State Planning Policy (TSPP) – Planning for stronger, more resilient floodplains – which creates the statutory mechanism by which a Local Government may look to adopt the Interim Floodplain Assessment Overlay as part of their existing planning scheme.

The TSPP suspends the effect of paragraphs A3.1 and A3.2 of Annex 3 of State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide, which identifies the process by which a Local Government may designate a Natural Hazard Management Area (Flood) (NHMA).

The effect of the TSPP is to allow amendments to an existing planning instrument under the SPA for a Natural Hazard Management Area (Flood) to include:

- 1) land inundated by a Defined Flood Event (DFE) and identified in a planning instrument; or
- 2) the Interim Floodplain Assessment Overlay mapping and Model Code provided by the Queensland Reconstruction Authority; or

- 3) the Interim Floodplain Assessment Overlay mapping and Model Code as amended by the relevant Local Government.

The TSPP therefore gives effect for a Local Government to designate a NHMA (Flood) to be adopted either in the current form provided by the Authority or as amended by the Local Government following a visual assessment through a minor planning scheme amendment process, provided that the amendment does not deviate from the intent of the interim provisions and the purpose as outlined in this Guideline and the TSPP. A Temporary Local Planning Instrument (TLPI) may also be an option for adoption of the mapping and code provisions however, preference is for a minor scheme amendment process be followed.

The TSPP remains in effect for a period of 12 months. It is expected that these amendments will be taken into consideration in the review of the SPP1/03 and an amendment of SPP1/03 will be undertaken prior to the expiry of the TSPP.

Interim Toolkit supporting the TSPP

Part 1 of this Guideline provides a voluntary interim toolkit which includes the Interim Floodplain Assessment Overlay (IFAO). The IFAO includes:-

- Interim Floodplain Assessment Overlay Maps (Floodplain Maps) prepared by the Authority in both digital and hard copy; and
- Interim Floodplain Assessment Overlay Model Code (Model Code).

It is acknowledged that not all local governments require this interim tool. Councils with adequate provisions and mapping will not need this Guideline. The response needs to be fit for purpose recognising the differing needs of each local government. However, even for those Councils who feel that there are adequate provisions within their existing scheme, the floodplain maps may help to:

- inform the strategic planning process for the preparation of their new QPP compliant planning scheme; and
- identify an area for the purpose of triggering the relevant building assessment provisions, if their existing flood mapping does not already perform this function.

For those Councils wishing to adopt the interim provisions, this can be done through incorporating a new section into the existing planning scheme, titled “Interim Floodplain Assessment Overlay” and incorporating as a minor amendment to the planning scheme. Alternatively, a Council may use a TLPI however the minor amendment process is preferred given the limited timeframe associated with TLPIs. Further advice in relation to the interim tool and how it can be implemented is provided in section 4 of this Guideline.

The Floodplain Maps provided (as well as an adopted flood level) can also be used by Councils to trigger the relevant building assessment provisions for construction of buildings in flood hazard areas. This applies to both the current suite of building provisions and those soon to be implemented through the proposed amendments to the QDC.

It is also important to note the adoption of the Floodplain Maps is not proposed to alter the level of assessment for development within the overlay area. It simply utilises the existing levels of assessment prescribed in the Table of Development for an area. Therefore, the adopted Floodplain Maps will be used as a trigger for already Assessable Development to be assessed against the Model Code. Any changes to the levels of assessment will require specific consideration by Council and DLGP as part of the amendment process.

Mapping

The Interim Floodplain Assessment Overlay (Floodplain Maps) are being produced across the State. As per section 2 of this Guideline, the Floodplain Maps have been derived by overlaying best available statewide information sources. Individual maps have been designed for display with the cadastre at 1:50,000 scale to allow for properties to be located in respect to the floodplain area.

By the end of October 2011, this project will have mapped 40 per cent of the State's area, which when combined with existing flood mapping represents coverage for approximately 90 per cent of the State's population. By mid 2012, Floodplain Maps for relevant areas of the entire State will be available.

Further information on the mapping products, including current coverage and availability can be found at www.qld.gov.au/floodcheck



Brisbane River in flood 1974

Source: Queensland State Archives

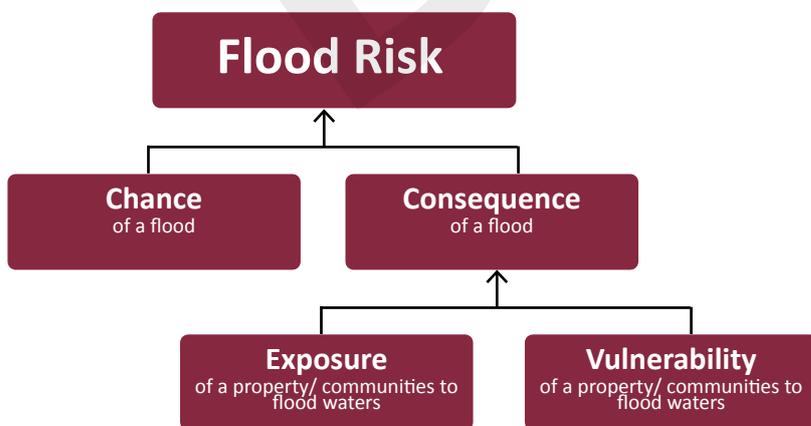


Example:- Interim Floodplain Assessment Overlay for the town of St George in Balonne Shire Council



Brisbane River in flood 2011

Source: Queensland Reconstruction Authority



Components of Flood Risk

Source:- Queensland Floods Science, Engineering and Technology Panel Understanding Floods – Questions and Answers

How do we manage flood risks?



Flood risk includes both the chance of an event taking place and its potential impact. Land use planning informed by floodplain management plans can reduce risk for new development areas. Flood risk is harder to manage in existing developed areas; however modification measures such as dams or levees can change the behaviour of floodwaters. Similarly, property modification measures can protect against harm caused by floods to individual buildings, and response modification measures help communities deal with floods.

Planning scheme provisions – Model Code

To support the Floodplain Maps an Interim Floodplain Assessment Overlay Model Code (Model Code) can be applied in assessing any assessable development on land wholly or partially within the area shown on the Floodplain Maps.

The Model Code is provided in **Schedule 1**.

Councils may decide on the types of development to which the Model Code applies.

The purpose of the code is to manage built form outcomes in the floodplain so that risks to life and property during future flood events are minimised, and to ensure that future development does not increase the potential for flood damage on site or any other property.

For clarity and consistency, all development-related terms defined elsewhere in other Queensland legislation (such as the *Sustainable Planning Act 2009*, *Dangerous Goods Safety Management Act 2001*) have the same meaning in this Guideline and its Schedules.

To demonstrate the practical application of the Interim Floodplain Assessment Overlay (including the Floodplain Maps and the Model Code) in a development assessment context, a number of case studies are provided following **Schedule 1** of this Guideline. This identifies how certain types of assessable development would be assessed against the Model Code.



Images sourced from:- Queensland Image Library and Getty Images

The traditional 'Queenslander' style home was designed to allow the cool breezes to circulate through the house in the hot summer and to let flood waters flow underneath.