Shaping Brisbane’s Built Form to Increase Resilience to Flooding

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Introduction: A FloodSmart Future
Our flood history: Benefit of lessons over time
A Flood Risk Management Approach
Hazards-based approach to land use planning
Concluding comments / key messages

Overview

Introduction
Brisbane’s FloodSmart Future Strategy is part of Council’s long standing commitment and plan to manage the risks of flooding.
It focuses on Brisbane as a city that is safe, confident and ready.

A history of flood management
Over the past four years Council has invested $500 million towards flood management:
- Extensive pipes and drainage works
- Backflow devices
- Flood information online for residents and businesses
- Lord Mayor’s Taskforce on Suburban flooding.

2011 Brisbane River Flood
The 2011 Brisbane River flood showed us how well Council and the community respond when the city is faced with disaster.

Brisbane’s FloodSmart Future strategy will help further develop Brisbane’s capacity to respond and recover quickly from flood events when they occur.

Strategy is based on an integrated mix of measures:
- structural flood mitigation
- providing good quality flood information
- world-class emergency management
- a hazard-based approach to land use planning.
Hazard-based approach to land use planning

Current - City Plan 2000
- Flood provisions found in range of codes and Subdivision and Development Guidelines
- One flood extent only mapped ('one-line' approach to flood planning)
- Applicant to determine development compatibility with flooding

Brisbane City Plan 2014
- Flood code + overlay map
- Flood planning areas
- Flood planning scheme policy
- Development compatibility
- Vulnerable uses
- Access

New Brisbane City Plan 2014
- A risk management approach to natural hazards
- Aims to ensure
  - Brisbane's residents, businesses and properties are not exposed to unacceptable flood risks and natural hazards
  - New development is located in the right place, designed and sited to tolerate the full range of flood events and natural hazards

New draft planning provisions
- Flood susceptibility is mapped into six flood areas
  - Flood Planning Areas (FPA) 1 to 5; covering river and creek flooding, and
  - Overland flow flooding
- FPAs take account of flood depth, velocity and frequency

Examples of flood overlay mapping

Land use compatibility with flood hazard

Certification requirements
- Registered Professional Engineer of Queensland (RPEQ) sign off may be required for houses
- RPEQ sign off required for other development in certain circumstances including
  - Certify structural soundness
  - Certify no material increase of flood hazard
  - Undertake flood study as necessary
  - Undertake a flood risk assessment
  - Undertake a coastal hazard risk assessment
Summary

- BCC has learnt lessons from a long history of dealing with flooding
- Brisbane FloodSmart Future provides a robust strategy toward safe and flood resilient city
- Hazards approach to land use planning important recognition of Flood Risk Management
- Brisbane City Plan 2014 is to be finalised shortly – will represent smart planning, aid in educating the development community and build flood resilience.