

Flood Regulations – Historical Overview

1. Introduction

This Fact Sheet is one of a series which deals with planning scheme related information. This Fact Sheet provides an historical overview of the flood regulations applying to development throughout the Ipswich Local Government Area.

2. Background

Early 19th century settlements tended to favour locations near rivers and creeks as these areas provided access to both water supply and early transport routes. The Ipswich Town Centre was originally developed as an important river port.

The original Municipality of Ipswich encompassed a relatively small area from West Ipswich, east to Queens Park. After one expansion, the City of Ipswich was later expanded west to Amberley and east from Bundamba to Gailes. The current Ipswich City Council area was created in 1995, through the amalgamation of the former City of Ipswich (approximately 121 km²) and most of the former Shire of Moreton (1,000+ km²).

3. Occurrences of Flooding

Flooding occurs most commonly from heavy rainfall when watercourses, water storage areas and floodplains do not have sufficient capacity to convey and store excess rainfall runoff. The Australian Government has defined flood (under the Insurance Contracts Amendment Regulation) as:

'The covering of normally dry land by water that has escaped or been released from the normal confines of:

- any lake, or any river, creek or other natural watercourse, whether or not altered or modified; or
- any reservoir, canal, or dam.'

There are two flooding occurrences that may affect land in Ipswich:

(1) River Flooding (Brisbane / Bremer River Catchment Flooding)

Riverine flooding normally occurs in relatively low-lying areas adjacent to rivers, commonly referred to as floodplains. This generally occurs in Ipswich when there is widespread prolonged rainfall over the Brisbane River Catchment or isolated to the Bremer River catchment which is a sub-catchment to the Brisbane River Catchment. The extent of flooding may also be influenced from the dam releases of the Somerset and Wivenhoe Dams depending on a large range of factors, including where the rainfall is being generated. Flood levels can also be influenced by storm surge (increase in sea level associated with storms and cyclones) and tidal influences which may cause back up of flooding in the respective river systems.

The main conveyance areas for river flooding are generally contained to the channel of the river and the immediate floodplain. These areas are normally characterised by high velocity and high flood depth. Also associated with river flooding are offline storage areas which can also be termed as backwater areas. These areas are generally characterised with low velocity, but may have high flood depths.

(2) Creek / Waterway Flooding

This is the flooding of normally dry land when water overflows the natural or artificial banks of a channel. This typically occurs when the full bank capacity of a channel for a section of a creek, stream, natural gully or drainage channel is exceeded during localised storm events. This form of flooding may occur quickly with corresponding short warning time. Ipswich has several creeks and natural drainage corridors which flow to the Bremer and Brisbane Rivers, including Warrill Creek, Purga Creek, Deebing Creek, Bundamba Creek, Six Mile Creek, Goodna Creek and Woogaroo Creek.

4. Historical Overview

The following information provides an overview of the history of flood regulation in the Ipswich City and the former Moreton Shire local government areas.



Early planning instruments had no flood regulation provisions, with flood provisions gradually introduced over time. As better flood data became available and flood modelling was undertaken, flood regulations were subsequently improved. Early work focused primarily on existing urban and future urban growth areas with hydrologic and hydraulic models generally developed for use in establishing design flood levels for major watercourses. Additional catchment and sub-catchment studies are being undertaken to better inform and improve future planning provisions.

- (1) *Local Government Act 1936* – This Act provided potential for compensation claims against local government where an interest in land was ‘injuriously affected’ by prohibition or restrictions imposed by a planning scheme (such as by reducing pre-existing development entitlements or ‘down’ zoning).

Note: In Queensland, ‘injuriously affected’ is a long-established statutory concept relevant to compensation for the compulsory acquisition of land, and for adverse effects to a person’s development rights resulting from changes made to planning provisions, such as a loss in development yield (eg reduction to the number of lots able to be created or number of dwellings able to be built). Compensation for ‘injuriously affected’ arising from planning scheme changes is unique to Queensland, creating difficulty for local governments to act in the greater interest of the community, address natural hazards, or to control development where ‘down zoning’ is needed to rectify land use conflicts.

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| (2) Former City of Ipswich 1949 Planning Scheme | - | No flood regulation provisions |
| (3) Former City of Ipswich 1953 Planning Scheme | - | No flood regulation provisions |
| (4) Former City of Ipswich 1957 Planning Scheme | - | No flood regulation provisions |
| (5) Former Moreton Shire 1961 Subdivision of Land By-Law | - | No flood regulation provisions |
| (6) Former City of Ipswich 1967 Interim Development By-Law | - | No flood regulation provisions |
| (7) Former Moreton Shire 1973 Interim Development Order | - | No flood regulation provisions |
| (8) Former Moreton Shire 1974 Planning Scheme | - | No flood regulation provisions |
| (9) Former City of Ipswich 1976 Planning Scheme | - | 1 in 20 Development Line |
| (10) Former Moreton Shire 1982 Planning Scheme | - | Maximum known flood level (generally taken to be the 1974 Flood Line) |
| (11) Former City of Ipswich 1989 Planning Scheme | - | 1 in 20 Development Line |
- (12) *Local Government (Planning and Environment) Act 1990* – This Act also provided potential for compensation claims against local government where an interest in land was ‘injuriously affected’ by prohibition or restrictions imposed by a planning scheme (such as by reducing pre-existing development entitlements or ‘down’ zoning).
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| (13) Former Moreton Shire 1992 Planning Scheme | - | 1 in 100 Flood Line |
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Note: Although the ‘maximum known flood level’ had been used to regulate land subdivision in the Former Moreton Shire following the introduction of the Former Moreton Shire 1982 Planning Scheme, the Former Moreton Shire 1992 Planning Scheme included an allowance for building on existing lots below the 1 in 100 Flood Line at Karalee, Karana Downs and Woogaroo Creek given these areas had been subdivided prior to 1974.

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| (14) Former Ipswich 1992 City Centre Development Control Plan | - | 1 in 20 Development Line
- 1974 Flood - Residential Development ‘Intensification’ Line |
| (15) Former City of Ipswich 1995 Consolidated Planning Scheme | - | 1 in 20 Development Line |
- (16) *Integrated Planning Act 1997 (IPA)* – This Act introduced a more performance based planning system and generally removed prohibited development. Whilst IPA allowed for compensation for ‘injuriously affected’, the process to obtain compensation required an application to be made within a specified timeframe (2 years) before a claim for compensation could be made.



IPA also limited compensation where a change to a planning scheme affected development that would have led to a significant risk to persons or property from natural processes, including flooding, land slippage or erosion.

- (17) 1999 Ipswich Planning Scheme (Post Ipswich/Moreton amalgamation)
- Adopted Flood Level:
 - Former Ipswich area: 1 in 20 Development Line / 1974 Flood Residential Development 'Intensification' Line
 - Former Moreton area: 1 in 100 Flood Line

Note: The 1999 Ipswich Planning Scheme was a partial consolidation of the former Ipswich and Moreton planning schemes and essentially kept the same overall policy context of both former schemes. Following the adoption of the 1999 Ipswich Planning Scheme, Council continued to prepare structure plans which focused on the major greenfield growth fronts for the newly amalgamated City. Council incorporated flood design levels as they became available from modelling to inform the preparation of the Ipswich Eastern Corridor Structure Plan, the Rosewood Corridor Structure Plan, the Southern Corridor Structure Plan, and the Northern and Inner Western Corridors Structure Plan.

- (18) *State Planning Policy 1/03 – Mitigating the Adverse Impacts of Flood, Bushfire and Landslide* (SPP 1/03): SPP 1/03 set out the State interests for planning scheme preparation, development assessment, and for the designation of land for community infrastructure purposes to ensure that the natural hazards of flood, bushfire and landslide were considered to minimise potential adverse impacts on people, property, economic activity and the environment.

- (19) 2004 Ipswich Planning Scheme
- 1 in 20 Development Line
 - 1 in 100 Flood Line
 - Development Constraint Overlay Map (OV5 – Flooding and Urban Stormwater Flow Path Areas)
 - Development Constraint Overlay Code (Division 4, Part 11.4.7 – Flooding and Urban Stormwater Flow Path Areas)

Note: The 2004 Ipswich Planning Scheme was the first planning scheme where there was a comprehensive use of a 1 in 100 Flood Line across the whole of the Ipswich/Moreton local government areas. The State government considered SPP 1/03 to have been appropriately reflected in the 2004 Ipswich Planning Scheme.

- (20) 2006 Consolidated Ipswich Planning Scheme (current planning scheme)
- 1 in 20 Development Line
 - 1 in 100 Flood Line
 - Development Constraint Overlay Map (OV5 – Flooding and Urban Stormwater Flow Path Areas)
 - Development Constraint Overlay Code (Division 4, Part 11.4.7 – Flooding and Urban Stormwater Flow Path Areas)

Note: The 2006 Ipswich Planning Scheme is a consolidation of amendments to the 2004 Ipswich Planning Scheme with the flooding provisions essentially the same as those adopted in 2004 except for changes made to the mapping in OV5 to more accurately reflect and update data in the Peak Crossing and Marburg areas. The State government considered SPP 1/03 to have been appropriately reflected in the 2006 Consolidated Ipswich Planning Scheme.

- (21) *Sustainable Planning Act 2009* (SPA) – The compensation regime established under IPA was continued. SPA also reduced the timeframe to 1 year within which claims for compensation could be made.

- (22) Temporary Local Planning Instrument 01/2011 (TLPI 01/2011)
- Adopted Flood Regulation Line comprising the outer limit of the 1 in 100 Flood Line, the historic 1974 Flood Line and the 2011 Flood Line
 - Updated Development Constraint Overlay Code provisions
 - Special Opportunity Areas to encourage the transition from residential uses to low impact non-residential uses in selected areas to improve flood resilience



Note: Council adopted TLPI 01/2011 on 14 June 2011 which took effect on 20 June 2011 and which ceased to have effect on 19 June 2012.

- (23) Temporary Local Planning Instrument 01/2012 (TLPI 01/2012)
- Updated Adopted Flood Regulation Line comprising the outer limit of the 1 in 100 Flood Line, the historic 1974 Flood Line and the 2011 Flood Line
 - Updated Development Constraint Overlay Code provisions
 - Special Opportunity Areas to encourage the transition from residential uses to low impact non-residential uses in selected areas to improve flood resilience

Note: On 12 June 2012, Council adopted TLPI 01/2012 (effectively replacing TLPI 01/2011) which took effect on 20 June 2012 and will cease to have effect on 19 June 2013. This TLPI incorporated minor changes related to flood hazard tolerance, minor alterations to permitted earthworks and updates to improve the Adopted Flood Regulation Line. The mapping updates incorporated revised 1974 flood data based on current topographical information and updated 2011 flood data.

The TLPI instruments were prepared to provide improved flood regulation based on a revised Flood Regulation Line and associated provisions for new development and earthworks within flood affected areas. The provisions provide an interim precautionary approach pending the implementation of the recommendations from the Queensland Floods Commission of Inquiry (QFCI), the review of State Planning Policy 1/03 - *Mitigating the Adverse Impacts of Flood, Bushfire and Landslide* (SPP 1/03) and the finalisation of a new comprehensive flood study (the Brisbane River Catchment Flood Study).

The Final Report of the Queensland Floods Commission of Inquiry (QFCI) identified that TLPI 01/2011 appropriately provided temporary planning controls, using the greatest of the defined flood level (1 in 100 Flood Line) from the Ipswich Planning Scheme 2006, and the 1974 and 2011 historical flood lines. The QFCI Final Report stated this approach was prudent and should be continued until the comprehensive flood study for the Bremer and Brisbane River Catchment areas has been completed.

- (24) Temporary Local Planning Instrument 01/2013 (TLPI 01/2013)
- TLPI 01/2013 took effect on and from 20 June 2013

Note: TLPI 01/2013 generally retains the same provisions that were included in TLPI 01/2012. Minor amendments have been included to recognise the introduction of MP 3.5 *Construction of buildings in flood hazard areas* as a mandatory component in the Queensland Development Code (QDC) and to facilitate the extension of the TLPI duration where legislative changes make an extension possible beyond the current 12 months.

5. Future Provisions

- (1) Proposed Major Amendments (to current planning scheme)
- Currently being prepared by Ipswich City Council

Note: The major amendment process provides an opportunity to undertake a more comprehensive review of the current flood provisions (including the provisions in TLPI 01/2013) and the ability to incorporate new catchment and drainage information. This process will involve public notification.

- (2) Brisbane River Catchment Flood Study
- In response to the QFCI, a joint study coordinated by the Queensland government has commenced to provide an up-to-date flood study for the Brisbane River catchment (which includes the Bremer River) downstream of the Wivenhoe Dam.

Note: The final outcomes of this flood study are likely to inform floodplain management in Ipswich and result in further amendments to the Ipswich Planning Scheme, and will include further consideration of the impact of river flows on local creeks and waterways, including backwater inundation during major floods.

