# Temporary Local Planning Instrument Explanatory Statement

No.10 (Development in the Guragunbah flood plain area) 2022

CITY OF GOLDCOAST.

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# Division 1 – Written statement as to why the local government proposes to make the TLPI and how the proposed TLPI complies with section 23(1) of the Planning Act 2016

## As required by the *Minister's Guideline and Rules* – July 2017, Schedule 3

## Description of the proposed TLPI

The proposed temporary local planning instrument is cited as *Temporary Local Planning Instrument No.10* (Development in the Guragunbah flood plain area) 2022 (proposed TLPI). It is a remake of the previously approved and endorsed *Temporary Planning Instrument No. 8* (Development in the Guragunbah flood plain area) 2020 which expires on 31 August 2022, two years from its effective commencement date.

The proposed TLPI applies to the area of land identified as the Guragunbah flood plain mapped in Appendix A Map 1 included in the proposed TLPI.

The proposed TLPI seeks to affect the current Planning Scheme being the City Plan 2016 Version 8.

The proposed TLPI creates new assessment benchmarks that will apply to the assessment of development applications against the Flood overlay code to:

(a) ensure development in the Guragunbah flood plain is not exposed to high to extreme flood hazards, unless high to extreme hazard for that use is specified by Table 8.2.8-4 of the Flood overlay code; and

(b) the sustainable flood mitigation of Flood prone land in the City is delivered through the provision of land at or above the defined flood level.

Under the *Planning Act 2016* (the **Act**) section 23(6), a temporary local planning instrument operates for up to two years. It is intended that the proposed TLPI will be repealed by adoption of an amendment of the City Plan that specifically repeals the TLPI, in accordance with section 24.

## Why the local government has proposed to make the TLPI

The City has a strong culture of flood risk management and a strong focus has been on the long-term management of the Guragunbah flood plain because this natural asset provides an essential flood storage function that mitigates the impacts of flooding in the City's most urbanised and developed catchment, the Nerang River catchment. The Guragunbah flood plain is an 1836 hectare area of generally low lying land bounded by the Robina Parkway, the Nerang River, the Pacific Highway and the southern bounds of the Mudgeeraba Creek catchment.

In 1998, Council completed the Guragunbah Hydraulic Master Plan and adopted the Guragunbah Structure Plan. These reports identified the Guragunbah as the largest urban flood plain in Australia, providing critical flood storage function benefits for the City. The reports informed the development of the 2003 Our Living City Guragunbah Local Area Plan which stated:

> "*It is envisaged that the Guragunbah area will ultimately comprise a limited mix of urban residential and tourist facilities, within a predominant environment of open space and ecologically sustainable waterways, which recognise the considerable recreation potential of the flood plain. In order to maximise the open character of the flood plain and minimise the cost of urban service provision and emergency response during flood events, urban development is expected to be clustered and, where possible, to represent a consolidation existing urban communities. As such, residential buildings may range from single dwelling houses to apartments, in an expansive landscaped environment, depending upon the opportunities presented by each site.*
>
> *…*
>
> *In all cases, development must be designed to ensure no adverse flooding impacts, having regard to the cumulative effect of all likely development within the flood plain. In addition, development will need to*

*ensure that the level of risk to occupants is acceptable during flood events and that appropriate emergency response can be facilitated."*

The City Plan continues to focus on the effective long-term management of the Guragunbah flood plain, and recognises it as a significant natural asset that provides flood management functions and opportunities for ecological restoration, water quality and flood resilience.

The City Plan designates the Guragunbah floodplain as a Limited development (constrained land) zone which allows for limited opportunities for low to medium intensity, low to medium intensity, low to medium rise residential and tourism related activities, it is to occur in the:

- least flood affected; and
- least environmentally sensitive areas.

To determine such locations, development is further guided and informed by:

- the Conceptual Land Use Map 10 – Merrimac/Carrara flood plain special management area;
- the Environmental significant overlay code and associated mapping; and
- the Flood overlay code which seeks to, among other things:
    - (i) avoid, if practicable, or otherwise lessen, the adverse impacts of flooding and ensure development is located, designed and managed to mitigate the risk to life and property;
    - (ii) protect the flood storage function of the city's flood plains;
    - (iii) place no extra burden on the city's counter-disaster response efforts during a flood emergency;
    - (iv) equitably share development constraints and development potential within a single river catchment and its sub-catchments; and
    - (v) equitably share the costs and benefits of flood-mitigation infrastructure within a river catchment and its sub-catchments.

However, despite this long standing policy framework, there is a material risk of serious harm to persons or property for developed activities on platforms exposed to high to extreme hazard flood hazards if development of that type happens in the Guragunbah flood plain. The potential for such development proposals may be attributed to:

- Applicant proposing development on platforms on land exposed to high to extreme flood hazard including functional open space that will be retained in private ownership and subject to private management arrangements rather than through undertaking the traditional and accepted practice of developing land that is resilient to flooding;
- the Flood overlay code provisions not expressly requiring a minimum area of 'flood free' land; and
- Proponents having previously been successful in demonstrating that the provisions of the Flood overlay are satisfied, with the support of certified engineers and the provision of Flood Emergency Management Plans (FEMPs) by elevating the occupants of apartments or commercial floor space above the level of flood hazard by placing development on a platform.

The likely development attributed to previous development applications in the flood plain for residential activities represents the potential for unplanned growth in an area identified as possessing high to extreme flood hazards. This includes known development proposals only and does not include other unforeseen potential development proposals that seek to adopt the same platform method. The Council considers this potential for platform development based upon the Flood Overlay code gives rise to unacceptable risks of harm to persons or property that are serious.

## How the proposed TLPI complies with the Act section 23(1)

Section 23(1) of the *Planning Act 2016*, provides that a local government can make a TLPI if the local government and Minister decide:

(a) there is significant risk of serious adverse cultural, economic, environmental or social conditions happening in the local government area; and
(b) the delay involved in using the process in sections 18 to 22 of the *Planning Act 2016* to make or amend another local planning instrument would increase the risk; and
(c) the making of the TLPI would not adversely affect State interests.

The proposed TLPI No. 10 is considered to satisfy each of these requirements.

*(a)(i) Significant adverse cultural conditions*

Council has implemented long standing performance criteria for development in flood affected land in the city. These policies have contributed to ensuring the city maintains a high level of resilience to flooding. Flood risk escalates where the consequence of persistent exposure to flooding events (frequent and extreme) is high. As such, developers of residential uses are directed to ensure their flood mitigation measures achieve an on-site flood hazard of medium hazard or less while ensuring adverse impacts (such as an increase in flood heights or changes in flood conveyance) are not transferred elsewhere in the catchment.

The minimum flood free land policy has been in place since the introduction of the superseded planning scheme. Specifically, the minimum flood free land policy was contained in the Reconfiguration of a lot code because this code dealt with the configuration of land. However, development in the Guragunbah flood plain may only be for a Material Change of Use (MCU), which only deals with built form and not the configuration of land.

Proposing certain development (such as, but not limited to residential activities) be exposed to high to extreme hazards is contrary to the accepted practice, ensuring developments maintain their resilience to the impacts of flooding. In the absence of a minimum flood free land policy in the City Plan, development of platforms exposed to high to extreme flood hazard in the Guragunbah flood plain potentially demonstrates that this is an acceptable mitigation measure. As such, the traditional culture to flood risk management is currently being undermined.

*(a)(ii) Significant adverse social conditions*

Development utilising platforms will expose users to high to extreme flood hazard in the Guruganbah flood plain. The frequent flooding of the under croft will also require residents to undertake ongoing cleaning, repairs and maintenance. In addition, the ponding of flood water for extended periods of time may create adverse environmental conditions that could enable conditions for vector borne disease and odour, thereby impacting user livability.

Current research on mitigating flood risk for residential development anticipates individuals taking action on their own private property in an ad-hoc basis, and generally concludes that mitigating risks at the individual level can be highly complex. These mitigation actions to address the impact resulting from frequent flooding on their properties is likely to also result in non-compliance with conditions of approval.

This complexity escalates with residents or users interacting with corporate structures and by-laws to address perceived or actual flood risk to common property on which their residence substantially relies.

There are no comparable examples of development that would enable the city to anticipate how to arrange the organisation of public and private responsibilities and the equitable distribution of costs now and into the future, with regard to platform developments of this type, form or magnitude. The social impact of these developments in these terms is significant and likely to shift between private and public entities over time.

There are potential safety, health and crime prevention through environmental design (CPTED) issues associated with extensive open floodable under crofts.

*(a)(iii) Significant adverse economic conditions*

Sustained experience of regular flooding is likely to promote in-situ, ad-hoc mitigation works by individuals which will impact the hydraulic and environmental function of the flood plain, undermining catchment based mitigation and strategic planning.

Building on land subject to frequent flooding creates a high maintenance form of urban development and results in a shorter life cycle of development (i.e. more frequent need for asset renewal). This is because development that is exposed to regular inundation events will require on-going maintenance, inspection and experience wear and tear and result in the diminished life cycle of the asset. Damage is also likely to occur if debris in flood waters collides with platform structures.

Platform development will also cause an additional cost burden on Council to ensure compliance with conditions of approval over the lifecycle of the building.

It is not clear how costs associated with managing flood risk to the platforms will be managed now and into the future. It is unknown as to how flood insurance costs will be distributed among the users of the developments or if flood insurance products are available for these types of development.

A delay or inability to rebuild or recoup losses after flood events also contributes to the diminishing of the city's flood resilience.

It is likely developments in the flood plain will be supported by flood emergency management plans or flood emergency evacuation plans or could be isolated during flood events. It is intended for these plans to be enacted during flood emergency events. These plans either provide for the evacuation of residents in flood emergencies or in the event residents become isolated because they are unable to be evacuated during a flood emergency. The plans are likely to be implemented by building or strata managers or the residents. Flood emergency management measures need to be implemented by experienced people and regularly practiced. Inexperienced practitioners may create unintended or adverse outcomes that could increase flood risks to users. Isolation of a large number of people in the flood plain could contribute to the demands experienced by emergency services during flood events.

These factors contribute to these developments possessing a high level of economic uncertainty which increases when multiplied by the magnitude of development proposed in the Guragunbah flood plain.

This level of uncertainty will create a significant adverse economic impact.

*(a)(iv) Significant adverse environmental conditions*

The Guragunbah flood plain provides a significant area of undeveloped low lying open space abutting the intensely urbanized areas of the Nerang River catchments. This open space area supports active recreational areas such as golf courses as well as passive open space areas. The open space also accommodates conservation values, waterways and wetlands of state and local significance.

Development of platforms which project out into the nominated open space corridors will adversely impact upon:

- the open space character of the flood plain; and
- hydraulic and environmental function of the flood plain which requires prolonged inundation and ponding of flood water which is inhibited by the platforms.

Loss of hydraulic function would lead to flood water ponding under the platform for extended periods of time, resulting in potential health and livability impacts (i.e. odour, amenity, etc.).

*(b) Increase in risk to delay in amending City Plan*

Given the importance of maintaining the long-term function and resilience of the city's flood plains, it is proposed that this immediate risk continue to be addressed by way of the proposed TLPI No. 10 as an effective tool that can be maintained while an amendment to the City Plan is finalised.

Council has been preparing an amendment to the Flood overlay code having regard to the State Planning Policy State interest for natural hazard risk and resilience and the supporting guidance material which requires the following:

- Undertaking fit for purpose flood studies utilizing hydrodynamic flood models to determine the extent and characteristics of flooding (flood depth, duration, velocity, isolation times, storage areas and conveyance paths) for a range of rainfall events and meteorological conditions, now and into the future;
- Undertaking flood risk assessments (including the preparation of supporting mapping) to determine the levels of flood risk for all land uses projected to be impacted by flood events, now and into the future;
- Testing and evaluating the effectiveness of proposed flood risk mitigation provisions and projected development on flood risk levels and their impact on proposed development in flood affected areas.

As such the *Designing for flood* update is being informed by the most up-to-date information and technology available, including the Australian Rainfall and Runoff 2019 (AR&R 2019). Updating Council's hydrodynamic flood models to incorporate AR&R 2019 has required detailed technical analysis and assessment as recommended by Council's peer reviewers.

The issue of the national rainfall map for the Gold Coast region excluding local gauging stations has been resolved. Council remain on track to complete the flood risk assessment, with the update package scheduled for presentation to Council in July 2022 for endorsement prior to State interest check. It is anticipated the *Designing for flood* update will be adopted well in advance of the proposed TLPI No. 10 expiring on 1 September 2024.

If this issue is not addressed through the proposed TLPI No. 10, the development pressure could potentially result in an outcome for the Guragunbah flood plain that is inconsistent with the flood mitigation policy intent of the City Plan and State Planning Policy. This will result in:

(a) unplanned growth in the flood plain;

(b) adverse impacts to the hydraulic and environmental functioning of the flood plain;

(c) the potential to create serious adverse economic, environmental and social conditions in the city's primary flood plain; and

(d) is liable to result in the creation of development induced material risks of serious harm to persons and property.

*(c) Not adversely affecting State interests*

The making of the proposed TLPI No. 10 would not adversely affect State interests as the maintenance of the flood absorption capacity and the management of community expectations relating to development in the Guragunbah flood plain are matters currently regulated in the City Plan.

The proposed TLPI No. 10 is consistent with the State interest guideline – Natural hazards, risk and resilience, dated July 2017, which contemplates local government including development requirements in planning schemes with respect to development within an area affected by a natural hazard such as flood.

For more information
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