

## **Natural Hazards - Storm Tide**

This information sheet provides information to raise awareness and to assist the reader in their understanding of how the planning scheme manages issues associated with storm tide natural hazards.

#### What are natural hazards?

A natural hazard is a naturally occurring event that may:

- harm people and our social wellbeing; or
- · damage property or infrastructure; or
- have an adverse impact on the economy; or
- have an adverse impact on the natural environment.

# Why is it important to regulate development in areas of known or potential natural hazards?

Land use planning is an important means for reducing natural hazard risks and improving community resilience. Land use planning can significantly reduce the financial and other resource pressures placed on all levels of government, business, and the community to respond to and recover from natural disasters.

Planning for storm tide natural hazards is a matter of QLD State Government policy. It is a statewide requirement that Local Government planning schemes suitably manage planning matters associated with storm tide hazards.

Storm tide inundation (flooding) of low lying coastal areas as a result of a storm tide can last for several hours, damaging property and infrastructure and posing risk to life.

Storm tides can also result in accelerated erosion of beaches and sand dunes as the higher than normal water levels enable waves to reach areas that are not usually touched.

Figure 1: Storm tide Yeppoon Main Beach
Photo sourced from the Capricorn Coast Storm Tide Study (Aurecon)

A number of coastal communities on the Capricorn Coast are at risk of inundation and/or isolation due to inundation associated with storm events.

In 2003, Aurecon (then Connell Wagner) undertook a Storm Tide Hazard Investigation of the Capricorn Coast for Livingstone Shire Council, assessing storm tide risks along the coast, in particular at Yeppoon, Emu Park and Keppel Sands

Livingstone Shire Council (LSC) commissioned Aurecon to undertake an update of the storm tide investigation and associated mapping to take account of current available information. The outcomes of the study provide LSC with detailed information to assist in two key risk management areas: Development Planning and Regulatory Controls & Emergency Management and Evacuation Planning

#### Natural hazards regulated by the planning scheme?

The planning scheme addresses potential impacts from natural hazards by regulating development in specific circumstances if it is located in an area affected by one (or more) of the various natural hazard overlays used in the planning scheme.

The following table lists the natural hazard overlays and overlay codes used in the planning scheme.



Figure 2: Example of storm tide hazard area overlay

Overlays are the primary planning scheme mechanism for identifying hazard prone areas and regulating development within these areas. Overlays are shown on a series of maps contained in Schedule 2 of the planning scheme. An Overlay Map may include one or multiple overlay features.

How does the planning scheme identify overlays?

Storm-tide inundation and coastal erosion are matters of State interest and fall within the Natural Hazards, Risk and Resilience State interest policy. This policy outlines the desired outcomes for planning and development where the risks associated with natural hazards, including the projected impacts of climate change, are avoided or mitigated to protect people and property and enhance the community's resilience to natural hazards.

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#### Where do natural hazard overlays come from?

Natural hazard overlays are mapped using available information that is held by either the Council or other State Government agencies. The most suitable information available at the time is used to prepare overlay maps however it must be recognised that there may be limitations on the accuracy of data used to create some of the overlay maps.

Overlay maps assist with identifying where there is potential for constraints, values, or opportunities. Considering overlay information has been obtained at various levels of detail it is important that where an overlay is mapped on a specific site, it should be viewed as a trigger for further investigation and consideration as part of the development process.

### What happens if a lot is affected by an overlay?

Having an overlay situated over a lot may or may not trigger a development application under the planning scheme. The Tables of Assessment in Part 5 of the planning scheme determine the categories of development and assessment, and the assessment benchmarks for assessable development. The assessment benchmarks will in most circumstances be contained within an Overlay Code.

# What happens if development is not consistent with the applicable overlay code?

A development proposal that is assessed as not complying with the applicable assessment benchmarks within an overlay code means that Council may refuse the development proposal or it can impose conditions if it is considered that the conditions will be suitable for ensuring that the development can comply with the overlay code.

Disclaimer: The content of this information sheet is a summary and has been prepared to assist the reader to understand the Planning Scheme. This advice given does not bind or fetter the Council in any way in exercising its statutory responsibilities in assessing any development application which might be made to the Council. Please refer to the full Livingstone Planning Scheme 2018 document on Council's website for further detail.