



# Etheridge Shire Council

## Natural Hazards - Flooding

FACT SHEET

### Flooding

A natural hazard is a naturally occurring event that may endanger the community, cause damage to property and/or infrastructure, and impact our economy and the environment. Flooding is an example of a natural hazard, and the negative impacts of flooding can be reduced through land use planning and development decisions.

All levels of the planning system seek to ensure that community resilience to natural hazards is increased. The purpose of this fact sheet is to explain some of the strategies used in the proposed planning scheme to help mitigate the impacts of flooding.

### Queensland floodplain assessment overlay

The Queensland Floodplain Assessment Overlay (QFAO) represents a floodplain area within drainage sub-basins in Queensland. It has been developed for use by local governments as to identify potential flood hazard areas. It represents an estimate of areas potentially at threat of inundation by flooding. The data has been developed through a process of drainage sub-basin analysis utilising data sources including 10 metre contours, historical flood records, vegetation and soils mapping and satellite imagery.

### How does the proposed Etheridge Shire Planning Scheme identify flooding?

Flood events have been experienced on varying scales throughout Etheridge Shire. Areas potentially prone to flooding have been identified in the proposed planning scheme using two methods.

Georgetown has refined flood modelling from a flood study undertaken in 2014. The study was based on the 1974 flood event (and some approximate survey points from local recollections on the 1956 flood). The data from this study has been used in the planning scheme.

In the proposed planning scheme, Etheridge Shire Council adopts flood modelling representing a 1% Annual Exceedance Probability (AEP) design event for Georgetown. This is in line with the Queensland Government's recommended planning practices.

The 1% AEP event for Georgetown is only slightly higher than the 1974 flood. It defines the flood level at 6.91m at BoM Gauge 030018 (291.07m AHD). The 1974 flood event was 6.82m at BoM Gauge 030018 (290.99m AHD).

For the remainder of Etheridge Shire, areas potentially prone to flooding are identified by using the QFAO located in the Queensland Government's State Planning Policy interactive mapping system at <https://spp.dsdip.esriaustraliaonline.com.au/geoviewer/map/planmaking>.

Flood mapping for the whole of Etheridge Shire is included in Schedule 2 of the proposed planning scheme as static PDF maps. You can also access it via council's new on-line mapping <http://www.etheridge.qld.gov.au>

## **How does the proposed Etheridge Shire Planning Scheme address flooding?**

Only a small number of properties in Georgetown are mapped in the flood hazard area. Most of Georgetown is not affected by the flood hazard overlay. New development on sites in the flood hazard area in Georgetown must be able to achieve a 600mm freeboard above the defined flood level (291.07m AHD) for all habitable rooms.

For Mount Surprise and Forsayth the flood risk is minimal. No private properties in the Township Zone in either townships are covered by flood hazard mapping. If your property has no flood hazard area mapped on it, then the flooding provisions in the planning scheme do not apply.

The township of Einasleigh is completely covered by the QFAO mapping as a potential flood hazard area. Unlike Georgetown, no further refinement of the QFAO mapping in Einasleigh has occurred. Until mapping refinements are undertaken, most new development in Einasleigh will need to undertake a flood study. Council is currently investigating options for refining the flood mapping for Einasleigh.

Some properties in the rural areas of the Shire have areas mapped that are likely to experience a flood event. The level of assessment for some types of development (such as uses that increase the number of people living in a flood hazard area or involve the storage of hazardous materials) is elevated in a flood hazard area. This will often mean that a development permit is required before development can occur in a flood hazard area.

If you intend to subdivide for residential or urban purposes or build on a property that is in a flood hazard area, you may need to show that the development has considered the flooding risk and is able to maintain personal safety in terms of the siting and layout. This may be achieved by showing that your development achieves flood immunity and provides sufficient access to roads that can be used in an emergency.

Flood provisions are included in the Strategic Framework, Tables of Assessment, General Development Code, Reconfiguring a Lot Code and Operational Work Code.

Operational work must not make the risks associated with flooding worse. The proposed planning scheme regulates and limits operational work involving filling greater than 150mm in height, or filling or excavation of more than 50m<sup>3</sup> of material in the flood hazard area. A development permit may be required before carrying out operational work in the flood hazard area.