

## Natural Hazards – Flooding

### Flooding

A natural hazard is a naturally occurring event that may cause harm to people and our social wellbeing, 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 a potential flood hazard area. 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. This data represents an initial assessment and can be refined by local government.

### How does the proposed Barcoo Shire Planning Scheme address flooding?

Areas potentially prone to flooding have been identified in the proposed planning scheme using two methods.

The townships in the region have historically established in proximity to water resources. Jundah and Stonehenge are each located on the banks of the Thomson River and Windorah is adjacent to the channels of Cooper's Creek. The proposed planning scheme has a significant role in mitigating flood hazard risks associated with future development in the region, particularly in the existing townships. Flood modelling has been undertaken to refine the QFAO for and around the townships of Jundah and Stonehenge.

In the proposed planning scheme, Barcoo Shire Council adopts:

- **for and around the townships of Jundah and Stonehenge:**
  - **for Jundah**, of an 8.38m flood event measured at the Bureau of Meteorology gauge 038037.
  - **for Stonehenge**, flood modelling representing a 1% annual exceedance probability design event [this is in line with the State's recommended planning

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practices] of an 7.97m flood event measured at the Bureau of Meteorology gauge 037040.

- **for Windorah and the balance of the Barcoo Shire:**  
the QFAO, which is published on the Queensland Government's SPP interactive mapping system at <https://spp.dsdip.esriaustraliaonline.com.au/geoviewer/map/planmaking>.

You can access the flood mapping for the proposed planning scheme using council's new interactive online mapping system or in Schedule 2 of the proposed planning scheme as static PDF maps.

The flood mapping identifies properties in the flood hazard area. In order to consider and mitigate risks associated with flooding, some additional provisions may be applied to the assessment of development on land in the flood hazard area.

The level of assessment for some types of development (for example, which increases the number of people living in a flood hazard area or involves 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.

The General Development Code in the proposed planning scheme includes provisions to ensure new development avoids flood hazard areas or alternatively, requires a development-specific flood risk assessment to be undertaken.

Provisions to address flood hazard risks will be applied to proposals to subdivide or build on a property that is in a flood hazard area. You may need to show that the development proposal 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 will achieve flood immunity and have sufficient access to roads that can be safely used for evacuation in an emergency. New buildings should have a finished floor level 500mm higher than the defined flood level for the area.

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 10m<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.